6th course on Computational Systems Biology of Cancer: models of data, data for models
September 25 - 29, 2023 hours are in CEST zone

Institut Curie Advanced International Course **(All lectures are in Amphi BDD*)**

Monday, September 25 Chairs: Emmanuel Barillot and Laurence Calzone		
08:50 09:00	**Inna Kuperstein** Institut Curie, Paris, FR	Welcome and opening remarks by the organisers
09:00 09:30	**Emmanuel Barillot** Institut Curie, Paris, FR	**Introduction to Computational Systems Biology of Cancer, Multi-omics and Artificial Intelligence**
09:30 10:00	**Laurence Calzone** Institut Curie,Paris, FR	**Introduction to modelling tumorigenesis**
10:00 10:30	Coffee break / Meet the speaker (Hall BDD)	
10:30 11:30	**Vera Pancaldi** Centre de Recherches en Cancérologie de Toulouse, Toulouse, FR	**Network-based multi-omics integrative approaches in immuno-oncology**
12:30 13:30	**Valentina Boeva** ETH Zürich, Zürich, CH	**Discovery of shared transcriptional states across cancer patients from RNA sequencing data**
13:30 14:30	Lunch (Hall BDD)	
Monday, September 25		
14:30 15:30	Flash Presentations by post-docs	15 minutes/presentation
15:30 16:30	**Luca Pinello Marie Curie Lecture Session** Harvard University, Cambridge, US	**Learning gene regulatory circuits and cell fate decisions from single-cell multi-omics data**
16:30 17:30	Coffee break / Meet the speaker (Hall BDD)	
17:30 18:30	Poster session 1 (Poster area BDD)	
19:00 20:30	**Welcome cocktail**	

Tuesday, September 26 Chair: Ina Koch		
09:00 10:00	**Julio Saez-Rodriguez** University of Heidelberg, Heidelberg, DE	**Knowledge-based machine learning on single-cell omics to understand cancer**
10:00 11:00	Flash Presentations by post-docs	15 minutes/presentation
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	**Hatzimanikatis Vassily** École Polytechnique Fédérale de Lausanne, Lausanne, CH	**From receptors to metabolism: reconstruction, modeling and data integration in signaling networks around metabolism**
12:30 13:30	Flash Presentations by post-docs	15 minutes/presentation
13:30 14:30	Lunch (Hall BDD)	
Tuesday, September 26		
14:30 15:30	**Ina Koch** Goethe University Frankfurt, Frankfurt, DE	**Modeling of signaling pathways in cancer applying Petri nets**
15:30 16:00	**Swati Gupta** Talk selected from abstract VIB-KU Leuven, Leuven, BE	**From morphology to transcriptomics: Understanding Breast cancer through Single-cell RNA sequencing of PIK3CA-H1047R and Kras-G12D Mutants**
15:00 16:30	**Maria Masid** Talk selected from abstract University of Lausanne, Lausanne, CH	**Developing systems biology models and methods to investigate the metabolic state of cancer cells and immune cells in the context of improving immunotherapies for cancer**
16:30 17:00	Coffee break / Meet the speaker (Hall BDD)	
17:00 18:00	**Reka Albert** Pennsylvania State University, State College, US	**Network-based dynamic models of oncogenic signaling in epithelial-mesenchymal transition and breast cancer suggest therapeutic interventions**
18:00 19:00	Poster session 2 (Poster area BDD) and Master's journal club (Amphi BDD)	

** Entrance through 11 rue Pierre et Marie Curie - 75005 PARIS*

Wednesday, September 27 Chair: Oznur Tastan		
09:00 10:00	**Ozgun Babur** University of Massachusetts, Boston, US	**Learning from multi-omic measurements using prior knowledge**
10:00 11:00	**Fatima Al-Shahrour** KEYNOTE Spanish National Cancer Research Centre, Madrid, ES	**Bioinformatics strategies to target cancer genomes for precision medic**
11:00 11:30	Coffee break / Meet the speaker speaker (Hall BDD)	
11:30 12:30	Flash Presentations by PhD students	10 minutes/presentation
12:30 13:30	Lunch (Hall BDD)	
Wednesday, September 27		
13:30 14:30	Flash Presentations by PhD students	10 minutes/presentation
14:30 15:30	**Oznur Tastan** Sabanci University, Istanbul, TR	**From Cell-Lines to Cancer Patients: Personalized Drug Synergy Prediction with Deep Learning**
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Flash Presentations by PhD students	10 minutes/presentation
17:00 18:00	Poster session 3 (Poster area BDD) and Master's journal club (Amphi BDD)	

Thursday, September 28 Chair: Thomas Walter		
09:00 10:00	**Thomas Walter** Institut Curie, Paris FR	**Predictive models in Computational Pathology**
10:00 11:00	Flash Presentations by PhD students	10 minutes/presentation
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	Flash Presentations by PhD students	10 minutes/presentation
12:30 13:30	Lunch (Hall BDD)	
Thursday, September 28		
13:30 14:30	**Kim Thrane** KTH Royal Institute of Technology, Stockholm, SE	**Spatial Transcriptomics and the mapping of T and B cell receptor sequences in human tissue**
14:30 15:30	**Giovanni Ciriello** University of Lausanne, Lausanne, CH	**Chromatin plasticity in cancer evolution**
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Flash Presentations by PhD students	10 minutes/presentation
17:00 18:00	Poster session 4 (Poster area BDD) and Master's journal club (Amphi BDD)	

Friday, September 29 Chair: Denis Thieffry		
09:00 10:00	**Asmund Flobak** Norwegian University of Science and Technology, Trondheim, NO	**Clinical decision support for colon cancer by computational cancer signaling simulation and patient-derived spheroid functional validation**
10:00 11:00	**Connie R. Jimenez** Amsterdam University Medical Center, Amsterdam, NL	**Inferring kinase activity from phosphoproteomics data for target discovery and treatment response prediction in cancer**
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	**Denis Thieffry (demo/tutorial)** Institut de Biologie de l'Ecole Normale Superieure, Paris, FR	**Reproducible model analyses with the CoLoMoto software container and Jupiter notebook**
12:30 13:30	Lunch (Hall BDD)	
Friday, September 29		
13:30 14:30	**Lodewyk Wessels** Netherlands Cancer Institute, Amsterdam, NL	**Combination treatment response**
14:30 15:00	**Ihab Bendidi** Talk selected from abstract Institute of Biology of Ecole Normale Supérieure, Paris, FR	**No Free Lunch in Self Supervised Learning for Image-based Phenotype Analysis**
15:00 15:30	**Martina Tosi** Talk selected from abstract University of Eastern Piedmont, Novara, IT	**A Multi-Omics Approach To Study Complex Diseases**
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Career development workshop	Representatives of academia, pharma, edting bodies and platforms
17:00 17:30	**Closing remarks, prizes for journal club, presentations and posters** (Amphi BDD)	
17:30 19:00	**Farewell cocktail**	