

8th Course on Cytoskeleton - April 13-20, 2016

Cytoskeleton in Tissue Mechanics

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

Wednesday, April 13		
Amphithéâtre Curie, 11 rue Pierre & Marie Curie, 75005 Paris		
13:00	Guillaume Montagnac, Stéphanie Miserey-Lenkei & Danijela Vignjevic	Practical aspects (Joliot room)
14:30		Presentation of the course (Joliot room)
14:30 15:30	Manuel Thery Hôpital Saint-Louis, FR	Centrosome positioning at the cell center sounds simple but nobody knows how it works (neither do we)
15:30 16:30	Marie-Hélène Verlhac Collège de France, FR	Symmetry and Asymmetry controlled by actin mechanics
16:30	BREAK	
17:00 18:00	Franck Perez Institut Curie, FR	Microtubules, the Golgi complex and the control of the secretory routes
18:00 19:00	Guillaume Montagnac Institut Gustave Roussy, FR	Adhesive Clathrin-coated pits for 3D cell migration
19:00 21:00	Presentations by students & Dinner (Chez Marie)	

Thursday, April 14

Amphithéâtre Curie, 11 rue Pierre & Marie Curie, 75005 Paris

09:30 10:30	Yohanns Bellaïche Institut Curie, FR	Cell division and tissue morphogenesis 1: Mitotic spindle orientation and cytokinesis in epithelial tissue
10:30	BREAK	
11:00 12:00	Benoit Ladoux Institut Jacques Monod, FR	Epithelial gap closure governed by forces and geometry
12:00 13:00	Pascal Silberzan Institut Curie, FR	Confined and shaped epitheliums
13:00	LUNCH (Green Café)	
14:30 15:30	VISIT OF THE CURIE MUSEUM	
15:30	BREAK	
15:30 16:30	Marija Plodinec University of Bazel, CH	An in vitro engineered epithelia that bears the hallmarks of living tissue
17:00 21:00	Presentations by students & Dinner (Chez Marie)	

Friday, April 15		
Amphithéâtre Curie, 11 rue Pierre & Marie Curie, 75005 Paris		
09:30 10:30	Stéphanie Miserey-Lenkei Institut Curie, FR	Coupling between RAB GTPases and Molecular Motors at the Golgi complex
10:30	BREAK	
11:00 12:00	Danijela Vignjevic Institut Curie, FR	Role of microenvironment in cancer cell invasion
12:00 13:00	Julie Plastino Institut Curie, FR	Cytoskeleton dynamics and cell shape changes in <i>C. elegans</i>
13:00	LUNCH (Green Café)	
14:30 15:30	Buzz Baum MRC, UK	The mechanics of cell division
15:30 16:30	Jean-François Joanny ESPCI, FR	Mechanics and growth of tissues
17:00 18:00	Presentations by students (Chez Marie)	
18:00	Dinner & Party	

Saturday, April 16	
Chez Marie, 12 rue Lhomond, 75005 Paris	
11:00 14:30	Career Development Workshop & Brunch

Monday, April 18		
Amphithéâtre Constant Burg, 12 rue Lhomond, 75005 Paris		
09:30 10:30	Alexander Bershadsky Weizmann Institute, IL	Self organization of actomyosin cytoskeleton
10:30	BREAK	
11:00 12:00	Carl-Philipp Heisenberg IST, AT	The physical basis of complex tissue spreading
12:00 13:00	Short talks: Denis Krndija: "Epithelial cell migration in the intestinal villi depends on actin-driven cell protrusions and mitotic pressure in the crypts" Diana Pinheiro: "Transmission of cytokinesis forces by E-Cadherin dilution and actin-myosin flows" Sjoerd van Helvert: "Strain stiffening of fibrillar collagen during individual and collective cell migration, identified by AFM nanoindentation" Nisha Mohd Rafiq: "An ARNO-ARF1 signaling axis in the regulation of podosome formation"	
13:00	LUNCH (Green Café)	
14:30 15:30	Alexander Bershadsky Weizmann Institute, IL	Cytoskeletal and signaling mechanisms of cell-matrix adhesion regulation
15:30	BREAK	
16:00 17:00	Nicolas Minc Institut Jacques Monod, FR	Cell shape and early embryonic development
17:00 18:00	Short talks: Arikta Biswas: " <i>Mapping membrane fluctuations in adherent cells</i> " Kotryna Vaidziulyte: " <i>Optogenetic control of intracellular gradients of RhoGTPases</i> " Antoun Al Absi: " <i>Actin cytoskeleton remodeling: a novel mechanism for tumor cells to escape from natural killer cell-mediated cell death</i> " Anita KUMARI: " <i>Force measurement at B cell Immune synapse</i> "	

Tuesday, April 19		
Amphithéâtre Constant Burg, 12 rue Lhomond, 75005 Paris		
09:30 10:30	Thomas Lecuit IBDM, FR	Mechanics of tissue morphogenesis
10:30	BREAK	
11:00 12:00	Jody Rosenblatt University of Utah, US	New roles for mechanical tensions controlling both epithelial cell death and division
12:00 13:00	Carl-Philipp Heisenberg IST, AT	The role of surface tension in cell segregation
13:00	LUNCH (Green Café)	
14:30 15:30	Xavier Trepât University of Barcelona, ES	Collective guidance of cell migration and invasion
15:30	BREAK	
16:00 17:00	Stéphane Germain Collège de France, FR	Extracellular matrix scaffolding dictates 3D vascular morphogenesis
17:00 18:00	Short talks: Chiara De Pascalis: <i>"Intermediate filaments control astrocyte collective migration through adhesion regulation"</i> Laurence Bertier: <i>"Nanobody footprinting of cortactin in cancer cell invasion"</i> Louis THERET: <i>"Identification of LPR-1 as a key endocytosis receptor of integrin β1 in the tumor context"</i> Berverly Yang: <i>"Protein Tyrosine Kinases Control Local Pinching Involved in Adhesion-Dependent Mechanosensing"</i>	

Wednesday, April 20		
Amphithéâtre Curie, 11 rue Pierre & Marie Curie, 75005 Paris		
09:30 10:30	Emmanuel Farge Institut Curie, FR	Mechanosensitivity of junctional beta-catenin : from mesoderm mechanotransductive evolutionary origins to tumourogenic mechanical induction
10:30	BREAK	
11:00 12:00	Jody Rosenblatt University of Utah, US	Hijacking epithelial extrusion to drive tumor formation and invasion
12:00 13:00	Mireille Montcouquiol Neurocentre Magendie, FR	Planar Cell Polarity in mammals
13:00	LUNCH (Green Café)	
14:30 15:30	Zsolt Lenkei ESPCI, FR	Cannabinoid-induced actomyosin contraction shapes neuronal structure and connectivity at multiple spatiotemporal scales
15:30	BREAK	
16:00 17:00	Yohanns Bellaïche Institut Curie, FR	Cell division and tissue morphogenesis 2: From Cell to tissue dynamics
17:00 18:00	Short talks: Jaume Casademunt: "Hydrodynamic instabilities in expanding epithelia. Elastic waves in a viscous medium?"	
19:00	Gala Dinner	