

# 6th course on Computational Systems Biology of Cancer: models of data, data for models

September 25 - 29, 2023 **hours are in CEST zone**

## Preliminary program

Institut Curie Advanced International Course

(All lectures are in Amphi BDD\*)

Monday, September 25 Session 1: TBA		
Chair: TBA		
08:50 09:00	Inna Kuperstein Institut Curie, Paris, FR	Welcome and opening remarks by the organisers
09:00 09:30	<b>Emmanuel Barillot</b> Institut Curie, Paris, FR	<b>Introduction to Computational Systems Biology of Cancer, Multi-omics and Artificial Intelligence</b>
09:30 10:00	<b>Laurence Calzone</b> Institut Curie, Paris, FR	<b>Introduction to modelling tumorigenesis</b>
10:00 10:30	Coffee break / Meet the speaker (Hall BDD)	
10:30 11:30	<b>Vera Pancaldi</b> Centre de Recherches en Cancérologie de Toulouse, Toulouse, FR	<b>Network-based multi-omics integrative approaches in immuno-oncology</b>
12:30 13:30	<b>Valentina Boeva</b> ETH Zürich, Zürich, CH	<b>Discovery of shared transcriptional states across cancer patients from RNA sequencing data</b>
13:30 14:30	Lunch (Hall BDD)	
Monday, September 25 Session 2: TBA		
Chair: TBA		
14:30 15:30	Flash Presentations by post-docs	15 minutes/presentation
15:30 16:30	<b>Luca Pinello</b> Harvard University, Cambridge, US	<b>Learning gene regulatory circuits and cell fate decisions from single-cell multi-omics data</b>
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 (Place TBA)	
Tuesday, September 26 Session 3: TBA		
Chair: TBA		
09:00 10:00	<b>Julio Saez-Rodriguez</b> University of Heidelberg, Heidelberg, DE	<b>Knowledge-based machine learning on single-cell omics to understand cancer</b>
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	<b>Hatzimanikatis Vassily</b> École Polytechnique Fédérale de Lausanne, Lausanne, CH	<b>From receptors to metabolism: reconstruction, modeling and data integration in signaling networks around metabolism</b>
12:30 13:30	Flash Presentations by PhD students	7 minutes/presentation (Amphi BDD)
13:30 14:30	Lunch (Hall BDD)	
Tuesday, September 26 Session 4: TBA		
Chair: TBA		
14:30 15:30	<b>Ina Koch</b> Goethe University Frankfurt, Frankfurt, DE	<b>Modeling of signaling pathways in cancer applying Petri nets</b>
15:30 16:30	Two short talks selected from abstracts	TBA
16:30 17:00	Coffee break / Meet the speaker (Hall BDD)	
17:00 18:00	<b>Reka Albert</b> Pennsylvania State University, State College, US	<b>Network-based dynamic models of oncogenic signaling in epithelial-mesenchymal transition and breast cancer suggest therapeutic interventions</b>
18:00 19:00	Poster session 2 (Poster area BDD) and Master's journal club (Amphi BDD)	
Wednesday, September 27 Session 5: TBA		
Chair: TBA		
09:00 10:00	<b>Ozgun Babur</b> University of Massachusetts, Boston, US	<b>Learning from multi-omic measurements using prior knowledge</b>
10:00 11:00	<b>Fatima Al-Shahrour KEYNOTE</b> Spanish National Cancer Research Centre, Madrid, ES	<b>Bioinformatics strategies to target cancer genomes for precision medicine</b>

11:00 11:30	Coffee break / Meet the speaker speaker (Hall BDD)	
11:30 12:30	Flash Presentations by PhD students	7 minutes/presentation (Amphi BDD)
12:30 13:30	Lunch (Hall BDD)	
<b>Wednesday, September 27 Session 6: TBA</b>		
Chair: TBA		
13:30 14:30	Pharma talk	TBA
14:30 15:30	<b>Oznur Tastan</b> Sabanci University, Istanbul, TR	<b>From Cell-Lines to Cancer Patients: Personalized Drug Synergy Prediction with Deep Learning</b>
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Flash Presentations by PhD students	7 minutes/presentation (Amphi BDD)
17:00 18:00	Poster session 3 (Poster area BDD) and Master's journal club (Amphi BDD)	

<b>Thursday, September 28 Session 7: TBA</b>		
Chair: TBA		
09:00 10:00	<b>Thomas Walter</b> Institut Curie, Paris FR	<b>Predictive models in Computational Pathology</b>
10:00 11:00	TBA	TBA
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	Pharma talk	TBA
12:30 13:30	Lunch (Hall BDD)	

<b>Thursday, September 28 Session 8: TBA</b>		
Chair: TBA		
13:30 14:30	<b>Kim Thrane</b> KTH Royal Institute of Technology, Stockholm, SE	<b>Spatial Transcriptomics and the mapping of T and B cell receptor sequences in human tissue</b>
14:30 15:30	<b>Giovanni Ciriello</b> University of Lausanne, Lausanne, CH	TBA
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Flash Presentations by PhD students	7 minutes/presentation (Amphi BDD)
17:00 18:00	Poster session 4 (Poster area BDD) and Master's journal club (Amphi BDD)	

<b>Friday, September 29 Session 9: TBA</b>		
Chair: TBA		
09:00 10:00	<b>Asmund Flobak</b> Norwegian University of Science and Technology, Trondheim, NO	<b>Clinical decision support for colon cancer by computational cancer signaling simulation and patient-derived spheroid functional validation</b>
10:00 11:00	<b>Connie R. Jimenez</b> Amsterdam University Medical Center, Amsterdam, NL	<b>Inferring kinase activity from phosphoproteomics data for target discovery and treatment response prediction in cancer</b>
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	<b>Denis Thieffry (demo/tutorial)</b> Institut de Biologie de l'Ecole Normale Supérieure, Paris, FR	<b>Reproducible model analyses with the CoLoMoto software container and Jupiter notebook</b>
12:30 13:30	Lunch (Hall BDD)	

<b>Friday, September 29 Session 10: TBA</b>		
Chair: TBA		
13:30 14:30	<b>Lodewyk Wessels</b> Netherlands Cancer Institute, Amsterdam, NL	<b>Combination treatment response</b>
14:30 15:30	Two talks selected from abstracts	TBA
15:30 16:00	Coffee break / Meet the speaker (Hall BDD)	
16:00 17:00	Career development workshop	Representatives of academia, pharma, editing bodies and platforms (Amphi BDD)
17:00 17:30	Closing remarks, prizes for journal club, presentations and posters (Amphi BDD)	
17:30 19:00	Farewell cocktail party (Place: TBA)	

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