

# Symposium: “Frontiers of Chemical Biology: Investigating life with chemistry”

## ITMO Bases moléculaires et structurales du vivant

**Friday June 6<sup>th</sup>, 2014**

**Amphithéâtre Marie Curie**  
CNRS, Campus Gérard Mégie  
3 rue Michel-Ange  
Paris 16<sup>ème</sup>

- 9:00 *Welcome and Check-in*
- 9:15 **Introduction - Jean-Claude Michalski** (Dir. ITMO BMSV)
- SESSION 1 : **Introduction and chemistry in living cell** - *Chair : Anne Imberty* (Grenoble)
- 9:30 **Inorganic cellular chemistry : from biological activity to sub cellular imaging** - **Clotilde Policar** (Paris)
- 10:10 **Metabolic labeling of living bacteria – Boris Vauzeilles** (Orsay – Gif sur Yvette)
- 10:35 **Breaking new ground of In cell and in vivo synthetic chemistry – Alain Wagner** (Illkirch)
- 11:00 *Coffee-break and Poster Session*
- SESSION 2 : **Chemical biology of proteins and peptides** - *Chair : Agnès Delmas* (Orléans)
- 11:20 **Chemical modification of proteins in vitro and on live cells using protein trans-splicing – Henning Mootz** (Münster)
- 12:00 **Chemically-modified proteins as tools designed to explore biological systems – Vincent Aucagne** (Orléans)
- 12:25 **Flash presentations (details page 2)**
- 13:00 *Lunch (Joliot-Curie room)*
- SESSION 3 : **Chemistry for imaging and modeling** - *Chair: Pascal George* (Chatenay -Malabry)
- 14:30 **Non-Invasive Imaging of metabolic fluxes and enzymatic activity in living mice - Hacer Karatas** (Lausanne)
- 15:00 **A toolkit of fluorescent molecular probes for biomembrane research - Andrey Klymchenko** (Strasbourg)
- 15:25 **A scent of molecular modeling in chemical-biology - Bernard Offmann** (Nantes)
- 15:50 *Coffee-break and Poster Session*
- SESSION 4 : **Chemical biology of nucleic acids** - *Chair : Carine Giovannangeli* (Paris)
- 16:10 **Small Molecules, Big Players – Raphael Rodriguez** (Gif-sur-Yvette)
- 16:35 **Imaging RNA and RNA biology using RNA mimics of green fluorescent protein - Samie Jaffrey** (New-York)
- 17:15 **Conclusion - Agnès Delmas, Anne Imberty et Pascal George**, représentant la Société de Chimie Thérapeutique (SCT)
- 17:30 *End of the symposium*

*Inscriptions:* <http://chemical-bio.sciencesconf.org/>

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

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

Broad profiling prediction of protein kinase inhibitors via kinochemometrics approach - **Nicolas Bosc** (Orléans)

Light-activated proteolysis for remote control of proteins - **Quentin Delacour** (Paris)

Lanthanide(III)-based polyamidoamine dendrimers as visible and near-infrared imaging probes - **Svetlana Eliseeva** (Orléans)

Synthesis of peptidyl-RNA conjugates for structural and mechanistic study of FemXwv aminoacyl transferase - **Mélanie Etheve-Quelquejeu** (Paris)

Cu ligands with high selectivity over Zn to combat Alzheimer's disease - **Christelle Hureau** (Toulouse)

Towards semi-synthetic n-glucosylated mog to identify aberrantly modified native protein autoantigens in multiple sclerosis - **Maud Larregola** (Cergy-Pontoise)

Heparan sulfate-protein chemical biology for therapeutic innovation - **Christine Le Narvor** (Orsay)

Targeting epigenetic factors and DNA methylation: towards development of novel anticancer therapies - **Marie Lopez** (Toulouse)

Out-of-phase imaging after optical modulation (opiom) for selective imaging of photoconvertible proteins – **Jérôme Quérard** (Paris)

Polymer photoswitches to manipulate lipid membranes and cells with light - **Christophe Tribet** (Paris)

Degradable hybrid materials based on cationic acylhydrazone dynamic covalent polymers promote DNA complexation through multivalent interactions - **Sebastien Ulrich** (Montpellier)

Brief presentation of “GDR ChemBioScreen: A French network for chemical biology” - **Laurence Lafanechère** (Grenoble)

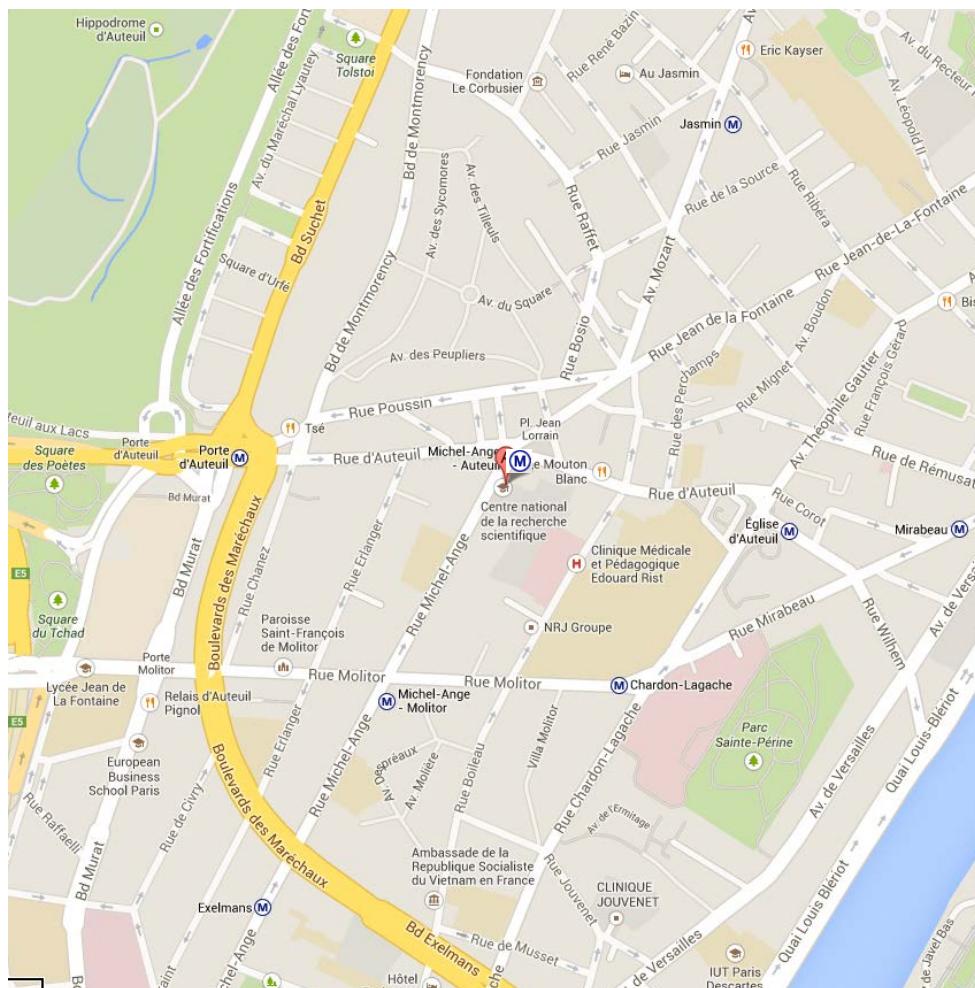
## Localisation

To get the **Amphithéâtre Marie Curie**

CNRS, Campus Gérard Mégie

3 rue Michel-Ange

Paris 16<sup>ème</sup>



**Métro :** Michel Ange  
Auteuil

**Bus :** 52 / 62 (Michel  
Ange Auteuil)

**Une carte d'identité sera demandée à l'accueil**

**An identity card will be requested at the reception**