



UNIVERSITÉ  
DE MONTPELLIER



IBMM  
Institut des  
Biomolécules  
Max Mousseron

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## Open position Post-doctoral fellowship 2017-2018

Duration: 18 months

Start date: flexible from May to October but candidates are invited to apply asap

Funding: Vaincre la Mucoviscidose - salary according to CNRS remuneration

Candidate profile: PhD in Chemistry from less than 3 years

### CHEMICAL SYNTHESIS OF METALLOPHORES INVOLVED IN THE REPLICATION OF *P. AERUGINOSA*

The IBMM-DAPP (Institute of biomolecules Max Mousseron, Amino Acids and Peptides Department) of the University of Montpellier is seeking an **ORGANIC CHEMIST/MEDICINAL CHEMIST** candidate to join our research team developing stereoselective synthesis of modified amino acids and peptides headed by Dr Florine Cavelier on a multidisciplinary project.

#### PROJECT DESCRIPTION

We have identified a novel metal import system that uses a nicotianamine-like broad-spectrum metallophore in *P. aeruginosa* and *S. aureus*, two pathogens involved in the infection of patients with cystic fibrosis. Importantly, this pathway is essential for the survival of *P. aeruginosa* in airway mucus secretions, therefore rendering this metal acquisition system an attractive target for the development of inhibitors with antibiotic properties.

The goal of the post-doc will be to chemically synthesize this nicotianamine-like metallophore, its intermediates and some analogues including dominant negative one's for inhibitor development. This collaborative research project, in the frame of "Vaincre la Mucoviscidose" association, engages chemists, biochemists, cellular and molecular biologists and physicians, all dedicated to advance discoveries from the bench to the bedside.

#### CANDIDATE PROFILE

The candidate should have a Ph.D. in chemistry, be interested in biomedical research, and should have excellent skills in organic synthesis, purification and product characterisation (NMR, MS, and HPLC). Experience in solid supported synthesis will be appreciated. The ability to work in a multidisciplinary research team as well as effective communication and writing skills and a good mastery of the English language are essential for a successful selection. French knowledge is appreciated but not necessary.

Candidates for this position should submit by email a cover letter, CV, and have two letters of reference sent directly to the email address below.

Application material should be sent to:

Dr. Florine Cavelier  
Directrice de Recherche CNRS  
Institut des Biomolécules Max Mousseron - UMR 5247  
Email: [florine.cavelier@umontpellier.fr](mailto:florine.cavelier@umontpellier.fr)