

Theoretical and Practical Course: **CELL AND ANIMAL MODELS FOR DRUG DISCOVERY**

October 16	October 17	October 18	October 19	October 20
Registration 8:30 - 9:00	Engineering cells (for drug discovery) (H. HAUSER) 9:00 - 10:00	Use of high throughput imaging to develop understanding of limitations in protein secretion in mammalian cells (A. DICKSON) 9:00 - 10:00	Organotypic cell cultures for drug and toxicity testing (A. KLEENSANG) 9:00 - 10:00	Transgenic mice as models for target and drug validation (H. HAUSER) 9:00 - 10:00
Welcome (M. BOLLATI) 9:00 - 9:30				
The Role of Cellular Assays in Drug Discovery (E. KRAUSS) 9:30 -10:45	Assay Development for High Content Screening (E. KRAUSS) 10:00 - 11:00	Cell based assay automation (E. KRAUSS) 10:00 - 11:00	Multi-Organ-Chip technology (U. MARX) 10:00 - 11:00	Presentation and discussion of case studies I Chair: HAUSER- CRISPO 10:00 - 11:00
<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>
Production of reproducible cell material & criteria for high quality cellular screening assay (D. SHUM) 11:30 - 12:30	Stem cells during development, regeneration and ageing (S. TAJBAKSH) 11:30 - 12:30	Data analysis and storage of screening results (D. SHUM) 11:30 - 12:30	HTS technology applied to the identification of hits against pathogenic organisms (D. SHUM) 11:30 - 12:30	Presentation and discussion of case studies I Chair: HAUSER- CRISPO 11:30 - 12:30
<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
Fluorescent based biosensors (M. COMINI) 14:00 -15:00	<b>Videoconference</b> Primary cells in screening (H. RUFFNER) 14:00 -15:00	Toxicology approaches in the 21st century (A. KLEENSANG) 14:00 -15:00	Generation of GM mice and rat (M. CRISPO) 14:00 - 15:00	Presentation and discussion of case studies II Chair: BOLLATI-COMINI 14:00 -16:00
Target identification/validation (e.g. by RNA interference) (E. KRAUSS) 15:00 -16:00	Stem cells, iPS (M. COHEN-TANNOUDJI) 15:00 -16:00	Cellular assays for later drug development (P. ALVES) 15:00 -16:00		
<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>
Students Poster Session Chair: CRISPO-HAUSER 16:30 – 18:30	Students Poster Session Chair: COMINI-ALVES 16:30 – 18:30	<b>Social activity:</b> visit to a colonial winery from 1972 and dinner	Preparation of case studies	The zebrafish embryo as a fast and low-cost in vivo drug test system (F. ZOLESSI) 16:30 -17:15
<i>Welcome cocktail</i>				<i>C. elegans</i> for target and drug validation (G. SALINAS) 17:15 – 18:00

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October 23	October 24	October 25	October 26	October 27
<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4	<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4	<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4	<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4	<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4
<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
<i>Practical activities</i> Group 1 Group 2 Group 3 Group 4				Final discussion
Manipulating gene expression after traumatic CNS injuries using lentiviral and modular recombinant vectors (H. PELUFFO) 16:00 -16:40	<i>Results analysis</i> Group 1 Group 2 Group 3 Group 4	<i>Results analysis</i> Group 1 Group 2 Group 3 Group 4	<i>Results analysis</i> Group 1 Group 2 Group 3 Group 4	Students and Instructors Farewell dinner
Using a rat model of ALS for the development of new drugs (E. TRIAS) 16:40 – 17:30				



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