


“In Vitro lung models”

Thursday, November 14, 2019

08:30 - 08:50

Coffee, registration, welcome



08:50 - 09:05	Welcome Introduction	Introduction and round table	Samuel Constant
09:05 - 09:15	Introduction	AlterTox Academy Overview	Nathalie Belot (Altertox Academy)
09:15 - 10:00	Keynote Speaker	Regulatory considerations for <i>in vitro</i> lung models	Rex FitzGerald (Swiss Center for Applied Human Toxicology)
10:00 - 10:30	Lecture Lung models	3D <i>In vitro</i> models of the human airway epithelium for efficacy and toxicity assessment	Samuel Constant (Epithelix)
10:30 - 11:00	Lecture Lung models	Bioinspired Lung-on-Chip	Janick Stucki (Alveolix)
11:00 - 11:15	<i>Coffee</i>		
11:15 - 11:45	Lecture Exposure devices	Novel aerosol exposure devices for in-vitro toxicity testing at the air/liquid Interface	Patrick Weindl (Vitrocell)
11:45 - 12:15	Lecture TEER	Theoretical and practical aspects of the trans-epithelial electrical resistance (TEER) and tissues interconnection	Adrien Roux (Hepia)
12:15 - 12:30	Lecture Immunocompetent models	Development of <i>in vitro</i> immunocompetent human airway epithelial models	Samuel Constant (Epithelix)

12:30 - 13:45

Lunch



5 HOT sessions will be run in parallel at the same time. Participants will be split into groups of 3-4. Order of HOT sessions are assigned for each group at the beginning of the training session.

13:45 - 15:15	HOT 1	Cell culture of 3D ALL lung models Quality criteria, maintenance, end-points measurement (LDH, mucins, Alcian Blue staining) Treatment with chemicals (Part 1) – Static exposure with Liquid and Solid (Nanopress)	Song Huang & Xiao-Yann Huang (Epithelix)
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15:15 - 15:30

Coffee



15:30 - 17:00	HOT 2	Monitoring of Cilia Motion: Cilia Beating Frequency (CBF) and Mucociliary Clearance (MCC), histology and immunostaining of ALL cultures	Bernadett Boda & Rosy Bonfante (Epithelix)
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19:00

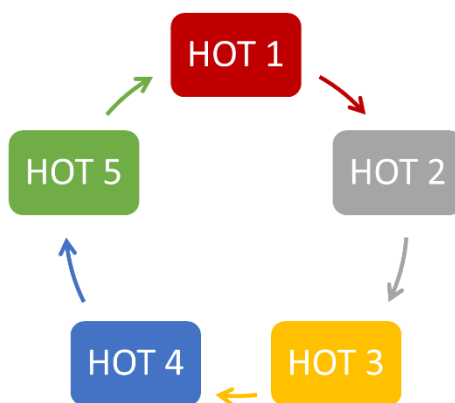
Social dinner at “les Cocottes”

Casino, Route d’Annecy, 74160 Saint-Julien en Genevois



“In Vitro Lung Models”

Friday, November 15, 2019			
08:30-09:00		Coffee 	
09:00 - 10:30	HOT 3	Treatment with chemicals (Part 2) – In-vitro testing of nanomaterials and pharmaceutical substances using the VITROCELL CLOUD System	Patrick Weindl (Vitrocell)
10:30 - 10:45		Coffee 	
10:45 - 12:15	HOT 4	Lung-on-chip system installation and AX-12 chip handling. Initial filling and medium exchange. Assembly and software introduction. Observation of cyclic breathing motion.	Aude Rapet & Andreas Hugi (AlveoliX)
12:15 -13:30		Lunch 	
13:30 - 15:00	HOT 5	Interconnection of human airway epithelia and set-ups for online TEER analysis	Adrien Roux & Loris Gomez Baisac (Hepia)
15:00 - 15:30	Wrap-up	Conclusion, round table discussion	Samuel Constant (Epithelix)
15:30 - 15:45		Closing, handing over certificates 	



HOT sessions will be run in parallel. The order will be color coded.

Group	Organization
RED	HOT 1 → HOT 2 → HOT 3 → HOT 4 → HOT 5
BLACK	HOT 2 → HOT 3 → HOT 4 → HOT 5 → HOT 1
YELLOW	HOT 3 → HOT 4 → HOT 5 → HOT 1 → HOT 2
BLUE	HOT 4 → HOT 5 → HOT 1 → HOT 2 → HOT 3
GREEN	HOT 5 → HOT 1 → HOT 2 → HOT 3 → HOT 4

List of attendees

Attendees:



Attendees	Organization	E-mail address	Groupe
Mariana Da Rocha Soares Guedes	University of Geneva	marianarsg_15@hotmail.com	RED
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Urszula Radzikowska	Swiss Institute of Allergy and Asthma Research	urszula.radzikowska@siaf.uzh.ch	BLACK
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Jeremie Gafner	Japan Tobacco International	jeremie.gafner@jti.com	GREEN
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Louisa Wallace	Utrecht University	louisaelizabeth.wallace@gmail.com	GREEN

Lecturers/Trainers:



Presenter	Organization	E-mail address
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