Life Sciences and Facility Management

> titute of emistry and Biotechnology

14th October 2021

TEDD Annual Meeting 2021

Cross-industrial applications of organotypic models

Campus Grüental, Wädenswil Switzerland

Zurich Universities of Applied Sciences and Arts



# Invitation

Recent advances in microphysiological systems (MPS) promise a global paradigm shift in drug development, diagnostics, disease prevention, and therapy. The expectation is that these systems will model healthy and various diseased stages and disease progression to predict toxicity, immunogenicity, ADME profiles, and treatment efficacies. MPS will provide unprecedented human-like physiological properties of in vitro models, enabling their routine application in the pharma industry and thus supporting reducing drug development costs by lowering the attrition rate of compounds.

Furthermore, we believe that promoting the cross-sectoral collaboration of academia and industry will further pave the way for widespread exploitation in precision diagnostics and therapy, disease prevention, and personalized nutrition. This will set a future-oriented alternative to animal testing, which is essential in the socio-political context.

During this TEDD Annual Meeting, we would like to showcase MPS application diversity across different industries. The aim is to foster the development of next-generation MPS based on 3D cell culture, organoid, and organ-on-chip technology.

To enable visionary projects and radical innovations, we will cover multidisciplinary fields and connect different industry sectors, like pharma, medtech, biotech, cosmetics, diagnostics, fra-

Dr Markus Rimann Chair

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Dr Katarzyna Kopanska Project Manager

# Program – Thursday, 14th October 2021

08.30	Registration and Welcome Coffee Foyer Aula GA 203	
09.00	Welcome Address Prof Christian Hinderling Director of Institute of Chemistry and Biotechnology, ZHAW Zurich University of Applied Sciences, Switzerland	
09.05	Opening of the meeting Dr Markus Rimann TEDD Competence Centre ZHAW Zurich University of Applied Sciences, Switzerland	
09.20	3RCC research – status and future funding schemes Dr Jenny Sandström Swiss 3R Competence Centre, Switzerland	
9.30	What it took to engineer scalable multi-tissue disease models Dr Olivier Frey InSphero AG, Switzerland	
10.15	Study of liver disease using spheroid models: From histology to single-cell sequencing Prof Laura Suter-Dick University of Applied Sciences Northwestern Switzerland (FHNW), Switzerland	
10.45	From organoids to tissues – automation in physiologi- cal microenvironments as a key enabler for industrial and clinical applications Dr Vincent Revol CSEM SA, Switzerland	
11.15	Volumetric 3D printing Dr Damien Loterie Readily3D SA, Switzerland	
11.45	Discussion	

# Program – Thursday, 14th October 2021

12:00	Networking Lunch & Exhibition Kalthaus GC 181	
14.00	Harnessing muscle stem cells for regenerative medicine and cellular agriculture Prof Ori Bar-Nur ETH ZurichDepartment of Health Sciences and Technology, Switzerland	
14.45	Cultivated meat: tissue engineering concepts enabling the development of food for future Dr Suman Das Mirai Foods, Switzerland	
15.15	Nanomechanical measurements of tissues in situ for diagnosis and treatment optimization of solid tumors Dr Marija Plodinec ARTIDIS, Switzerland	
15.45	CRISPR-Cas9-modified cells in skin equivalent: a game-changer for 3D skin models Michela Di Filippo University Hospital Zurich, Department of Dermatolo- gy, Switzerland	
16.15	Final remarks and TEDD next steps Dr Markus Rimann TEDD Competence Centre, ZHAW Zurich University of Applied Sciences, Switzerland	
16:30	Aperitif and Networking Foyer Aula GA 203	

TEDD Annual Meeting 2021 is recognised by the Swiss Association of Cantonal Veterinarians (VSKT) as 0.5 days continuing education in 3R principle (replacement, reduction, and refinement of animal experimentation).





CORNING



💁 CELLNTEC







EPFL

















# **Further Details**

Required for participation is a valid Covid Certificate and an ID.

#### Costs

TEDD Partner (two participants):	FREE
<b>TEDD Partner (third and next participant):</b>	CHF 80
Standard fee:	CHF 160
Students:	CHF 80

### Registration: www.zhaw.ch/icbt.tedd

Deadline: 1. October 2021

### Contact

Dr Katarzyna Kopanska E-Mail: katarzyna.kopanska@zhaw.ch

#### Venue

ZHAW School of Life Sciences and Facility Management Campus Grüental, Aula GA 203 (talks) and Kalthaus GC 181 (exhibition) Grüentalstrasse 14, P.O. Box 8820 Wädenswil + 41 58 934 54 29

