

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 23 th		Session 1: Pathway databases for single cell research	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Emmanuel Barillot	
08:50	Training Unit and Emmanuel Barillot Institut Curie, Paris, France	Welcome and opening remarks	
09:00	Loredana Martignetti <i>Didactic introductory lecture</i> Imagine Insitut, Paris, France	Approaches in computational single cell genomics data analysis	
10:00	COFFEE/TEA BREAK (BDD Hall) AND POSTERS PLACEMENT (odd numbers, BDD, Annexes 1-3)		
10:30	Augustin Luna Harvard Medical School, Boston, USA	Pathway Commons resource for single cell data analysis and network-based interpretation	
11:30	Flash presentations of projects by post-docs		
12:30	7 minutes/presentation		
12:30	LUNCH (BDD Hall) AND POSTERS PLACEMENT (odd numbers, BDD, Annexes 1-3)		
13:30			
Monday, September 23 th		Session 2: Visualization and interpretation of single cell cancer data	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Vassili Soumelis	
13:30	Reinhard Schneider LCSB, Beval, Luxembourg	Data integration and knowledge management in Biomedicine	
14:30	Flash presentations of projects by post-docs and PhD students		
15:30	7 minutes/presentation and 4 minutes/presentation		
15:30	COFFEE/TEA BREAK (BDD Hall)		
16:00			
16:00	POSTER SESSION 1 (odd numbers, BDD Annexes 1-3)		Master student's journal club - session 1 (BDD Amphithéâtre)
17:00			
17:30	WELCOME RECEPTION (Chez Marie)		
19:00			

Tuesday, September 24 th		Session 3: Single cell omics data analysis in tumor heterogeneity studies (1)	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Denis Thieffry	
09:00	Julio Saez-Rodriguez EMBL-EBI, Hinxton, UK	Pathway-based analysis of single-cell data	
10:00	COFFEE/TEA BREAK (BDD Hall)		
10:30			
10:30	Luca Pinello Harvard Medical School, Boston, USA	Single Cell Trajectory Reconstruction Exploration and Mapping of omics data	
11:30	Flash presentations of projects by PhD students		
12:30	4 minutes/presentation		
12:30	LUNCH (BDD Hall)		
13:30			
Tuesday, September 24 th		Session 4: Single cell omics data analysis in tumor heterogeneity studies (2)	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Denis Thieffry	
13:30	Thomas Höfer Deutsches Krebsforschungszentrum, Heidelberg, Germany	Tumorigenesis driven by aberrant stem cell dynamics	
14:30	Andrew Teschendorff UCL, London, UK	Towards the quantification of Waddington's epigenetic landscape at the single-cell level	
15:30	COFFEE/TEA BREAK (BDD Hall)		
16:00			
16:00	Ioannis Xenarios UNIL, Lausanne, Switzerland	Cellular decision process using single data to build up cellular automata of differentiations and responses	
17:00	POSTER SESSION 2 (odd numbers, BDD Annexes 1-3)		
18:00	Master student's journal club - session 2 (BDD Amphithéâtre)		

Wednesday, September 25 th		Session 5: Exploring tumor microenvironment using single cell data (1)	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Laurence Calzone	
09:00	Denis Thieffry IBENS-ENS, Paris, France	Qualitative dynamical modeling of T-helper cell differentiation and reprogramming	
10:00	COFFEE/TEA BREAK (BDD Hall) AND POSTERS PLACEMENT (even numbers, BDD, Annexes 1-3)		
10:30			
10:30	Veronique Thomas-Vaslin Sorbonne University, Paris, France	Systems biology for cell proliferation quantification and modeling of lymphocyte dynamics: T-cell heterogeneity dynamics across aging and genetic origins	
11:30	Flash presentations of projects by PhD students		
12:00	4 minutes/presentation		
12:00	LUNCH (BDD Hall), POSTERS PLACEMENT (even numbers, BDD, Annexes 1-3) AND VISIT OF MARIE CURIE MUSEUM (Group 1)		
13:30			
Wednesday, September 25 th		Session 6: Exploring tumor microenvironment using single cell data (2)	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Tatiana Popova	
13:30	Vassili Soumelis INSERM, Paris, France	Immune cell diversity in cancer: of concepts, subsets, states and single cells	
14:30	Leïla Perié Institut Curie, Paris, France	Family matters: the role of single cell families in hematopoiesis	
15:30	COFFEE/TEA BREAK (BDD Hall)		
16:00			
16:00	Jérôme Galon Cordeliers Research Center, Paris, France	Integrative cancer immunology and immune contexture	
17:00	POSTER SESSION 3 (even numbers, BDD Annexes 1-3)		
18:00	Master student's journal club - session 3 (BDD Amphithéâtre)		

Thursday, September 26th		Session 7: Tumor genetics and epigenetics	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Inna Kuperstein	
09:00 10:00	Flash presentations of projects by PhD students	4 minutes/presentation	
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)		
10:30 11:30	Estelle Duprez CRCM, Marseille, France	Epigenetic and gene expression profiling for patient stratification and biomarker discovery	
11:30 12:30	Talks selected from abstracts	10 minutes/presentation	
12:30 13:30	LUNCH (BDD Hall) and VISIT OF MARIE CURIE MUSEUM (Group 2)		
Thursday, September 26th		Session 8: Treatment response prediction and patient stratification	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Andrei Zinoyev	
13:30 14:30	Lodewyk Wessels National Cancer Institute, Amsterdam, The Netherlands	Interactions and drug response prediction in cancer	
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 16:30	Antoine de Weck <i>Pharma talk</i> Novartis, Basel, Switzerland	Functional screening for Target Identification and Drug Discovery	
16:30 17:30	POSTER SESSION 4 (even numbers, BDD Annexes 1-3)	Master student's journal club - session 4 (BDD Amphithéâtre)	

Friday, September 27th		Session 9: Multi-level single cell omics data analysis	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Vassili Soumelis	
09:00 10:00	Andrei Zinoyev Institut Curie, Paris, France	Epigenetic tumor heterogeneity at single cell level	
10:00 10:30	COFFEE/TEA BREAK (BDD Hall)		
10:30 11:30	Peter Kharchenko <i>Keynote Marie Curie Seminar</i> Harvard Medical School, Boston, USA	Integrative analysis of large single-cell RNA-seq collections	
11:30 12:00	Philip Stegmaier <i>Pharma talk</i> geneXplain, Wolfenbüttel, Germany	Combining Single Cell and Upstream Analysis to Infer Molecular Mechanisms of Cancer	
12:00 12:30	Talks selected from abstracts	10 minutes/presentation	
12:30 14:30	LUNCH (BDD Hall) and VISIT OF MARIE CURIE MUSEUM (Groups 3, 4)		
Friday, September 27th		Session 10: Bioimage informatics for single cell data cancer research	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris		Chairs: Thomas Walter	
14:30 15:30	Thomas Walter Centre for Computational Biology, MINES ParisTech, Paris, France	Bioimage analysis for single cell analysis and spatial transcriptomics	
15:30 16:30	Talks selected from abstracts	10 minutes/presentation	
16:30 17:00	Coffee break (BDD Hall)		
17:00 18:00	Ido Amit The Weizmann Institute of Science, Rehovot, Israel	The power of ONE: Immunology in the age of single cell genomics	
18:00 18:30	Closing remarks, prizes for flash presentations and posters		
18:30 21:00	FAREWELL COCKTAIL (Chez Marie)		

Saturday, September 28th		CAREER DEVELOPMENT WORKSHOP	
BDD Amphithéâtre, 11-13 rue Pierre & Marie Curie, 75005 Paris			
10:00 10:15	Furtado Ana Rita The training Unit of Institut Curie, Paris, France	The general trends of career paths in academy	
10:15 10:30	Emmanuel Barillot Institut Curie, Paris, France	Career in a Bioinformatics Core Facility	
10:30 10:45	Denis Thieffry IBENS-ENS, Paris, France	CV and profile writing: what recruiters like and dis-like	
10:45 11:00	Vassili Soumelis Institut Curie-INSERM, Paris, France	Working at the interface between academic research and hospital	
11:00 11:30	BRUNCH (BDD Hall)		