



SCIENTIFIC PROGRAM

WEDNESDAY MAY 23TH

14:00 Welcome introduction: Pr. Jean-Marie LEHN, Nobel Prize in Chemistry 1987

14:10 Session 1: Adhesion of circulating cells

Chair: Raphaël GAUDIN and Benoit HO-TIN-NOÉ

- 14:15** **Martine JANDROT-PERRUS**
(INSERM U1148, Paris, France)
Glycoprotein VI in platelet adhesion and activation
- 14:50** **Leo CARLIN**
(Beatson Institute, Glasgow, United Kingdom)
Leukocyte dynamics in the lung

Selected talks

- 15:25** **Gautier FOLLAIN**
(INSERM UMR_S1109, Strasbourg, France)
Hemodynamic forces tune the arrest, adhesion and extravasation of circulating tumor cells
- 15:40** **Kateřina KUŽELOVÁ**
(Institute of Hematology and Blood Transfusion, Prague, Czech Republic)
Adhesion structures in leukemia cells and their regulation by Lyn and PAKs
- 15:55** **Sponsor communications**

16:05 Coffee break/Poster session

16:50 Session2: Biophysics of cell adhesion

Chair: Laurent PIEUCHOT and Rodolph JAFFIOL

- 16:50** **Christophe GUILLUY**
(Institute for Advanced Biosciences, Grenoble, France)
Changes in nuclear shape regulate gene expression
- 17:25** **Xavier TREPAT**
(Institute for Bioengineering of Catalonia, Barcelona, Spain)
Mechanobiology of epithelial growth and folding
- 18:00** **Tam MIGNOT**
(Laboratoire de Chimie Bactérienne, Marseille, France)
Bacterial and parasitic gliding motility: a remarkable case of functional convergence

Selected talks

- 18:35** **Dominique VAUTIER**
(Université de Strasbourg, Strasbourg, France)
Chromatin de-condensation by switching substrate elasticity
- 19:05** **Christophe GIRARD**
(Centre méditerranéen de médecine moléculaire, Nice, France)
MAPK-targeting therapies induce a cancer cell-autonomous matrix reprogramming involved in melanoma mechanical properties and resistance

Gala Dinner at "La Maison Kammerzel"

THURSDAY MAY 24TH

8:30 Session 3: Probing adhesion Forces

Chair: Corinne ALBIGES-RIZO and Xavier TREPAT

- 8:30** **Alba DIZ-MUÑOZ**
(EMBL, Heidelberg, Germany)
Steering cell migration by alternating blebs and actin-rich protrusions
- 9:05** **Matthieu PIEL**
(Institut Curie IPGG, Paris, France)
Mega deformation: Consequences and mechanisms of large cell and nuclear deformations during migration and growth of immune and cancer cell

Selected talks

- 9:40** **Michael BACHMANN**
(KIT, Karlsruhe, Germany)
Force-dependent ligand sensing enables $\alpha\beta3$ integrin to differentiate between fibronectin and high-affinity ligands
- 9:55** **Jérôme DEVY**
(UMR CNRS 7369, Reims, France)
A gentle approach to investigate the influence of LRP-1 silencing on the MDA-MB-231 cancer cells behavior by Atomic Force Microscopy

10:10 Coffee break/Poster session

10:55 Session 4: Cell adhesion in cancer

Chair: Cécile GAUTHIER-ROUVIÈRE and Sophie MARTIN

- 10:55** **Nils CORDES**
(OncoRay-Faculty of Medicine, Dresden, Germany)
Focal adhesion signaling - Therapy-induced adaptation mechanisms and functional Multi-targeting
- 11:30** **Erik DANEN**
(Leiden University, Leiden, Netherlands)
Cell adhesion in vasculature and cancer

Selected talks

- 12:05** **Aurélie DOBRIC**
(Université Aix-Marseille, Marseille, France)
Cadherin-1 and cadherin-3 cooperation determines the aggressiveness of pancreatic ductal adenocarcinoma
- 12:20** **Alexandra FAUSTINO**
(Lisbon University, Lisbon, Portugal)
A new role for Arl13b in cancer cell migration and invasion through the regulation of cell adhesion to the extracellular matrix

12:35 Lunch



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13:35 Session 5: Cell adhesion in development

Chair: René-Marc MEGE and Gertraud OREND

- 13:35 **Michel LABOUESSE**
(Université Sorbonne, Paris, France)
Breaking symmetry during morphogenesis through mechanical forces
- 14:10 **Sylvie DUFOUR**
(INSERM U955, Créteil, France)
Adhesion crosstalks and interplays with soluble and transcription factors during the development of the enteric nervous system

Selected talks

- 14h45 **René-Marc MÈGE**
(Institut Jacques Monod, Paris, France)
Myosin-II isoforms play distinct roles on adherens junction dynamics
- 15:00 **Frédéric SALTEL**
(INSERM, UMR1053, Bordeaux, France)
Discoidin Domain Receptor 2 promotes matrix degradation inducing tumor neo-angiogenesis

15:15 Coffee break/Poster session

16:00 Session 6: Cell biology of adhesion

Chair: Anthony LEMARIE and Maxime LEHMANN

- 16:00 **Guillaume MONTAGNAC**
(Inserm/Gustave Roussy, Villejuif, France)
Frustrated endocytosis in cell migration and mechanotransduction
- 16:35 **Johanna IVASKA**
(University of Turku, Turku, Finland)
Mechanosensitive adhesions governing proliferation and pluripotency

Selected talks

- 17:10 **Sylvie THUAULT**
(Centre de Recherche en Cancérologie de Marseille, Marseille, France)
Depicting invadopodia molecular landscape by proximity labeling-proteomics in breast cancer cells
- 17:25 **Adèle KERJOUAN**
(Institute for Advanced Biosciences, Grenoble, France)
Optogenetic modulations of SRC molecular flux encode distinct cytoskeletal and adhesive outputs by specifying signaling pathways

19:00 Social Event at "Cave des Hospices"

FRIDAY MAY 25TH

8:30 Session 7: Imaging cell adhesion

Chair: Jacky GOETZ and Guillaume JACQUEMET

- 8:30 **Erik SAHAI**
(The Francis Crick Institute, London, United Kingdom)
Role of the microenvironment in cancer invasion and therapy response
- 9:05 **Frank WINKLER**
(University Hospital Heidelberg, Heidelberg, Germany)
Novel insights into brain tumors: cellular interactions that drive progression and resistance

Selected talks

- 9:40 **Dalia EL ARAWI**
(Université de Technologie de Troyes, Troyes, France)
Variable-angle Total Internal Reflection Fluorescence Microscopy: exploring integrin-mediated adhesion

9:55 Coffee break/Poster session

- 10:40 **Christophe LETERRIER**
(Université Aix-Marseille, Marseille, France)
The axonal cytoskeleton at the nanoscale

Selected talks

- 11:15 **Ralitza STANEVA**
(Institut Curie, Paris, France)
Tissue explant imaging reveals spatially coordinated migration patterns in the tumor core
- 11:30 **Anita ECKLY**
(EFS Grand Est/INSERM 949, Strasbourg, France)
Megakaryocytes use podosome-like protrusions for transcellular passage through endothelial cells

Concluding remarks

Awards for the best presentations

End of the symposium