

**8th course on Computational Systems Biology of Cancer:
Multimodal data analysis and network modelling to master cancer hallmarks
September 22nd - September 26th, 2025**

Amphi BDD - Entrance through 11 rue Pierre et Marie Curie - 75005 PARIS

Monday, September 22nd - Background in computational oncology

Chair: Denis Thieffry

09:15 09:30	Loredana MARTIGNETTI & Denis THIEFFRY Institut Curie, PSL, Paris, FR	Welcome and opening remarks
09:30 10:30	Laurence CALZONE & Loredana MARTIGNETTI Institut Curie, PSL, Paris, FR	From cancer omics data to mechanistic models
10:30 11:00	Coffee break / Meet the speaker (Hall BDD)	
11:00 11:45	Chloé AZENCOTT CBIO Mines Paris PSL, Paris, FR	Machine learning for genomics
11:45 12:30	Aurélien DUGOURD University of Heidelberg, DE / EBI, Hinxton, UK	Integrating multi-omic data with prior knowledge network to generate mechanistic hypotheses
12:30 14:00	Lunch (Hall BDD)	

Monday, September 22nd – Spatial transcriptomics: experimental technologies and computational methods

Chair: Loredana Martignetti

14:00 15:00	Kyra BORGMAN Institut Curie, Paris, FR	Diving into FISH-based spatial omics technologies
15:00 15:30	Coffee break / Meet the speaker (Hall BDD)	
15:30 16:30	Leanne DE KONING & Nicolas SERVANT Institut Curie, Paris, FR	Finding your way in the universe of spatial omics
17:00 20:00	Welcome cocktail (Green Cafe)	

Tuesday, September 23rd – Computational analysis of multi-omics data

Chair: Lucie Gaspard-Boulinç

09:00 10:00	Giovanni CIRIELLO University of Lausanne, CH	Co-mutations in cancer: from algorithmic identification to clinical applications
10:00 11:00	Marta LOVINO UniMore, Modena, IT	Multi-modal and multi-omics integration for patient stratification and survival estimation
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	Flash Presentations	
12:30 14:00	Lunch (Hall BDD)	

Tuesday, September 23rd – Knowledge graph models for human diseases

Chair: Annabelle Ballesta

14:00 15:00	Andrei ZINOVYEV	Predictive modeling of complex biology in early drug discovery : where are we now ?
15:00 15:30	Tom S WEBER	LoxCode <i>in vivo</i> barcoding reveals epiblast clonal fate bias to fetal organs
15:30 16:30	Short talks + Flash Presentations	
16:30 17:00	Coffee break / Meet the speaker (Hall BDD)	
17:00 18:00	Luca PINELLO BROAD/HARVARD, US	TBC
18:00 19:00	Poster session 1 (Poster area BDD)	

Wednesday, September 24rd – Towards personalised cancer models

Chair: Laurence Calzone

09:00 10:00	Kristin REICHE Fraunhofer Institute, Leipzig, DE	Design specifications for virtual patient twins in engineered adaptive cellular immunotherapies
10:00 11:00	Asmund FLOBAK Norwegian University of Science and Technology, Trondheim, NO	Towards patient-unique drug combinations by computational prediction and functional validation
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	Short talks	
12:30 14:00	Lunch (Hall BDD)	

Wednesday, September 24rd – Dynamical modelling of cancer networks

Chair: Thomas Walter

14:00 15:00	Vassily HATZIMANIKATIS EPFL, Lausanne, CH	From receptors to metabolism: reconstruction, modeling and data integration in signaling networks around metabolism
15:00 16:00	Short talks + Flash Presentations	
16:00 16:30	Coffee break / Meet the speaker (Hall BDD)	
16:30 17:30	Angelique STEPHANOU TIMC, CNRS, Grenoble, FR	Hybrid multiscale modelling as a computational tool to investigate tumour metabolism
18:00 19:00	Poster session 2 (Poster area BDD)	

Thursday, September 25th – Proteomics and metabolomics

Chair: Saran Pankaew

09:00 10:00	Laurent GATTO UCLouvain, Louvain, BE	A principled approach to process, analyse and interpret single-cell proteomics data
10:00 11:00	Frédérique LISACEK SIB Swiss Institute of Bioinformatics, Univ. of Geneva, CH	Glycoinformatics pieces fitting in the human health puzzle
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:30	Annabelle BALLESTA Institut Curie, PSL Paris, FR	Multiscale modelling for personalised medicine
12:30 14:00	Lunch (Hall BDD)	

Thursday, September 25th – From data to models to patients

Chair: Emmanuel Barillot

14:00 15:00	Lodewyk WESSELS NKI, Amsterdam, NL	Towards understanding drug response in cancer
15:00 15:30	Coffee break / Meet the speaker (Hall BDD)	
15:30 16:30	Yves MOREAU KU Leuven, BE	AI in drug discovery and precision medicine: A revolution?
16:30 17:30	Master's journal club (Amphi BDD)	
18:00 21:00	Social Event (Outside Curie)	

Friday, September 26th – NLP and hallmarks

Chair: Marta Lovino

09:00 10:00	Michele CASELLE University of Torino, IT	Topic modelling for the analysis of multi-omic data
10:00 11:00	Elsa BERNARD Gustave Roussy, Villejuif, FR	Mutations in Myeloid Cells: Enabling Precision Diagnostics and Understanding Systemic Impact in Cancer
11:00 11:30	Coffee break / Meet the speaker (Hall BDD)	
11:30 12:00	Short talks	
12:00 14:00	Lunch (Hall BDD)	

Friday, September 26th

Chair: Victoria Bruning + Kazi Faizul

14:00 16:30	Curie Museum Vist (Curie Campus) Career development workshop (Amphi BDD) Master's journal club (IBENS)	
17:00 17:30	Closing remarks, prizes for journal club, presentations and posters (Amphi BDD)	
17:30 19:00	Farewell Social	