

High Content Screening for Therapeutics Discovery

August 29th to
September 2nd, 2022



["Click to the poster of the course"](#)

Program

DAY
01

Monday
August 29TH

Designing & establishing cell-based assays for screening

08:00 - 09:00	Meeting with the participants	Atrium
09:00 - 10:00	Welcome & Round table presentation	Conference room
10:00 - 10:40	Introduction to high content analysis and screening <i>Regis Grailhe</i>	Conference room
10:40 - 11:20	Production of reproducible cell material and quality assessment <i>David Shum</i>	Conference room
11:20 - 12:00	Assay development and optimization for cell based assay <i>David Shum</i>	Conference room
12:00 - 13:00	Lunch	
13:00 - 14:00	HTS assay development for discovery of new antibacterial molecules <i>Soojin Jang</i>	Conference room
14:00 - 16:00	[Practical training] Practice on cell infection assay	Laboratory, 3F R&D
16:00 - 17:30	[Pasteur seminar] Cell Based Assay for Infectious Disease Studies <i>Nathalie Aulner</i>	Conference room
17:30 -	Welcome Dinner	

DAY
02

Tuesday
August 30TH

Advanced cell-based assays for screening

9:30 - 10:30	Advanced models: HTS using 3D tissue models <i>Haengran Seo</i>	Conference room
10:30 - 12:00	[Practical training] Advanced models: HTS using 3D tissue models	Laboratory, 3F R&D
12:00 - 13:00	Lunch	Conference room
13:00 - 14:30	Assay development and functional genomics <i>David Shum</i>	Conference room
14:30 - 16:00	[Practical training] Assay development and functional genomics	Laboratory, 3F R&D
16:00 - 17:30	[Pasteur seminar] Deciphering early gut infection by shigella flexneri with bioimage analysis <i>Jean-Yves Tinevez</i>	Conference room

DAY
03

Wednesday
August 31ST

HCS instrumentation and automation systems

9:30 - 10:30	Adapting your assay to your instrumentation <i>Regis Grailhe</i>	Conference room
10:20 - 11:00	Sample management and automation	Conference room
11:00 - 12:00	Overview on available HCS instrumentation	Conference room
12:00 - 13:00	Lunch	Conference room
13:00 - 14:30	[Practical training] HCS instrumentation technologies	Laboratory, 3F R&D
14:30 - 16:00	[Practical training] Liquid handling and automation	Laboratory, 3F R&D
16:00 - 17:30	[Pasteur seminar] HTS/HCS strategies in forward and reverse chemogenomic workflows for bio-discovery <i>Mikael Bouille</i>	Conference room
17:30 - 18:00	Group presentation preparation	PC room, 3F R&D

DAY
04

Thursday
September 1ST

Image processing and screening data analysis

9:30 - 10:30	Overview of HCS analysis software	Conference room
10:30 - 12:00	Practical training: HCS analysis software	PC room, 3F R&D
12:00 - 13:00	Lunch	
13:00 - 14:00	Data analysis and storage of screening hits <i>Inhee Choi</i>	Conference room
14:00 - 15:30	Data curation for integrated database and visualization (featuring DOTMATICs) <i>Inhee Choi</i>	PC room, 3F R&D
15:30 - 17:00	[Pasteur seminar] Leaving conventional image analysis behind: new open super-resolution and deep-learning technologies to empower your cell-based assays <i>Ricardo Henriques</i>	Conference room
17:00 - 18:00	Group presentation preparation	PC room, 3F R&D

DAY
05

Friday
September 2ND

Group presentation & round table discussion

9:30 - 11:00	Group presentation (20 min / group * 4 groups)	Conference room
11:00 - 12:00	Course Evaluation	Conference room
12:00 - 13:00	Lunch	
13:00 - 14:00	Round table & closing ceremony	Conference room