





Workshop on 3D cell culture models:

Lung, intestine and skin tissues

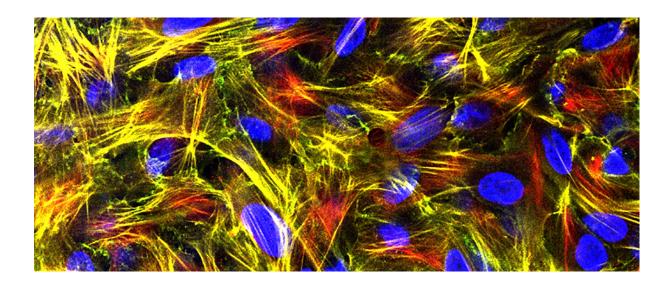
Organized by the PATROLS and CITYCARE consortia

Adolphe Merkle Institute, Fribourg, Switzerland

8-9th July, 2019













Theoretical part

Introduction			
Application of advanced 3D co-culture models	Prof. Dr. B. Rothen-Rutishauser, Adolphe Merkle Institute, Switzerland		
Lung models			
A dynamic in vitro model approach towards deducing the hazard of nanomaterial exposure to the alveolar epithelial barrier	Dr. K. Meldrum, Swansea University, United Kingdom		
In vitro model for the prediction of respiratory sensitization	Dr. S. Cambier, LIST, ERIN, Belvaux, Luxembourg		
Engineering of a dynamic model of the alveolar interface for the study of aerosol deposition	R. Nossa, University of Pisa, Italy		
Skin models			
Construction of a Full Thickness Skin Model Using RAFT™ 3D Cell Culture System	Dr. D. Confalonieri, LonzaPharma and Biotech-Bioscience Solutions, Germany		
Reconstructed human skin equivalents- past, present and future	Dr. H. Kandarova, Centre of Experimental Medicine SAS, Bratislava, Slovakia		

Practical part

Module I	Skin	Harvesting, seeding and imaging of 3D skin model
Module II	Lung and intestine	Seeding of triple cell co-cultures and live cell staining and imaging
Module III	Realistic exposures	Model exposures using VITROCELL® Cloud and DALI Bioreactor
Module IV	Blood isolation	Isolation of primary monocytes







Day 1: Monday, 8th of July 2019

8.45 – 9.15	Arrival, registration and coffee	
9.15-12.00	Theoretical part	
9.15-9.45	Application of advanced 3D co-culture models, Prof. Dr. B. Rothen-	
	Rutishauser, Adolphe Merkle Institute, Switzerland	
	A dynamic in vitro model approach towards deducing the hazard of	
9.45-10.00	nanomaterial exposure to the alveolar epithelial barrier, Dr. K. Meldrum,	
	Swansea University, United Kingdom	
10.00-10.15	In vitro model for the prediction of respiratory sensitization,	
	Dr. S. Cambier, LIST, ERIN, Belvaux, Luxembourg	
10.15-10.30	Engineering of a dynamic model of the alveolar interface for the study of	
	aerosol deposition, R. Nossa, University of Pisa, Italy	
10.30-10.45	Break	
10.45-11.20	Construction of a Full Thickness Skin Model Using RAFT™ 3D Cell Culture	
	System, Dr. D. Confalonieri, LonzaPharma and Biotech-Bioscience Solutions,	
	Germany	
11.20-12.00	Reconstructed human skin equivalents- past, present and future,	
42.00.42.00	Dr. H. Kandarova, Centre of Experimental Medicine SAS, Bratislava, Slovakia	
12.00-13.00	Lunch	
13.00-16.00	Practical part	
13.00-16.00	Module I: Skin	
Group A		
13.00-16.00	Module II: Lung and intestine	
Group B		
16.30-17.30		
16.30-17.00	Module III:	
Group A	Realistic exposures with VITROCELL® Cloud and DALI Bioreactor	
17.00-17.30		
Group B		
19.00-21.00	Dinner in Fribourg	

Day 2: Tuesday, 9th of July 2019

8.30-12.00		
8.30-9.00	Preparation for blood isolation	
Group A and B		
9.00-12.00	Module IV: Blood isolation	
Group A	iviouule iv. biood isolation	
9.00-12.00	Module I: Skin	
Group B	Woulde I. Skill	
12.00-13.00	Lunch	
13.00-16.00		
13.00-16.00	Madula IV. Diagdicalation	
Group B	Module IV: Blood isolation	
13.00-16.00	Madula II. Lung and intenting	
Group A	Module II: Lung and intestine	
16.00-16.30	Live cell imaging	
Group A and B	Live cell imaging	
16.30-17.00	Closing remarks	







Safety

Please wear long trousers and closed shoes in the lab for safety purposes. Lab goggles will be provided.

Dinner

Lunch and dinner is not included in this workshop. Please bring cash (Swiss Franc – CHF) for lunch and dinner. If you have any dietary restriction, please let us know.

Contact information

For questions regarding the workshop please send an email to amieuworkshop@gmail.com.

Venue

Adolphe Merkle Institute
University of Fribourg
Chemin des Verdiers 4
CH-1700 Fribourg
+41 26 300 9254
info-ami@unifr.ch
www.ami.swiss/en/about-us/contact/



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Lonza

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