



Post-doctoral position

Metal-centered peptidomimetics as protein-protein interactions modulators and bio-imaging probes

Up to 24 months from Autumn 2017

Laboratory: A postdoctoral position is available at the Laboratoire des Biomolécules (LBM) - team 1 'Peptide, Glycoconjugates and Metals in Biology' (UMR7203, CNRS, UPMC, Département de chimie de l'ENS, <http://www.chimie.ens.fr/?q=umr-7203/equipe-1>) in the "Inorganic cellular chemistry" group (director: Pr. C. Policar, supervision Dr. H. C. Bertrand).

The project will involve collaborators at School of Pharmacy, UCL, London UK and Nanyang Technological University NTU, Singapore. Short visit periods within these 2 laboratories may be considered.

Funding: ANR

Starting date and duration: start between October 2017 and January 2018. Position available for one year, renewable once.

Project: The project is focused on the development of metal-centered peptidomimetics (α -helices and β -turns) as protein-protein interactions modulators and bio-imaging probes. The overall project involves the design, synthesis (solution and solid phase synthesis, coordination chemistry) and characterization of the target complexes, the set-up of *in vitro* biophysical assays (thermofluor, fluorescence polarization) for the screening of the complexes against the proteins of interest, the evaluation of the potent compounds in cell-based assays and their imaging in cells using different modalities (conventional fluorescence, infra-red spectroscopy).

Technical aspects: The postdoctoral fellow will work closely with a PhD student whom he/she is expected to support and advise. She/he is expected to take part in all stages of the interdisciplinary project, with a particular emphasis on the biochemistry (protein expression and purification), biophysical (set up of biophysical assays and screening evaluation of the compounds) and cellular (cell culture, cell-based assays and imaging studies) aspects of the project. The candidate will work collaboratively with LBM teams 2 and 3 in laboratories located at ENS Paris, UPMC Jussieu and St Antoine Hospital.

Profile of the candidate: PhD in molecular chemistry or biochemistry; a strong background in protein biochemistry, knowledge and skills in cell culture and assays and optical (fluorescence) spectroscopy are required; Experience or basic knowledge in organic-bioorganic chemistry will be strongly appreciated.

Real motivation for interdisciplinary projects, strong autonomy, adaptability and interpersonal communication skills are essential.

How to apply: Send your CV (with the contact details of, at least, two referees) and a cover letter describing your research interests (in French or English) to helene.bertrand@ens.fr by June 30th.

Contact persons: Dr. H el ene Bertrand, tel 01.44.32.24.40