

2nd Course on Computational Systems Biology of Cancer - September 23-28, 2019

A Training Unit International Course - Open conferences (in blue or orange)

Monday, September 23th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Session 1: Pathway databases for single cell research Chairs: TBA
08:50 09:00	Emmanuel Barillot Institut Curie-INSERM, Paris, France	Welcome and opening remarks
09:00 10:00	Augustin Luna Harvard Medical School, Boston, USA	Pathway Commons resource for single cell data analysis and network-based interpretation
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)	
10:30 11:30	Inna Kuperstein Institut Curie-INSERM, Paris, France	ACSN: cancer-specific knowledge resource to study cell type-specific features
11:30 12:00	Presentation(s) selected from post-docs abstracts	10 minutes/presentation
12:00 13:30	LUNCH (BDD Hall) AND POSTERS PLACEMENT (BDD, Annexes 1-3)	
Session 2: Visualization and interpretation of single cell cancer data		
13:30 14:30	Reinhard Schneider Luxembourg University, Luxembourg	MINERVA: data analysis and visualisation platform
14:30 15:30	Heather Marlow <i>Didactic introductory lecture</i> Institut Pasteur, Paris, France	Single cell approaches: lessons from wet lab
15:30 16:00	COFFEE/TEA BREAK (BDD Hall)	
16:00 17:30	Flash presentations of projects by PhD students	5 minutes/presentation
17:30 19:30	WELCOME RECEPTION (Chez Marie)	
Tuesday, September 24th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		
09:00 10:00	Speaker TBA <i>Didactic introductory lecture</i>	Modern data analysis approaches
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)	
10:30 11:30	Luca Pinello Harvard Medical School, Boston, USA	Single Cell Trajectory Reconstruction Exploration and Mapping of omics data
11:30 12:00	Andrei Zhovnev Institut Curie, Paris, France	Epigenetic tumor heterogeneity at single cell level
12:30 13:30	LUNCH (BDD Hall)	
Session 4: Single cell omics data analysis in tumor heterogeneity studies (2)		
13:30 14:30	Oliver Stegle <i>Keynote</i> EMBL-EBI, Hinxton, UK	Computational analysis of cell-to-cell heterogeneity in single-cell RNA-sequencing data
14:30 15:30	Presentation(s) selected from abstracts	10 minutes/presentation
15:30 16:00	COFFEE/TEA BREAK (BDD Hall)	
16:00 17:00	Flash presentations of projects by PhD students	5 minutes/presentation
17:00 18:30	POSTERS (BDD Annexes 1-3)	
Wednesday, September 25th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		
09:00 10:00	Denis Thieffry <i>Didactic introductory lecture</i> IBENS-ENS, Paris, France	Mathematical modelling approaches in cancer research
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)	
10:30 11:30	Julio Saez-Rodriguez EMBL-EBI, Hinxton, UK	Pathway-based analysis of single-cell data
11:30 12:00	Flash presentations of projects by PhD students	5 minutes/presentation
12:00 13:30	LUNCH (BDD Hall)	
Session 6: Exploring tumor microenvironment using single cell data		
13:30 14:30	Vassili Soumelis INSERM, Paris, France	Immune cell diversity in cancer: of concepts, subsets, states and single cells
14:30 15:30	Lella Perié Institut Curie, Paris, France	Family matters: the role of single cell families in hematopoiesis
15:30 16:00	COFFEE/TEA BREAK (BDD Hall)	
16:00 17:00	Jérôme Galon Cordeliers Research Center, Paris, France	Integrative cancer immunology and novel concepts of cancer evolution
17:00 18:30	POSTERS AND BEER (BDD Annexes 1-3)	
Thursday, September 26th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		
09:00 10:30	Estelle Duprez CRCM, Marseille, France	Epigenetic and gene expression profiling of normal and malignant hematopoiesis
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)	
10:30 11:30	Nikolaus Rajewsky <i>Keynote EMBO lecturer</i> MDC, Berlin, Germany	TBA
11:30 12:30	Students journal club	4-5 milestone papers from the field presentation by students
12:30 13:30	LUNCH (BDD Hall)	
Session 8: Treatment response prediction and patient stratification		
13:30 14:30	Lodewyk Wessels National Cancer Institute, Amsterdam, The Netherlands	Molecular networks as determinants of response and outcome
14:30 15:30	Kathleen Marchal Ghent University, Ghent, Belgium	Integrative network-based analysis for subtyping and cancer driver identification
15:30 16:00	COFFEE/TEA BREAK (BDD Hall)	
16:00 17:00	Students journal club	4-5 milestone papers from the field presentation by students
17:00 18:00	Tutorials	
Friday, September 27th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		
09:00 10:00	Ioannis Xenarios UNIL, Lausanne, Switzerland	Modelling approaches in tumor microenvironment
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)	
10:30 11:30	Peter Kharchenko <i>Keynote</i> Harvard Medical School, Boston, USA	Integrative analysis of large single-cell RNA-seq collections
11:30 12:30	Tutorials	
12:30 13:30	LUNCH (BDD Hall)	
13:30 14:30	VISIT OF CURIE MUSEUM	
Session 10: Bioimage informatics for single cell data cancer research		
14:30 15:30	Jean-Phillipe Vert Google, Paris, France	TBA
15:30 16:30	Thomas Walter Centre for Computational Biology, MINES ParisTech, Paris, France	Bioimage analysis for single cell analysis and spatial transcriptomics
16:30 17:00	Coffee break and poster removal (BDD Hall)	
16:30 17:30	Master student's journal club	4-5 milestone papers from the field presentation by students
17:30 18:00	Closing remarks, prizes for flash presentations and posters	
18:30 21:00	FAREWELL COCKTAIL (Chez Marie)	
Saturday, September 28th BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		
CAREER DEVELOPMENT WORKSHOP		
10:00 10:15	Introduction to career development opportunities in computational systems biology of cancer	
10:15 12:30	Flash presentations: invited speakers, pharma and scientific editing representatives, platform managers speaking on their career	
12:30 13:00	Global discussion panel of audience with all speakers	
13:00 14:00	LUNCH (BDD Hall) AND DISCUSSIONS (BDD, Annexes 1-3)	
14:00 16:00	Round tables: students discuss career paths with invited speakers, pharma and scientific editing representatives, platform managers	