

EQUIPE *Conception et Synthèse de Molécules d'Intérêt
Thérapeutique (CoSMIT) - BioCIS – CNRS (UMR 8076)*

Mouad ALAMI - *Team Leader*

*Directeur de recherche au CNRS & Directeur adjoint de BioCIS
Equipe labellisée par la Ligue Contre le Cancer*

POST-DOCTORAL POSITION

MEDICINAL CHEMISTRY & IMMUNO-ONCOLOGY FUNDED BY THE FRM

18 MONTHS – POSITION TO BE FILLED IN MAY 2019

ANTIGENIC PRESENTATION & NOVEL CHEMICAL ENTITIES IMMUNOMODULATORS : A NEW PARADIGM IN ONCOLOGY

CONTEXT AND PROJECT

Recent advances in oncology have been linked to the advent of immunotherapy, one of the most promising lines of research targeting the immune system. Monoclonal antibodies called "immunomodulators" (e.g., anti-PD-1/PD-L1) are currently used in human therapy. The success of these biologics in the clinic is now inspiring the discovery and development of small molecules that act on intracellular targets affecting immunomodulatory pathways in cancer.

The purpose of this project is to promote the discovery of novel small molecules that may enhance the ability of the immune system to selectively recognize and attack cancer cells. These small molecules could be further developed into stand-alone immunotherapeutics or synergistic partners for existing therapies.

This is an interdisciplinary project funded by the FRM and conducted between :

- *the medicinal chemistry CoSMIT team (M. Alami) (BioCIS - UMR CNRS 8076), located at Chatenay-Malabry,*
- *the biologist Apcher's team (UMR 1015 Immunologie des tumeurs et immunothérapie) located at Gustave Roussy.*

The successful applicant will apply his/her knowledge to the design and synthesis of small molecules as immunomodulator agents. In addition, the successful applicant will develop skills in medicinal chemistry, as well as broader drug discovery knowledge. Biological part of the project will be performed by a second post-doctoral scientist, recruited for 2 years at Gustave Roussy.

THE POSITION

We are seeking an independent and motivated PhD scientist for a Postdoctoral Fellowship in a joint Paris-Sud University / Gustave Roussy program. The successful candidate is expected to design and synthesize novel entities having anti-tumoral activities and to establish a structure-activity relationship. Toward this end, eco-compatible and metal-catalyzed chemistry transformations will be developed to create targeted molecules.

For this, we wish the Post-doc scientist to perform following tasks:

- Take part in the rational design and synthesis of new molecules,
- Have a good knowledge in NMR analysis (1H, 13C, DEPT, HSQC, HMBC...),
- Crystallize samples in order to get complementary solid state structural information,
- Follow on the biological and pharmacological evaluations of the synthesized compounds,
- Proper Lab Recording, Documentation & Reporting according to pharmaceutical standards.

POST-DOC PROFILE

- Combination of knowledge, experience and achievement are required
- Graduated with a PhD in organic chemistry
- Solid background in organic and organometallic synthesis but also in medicinal chemistry
- Sound understanding of drug discovery process
- Ideally project management experience
- Strong oral & written communication skills
- Ability to work within multidisciplinary teams
- Creativity & sense of innovation
- High degree of intellectual independence

Applicants should send a CV, a motivation letter (stating your relevance for the requirements only), and the contact information of at least 2 referees to both Dr Mouad Alami (mouad.alami@u-psud.fr) and Samir Messaoudi (samir.messaoudi@u-psud.fr)



BioCIS

Biomolécules :
Conception, Isolement, Synthèse

5, rue Jean-Baptiste Clément 92296 Châtenay-Malabry Cedex

☎ : (+33) 1 46 83 58 87 ou 53 92 (55 90 Secrétariat) ☎ : (+33) 1 46 83 58 28 ✉ : mouad.alami@u-psud.fr
<http://www.biocis.u-psud.fr/spip.php?rubrique76>