

## Symposium: “New concepts & technological advances in extracellular matrix”

Amphitheatre Jean Jaurès  
ENS Paris  
29 rue d’Ulm  
Paris 5<sup>ème</sup>

### ITMO Molecular and structural basis of life sciences

8:45 *Welcome and Check-in*

9:15 *Introduction*

**SESSION 1: The cell-matrix interface I** - Chair : **Anne Imberty** (CERMAV, CNRS, Grenoble)

9:30 **Self-organization of extracellular polysaccharides** - **Ralph Richter** (Joseph Fourier University, Grenoble - CIC biomaGUNE, San Sebastian, Spain - Max Planck Institute for Intelligent Systems, Stuttgart, Germany)

10:10 **Mechanics of cell adhesion (bio-micromechanic, cell polarity)** – **Matthieu Piel** (Institut Curie, Paris)

10:35 **Second harmonic imaging of collagen organisation in connective tissues** – **Marie-Claire Schanne-Klein** (Laboratoire d’Optique et Biosciences, Ecole Polytechnique, CNRS, Palaiseau)

11:00 *Coffee-break and Poster Session*

**SESSION 2: The cell-matrix interface II** - Chair : **François-Xavier Maquart** (MEDyC, UMR CNRS/URCA N° 7369, Faculté de Médecine de Reims)

11:20 **Heparan sulfate in embryonic development: Lessons from biosynthesis studies** – **Lena Kjellen** (Uppsala University, Sweden)

12:00 **Chemistry & Biology : a winning tandem for the exploration of glycosaminoglycan synthesis** – **Chrystel Lopin-Bon** (ICOA, Orléans) / **Sandrine Gulberti** (IMoPA, Nancy)

12:25 *Flash presentations*

13:00 *Lunch (Hall Ecole Chimie Paris Tech - 11, rue Pierre et Marie Curie – Paris 5<sup>ème</sup>)*

**SESSION 3: Molecular aspects of matrix biology and disease I** - Chair: **Sylvie Fournel-Gigleux** (IMoPA, Nancy)

14:30 **Small Leucine Rich Proteoglycan signaling in inflammation and fibrosis** - **Liliana Schaefer** (Universitäts Klinikum Goethe-Universitäts Frankfurt, Germany)

15:10 **Sulfs : post-synthetic regulators of heparan sulfate structure and activities** - **Romain Vives** (Institut de Biologie Structurale, CNRS, Grenoble)

15:35 **Syndecan-1 function in cell adhesion to laminin** - **Patricia Rousselle** (Institut de Biologie et Chimie des Protéines, ENS Lyon, CNRS, Lyon)

16:00 *Coffee-break and Poster Session*

**SESSION 4: Molecular aspects of matrix biology and disease II** - Chair: **Fabrice Allain** (UGSF, UMR 8576 CNRS - Université Lille 1)

16:20 **Microparticules and cancer: key actors of cell communication** – **Christophe Dubois** (INSERM UMR-S1076, Vascular Research Center of Marseille)

16:45 **Role of proteoglycans in the control of cancer cells behaviour** - **Nikos Karamanos** (Department of Chemistry, University of Patras, Greece)

17:25 *Conclusion*

17:35 *End of the symposium*

## Flash presentations (12:25 - 13:00)

Molecular modeling and numerical simulations of extracellular matrix components : insight into the structure/function/dynamic relationships - **Nicolas Belloy** (Reims)

Elastin-derived peptides stimulate tumour invasion process via the increase of tumour cell blebbing and microvesicle shedding - **Bertrand Brassart** (Reims)

Glycosaminoglycans profiling in different cell types using infrared spectroscopy and imaging - **Stéphane Brezillon** (Reims)

Targeting tumor progression with compounds from the extracellular matrix: an original peptide-based approach - **Stéphane Dedieu** (Reims)

Galectin-1 dependent pre-B cell receptor activation - **Latifa Elantak** (Marseille)

Tissue-engineered dermal model rich in collagens recapitulates human native dermal tissue biomechanics better than classical monolayer and spheroid model - **Laure Gibot** (Toulouse)

Why the most abundant protein in the body, collagen I, is normally a heterotrimer - **David Hulmes** (Lyon)

Matrigel microbeads provide a highly-controlled microenvironment for prostatic organoids culture - **Bastien Laperrousaz** (Grenoble)

Cysteine-rich protein 2 (CRP2): linking the actin cytoskeleton, invadopodia and hypoxia in breast cancer cells – **Xianqing Mao** (Luxembourg)

A new tridimensional nanofibers scaffold to study the interaction of glioblastoma stem cells with the extracellular matrix - **Ali Saleh** (Montpellier)

Structural and functional characterization of matrix heparan sulfates and chondroitin sulfates of the human cartilage during osteoarthritis - **Sara Shamdani** (Créteil)

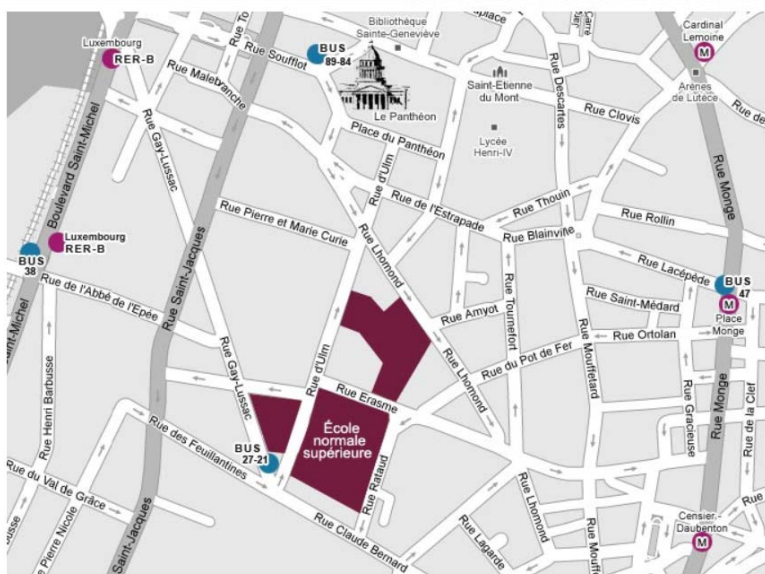
The lysyl oxidase propeptide, a new player within the extracellular matrix- **Sylvain Vallet** (Lyon)

### *Teaching:*

The BioC2M Master's degree from Cergy-Pontoise University : a new teaching program dedicated to the multifaceted properties and pleiotropic functions of the extracellular matrix - **Johanne Leroy-Dudal** (Cergy-Pontoise)

## Venue

To get the **Amphitheatre Jean Jaurès**  
Ecole Normale Supérieure (ENS) Paris  
29 rue d'Ulm  
Paris 5<sup>ème</sup>



<http://www.ens.fr/a-propos/l-ecole/article/contacts-et-plans>

**Métro** : Cardinal Lemoine (ligne 10), Place Monge (ligne 7), Censier Daubenton (ligne 7)

**RER B** : Luxembourg

**Bus** : 21 – 27 – 47 – 38 – 89 – 84

Inscriptions: <http://itmo-bmsv-2015.sciencesconf.org/>

Web Site: (French) <http://tinyurl.com/IBMSV-aviesan> and (English) <http://tinyurl.com/IBMSV-aviesan-english>