

First Paris-Saclay Cytoskeleton Day
October 13th, 2022
Institut Pascal, Orsay

Program

Chairperson: Guillaume Romet-Lemonne (Institut Jacques Monod)

9h Alexis Gautreau (LBSC, École Polytechnique)
Branched Actin controls Persistence of Cell Migration and Dissemination of Tumor Cells

9h30 Marie-Émilie Terret (CIRB, Collège de France)
Cortical tension, a key regulator of oocyte quality

10h Coffee break

Chairperson: Marie-Émilie Terret (CIRB, Collège de France)

10h15 Short talks

Antoine Jegou (Institut Jacques Monod)
Unexpected Regulation of Arp2/3-mediated actin filament branches

John James (Ecole Polytechnique)
Vinculin-Arp2/3 interaction antagonizes branched actin networks during the maturation of adherens junctions

Feng-Ching Tsai (Laboratoire Physico-Chimie Curie)
Curved protein I-BAR IRSp53 controls the formation of VASP-actin-based membrane protrusions

Julien Pernier (I2BC, Université Paris-Saclay)
Regulation of integrin clustering by talin, kindlin and the actomyosin cytoskeleton

10h55 Manuel Théry (CytoMorpho Lab, CEA / Univ. Paris Diderot, Hôpital Saint Louis)
Recycling limits the lifespan of actin turnover

11h25 Guillaume Montagnac (Institut Gustave Roussy)
Clathrin-coated structures in cell migration and mechanotransduction

12h-13h30 lunch

Chairperson: Manuel Théry (CytoMorpho Lab, CEA / Univ. Paris Diderot, Hôpital Saint Louis)

13h30 Carsten Janke (Institut Curie, Orsay)
The tubulin code: a molecular mechanism to coordinate complex cellular functions

14h Benoit Gigant (I2BC, Université Paris-Saclay)
Structural studies of microtubule dynamics regulation by CPAP and Tau proteins

14h30 Roland Brandt (Universität Osnabrück)
In search of the structure and function of axonal and dendritic microtubule arrays

15h-15h30 Short talks

Nicolo Bisi (FLUOPEPIT, Université Paris-Saclay)
Methods to assess the activity of drug candidates on tau aggregation and tau microtubule dynamics

Zoé Bomsel (Institut Jean-Pierre Bourgin, INRAE Île-de-France - Versailles-Saclay)
Functional characterisation of G2-expressed proteins involved in the regulation of cortical MT

Christian Poüs (Inserm UMR-S 1193, Université Paris-Saclay)
Acute Paclitaxel-resistant phenotype reveals the interplay between actin, septins and microtubules and alters mechanotransduction from focal adhesions to nuclei

16h Coffee break

Chairperson: François Treussart (ENS Paris-Saclay)

16h30 Rut Carballido-Lopez (Institut Micalis, Université Paris-Saclay)
Shaping bacteria: actin-like MreB proteins, from single molecules to cell morphogenesis

17h Cécile Leduc (Institut Jacques Monod)
Reconstitution of vimentin intermediate filament dynamics in vitro

17h30-18h Short talks

Guy Tran Van Nhieu (I2BC, Université Paris-Saclay)
Shigella ipaA mediates actin bundling through diffusible vinculin oligomers with activation imprint

Rayane Dibsy (Institut de Recherche en Infectiologie de Montpellier)
Role of Arp2/3 mediated branched actin in HIV-1 assembly and release in infected CD4 T lymphocytes

Magda Teixeira Nunes (I2BC, Université Paris-Saclay)
Structural basis for the activation of bacterial ExoY nucleotidyl cyclase exotoxins by free or profilin-bound G-actin and impact of the ternary complex on actin filament assembly in vitro