

Paris Cytoskeleton Day 2020

November 10, 2020 – fully online – registration at <https://pcd2020.sciencesconf.org>

Sessions do not correspond to topics. We tried to mix things up as much as possible.

Following the keynote talks, you can join the speaker and chair for a coffee break chat in the break-out room.

Including Q&A: keynote talks are 40 minutes, invited talks 30 minutes, short talks 15 minutes.

9:00 *Opening remarks*

SESSION 1 – Chair: Béatrice Benoit (Université Paris-Saclay)

9:05 **Carsten Janke** (Institut Curie)

Tubulin diversity: small changes - big impacts

9:35 **Joseph D'alessandro** (Institut Jacques Monod)

Path reinforcement in cell migration through retroactions with the substrate

9:50 **Martin Lenz** (LPTMS Orsay, PMMH ESPCI Paris)

Elasticity from entanglements in branched actin

KEYNOTE 1 – Chair: Nicolas Minc (Institut Jacques Monod)

10:05 **Sophie G. Martin** (University of Lausanne)

From the cytoskeleton to membrane flows and fusion

10:45 Break + *Break-out room with Sophie Martin*

SESSION 2 – Chair: Véronique Marthiens (Institut Curie)

11:15 Sponsor talk : **Impetux**

SENSOCELL optical tweezers for mechanobiology: main features and application examples

11:20 **Juliette Azimzadeh** (Institut Jacques Monod)

Structural asymmetry of centrioles and its roles in animal cells

11:50 **Juan Manuel Garcia Arcos** (Institut Curie)

Stabilization and motility mechanism of blebs

12:05 **Clément Campillo** (Université d'Evry, Université Paris-Saclay)

Morphology and mechanics of membrane nanotubes interacting with reconstituted actin networks

12:20 **Morgane Simao** (Institut Cochin)

cAMP bursts control T cell directionality by actinmyosin cytoskeleton remodelling

12:35 **Jean-Baptiste Brault** (Institut Curie)

Dynein drives post-Golgi apical transport to prevent neuroepithelial progenitor delamination

12:50 *Lunch break*

SESSION 3 – Chair: Stéphane Brunet (Hôpital Saint Louis)

14:00 **Marie-Emilie Terret** (Collège de France)

Artificially decreasing cortical tension generates aneuploidy in mouse oocytes

14:30 **Hugo Wioland** (Institut Jacques Monod)

Biochemical and mechanical regulation of actin filament disassembly

14:45 **Joëlle Salameh** (Faculté de Pharmacie, Université Paris-Saclay)

Cdc42 and its effector BORG2/Cdc42EP3 control the subcellular relocalization of septin filaments from actin to microtubules upon acute Taxol® treatment

KEYNOTE 2 – Chair: Paul Conduit (Institut Jacques Monod)

15:00 **Thomas Surrey** (Crick Institute London, CRG and ICREA Barcelona)

Microtubule nucleation properties of single human γ TuRCs explained by their cryo-EM structure

15:40 Break + *Break-out room with Thomas Surrey*

SESSION 4 – Chair: Stéphanie Miserey-Lenkei (Institut Curie)

16:10 Sponsor talk : **NanoLive**

3D label free imaging at 200nm resolution

16:15 **Matthieu Piel** (Institut Curie)

Actomyosin adaptation in confined cells

16:45 **Clara Nahmias** (Gustave Roussy Cancer Center)

Microtubule-associated regulatory proteins in breast cancer chemoresistance

17:00 **Carlos Perez Gonzalez** (Institut Curie, IBEC, Universitat de Barcelona)

Mechanical compartmentalization of the intestinal organoid enables crypt folding and collective cell migration

17:15 **Julien Maufront** (Institut Curie)

Electron microscopy study of formin conformations during actin filament elongation

17:30 **Antoine Guichet** (Institut Jacques Monod)

The MAP NuMA controls nuclear positioning and microtubule assembly from the nuclear envelope in fly oocyte

17:45 **Pablo J. Sáez** (Institut Curie, Universitätsklinikum Hamburg-Eppendorf)

Signal integration during leukocyte chemotaxis in complex microenvironments

18:00 *Closing remarks*