

Laboratoire CMGPCE – EA 7341 - Equipe de Chimie Moléculaire

Conservatoire National des Arts et Métiers (Cnam), Paris 2, rue Conté - accès 31-4 - 75003 Paris

Postdoctoral Position in Medicinal Chemistry

Host Laboratory: Equipe de chimie moléculaire, Laboratoire de chimie moléculaire, génie des procédés chimiques et énergétiques, CMGPCE, EA7341, Cnam. 2 rue Conté 75003 Paris

Job Type: Contract

Duration: 12 months renewable 1 year

Required education: PhD

Required experience: Organic/Medicinal/Analytical chemistry and eventually radiochemistry

Required language: English/French

Salary: between 2600 € and 3200 € gross monthly according to the experience of the candidate

Key-words: Medicinal chemistry, physicochemistry, drug design,

Research on the development of theranostic small molecule inhibitor of TNF α

The team Equipe de Chimie Moléculaire (CMGPCE laboratory, Cnam, <http://cmgpce.cnam.fr/chimie-moleculaire-presentation-703533.kjsp?RH=1422960106797>) has a strong experience in the design and synthesis of therapeutic compounds (notably inflammatory diseases) and contrast agents dedicated to molecular imaging in MRI and nuclear medicine.

The team obtained funding by the French National Agency of research (ANR): Theranalpha: challenge 4 (vie santé bien être/ AXE 11 Innovation médicale, nanotechnologies, médecine régénérative, thérapies et vaccins innovants).

The global objective of this project is the design, identification and optimization of a novel theranostic small molecule inhibitor of TNF α for simultaneous treatment and positron emission tomography imaging of rheumatoid arthritis.

The deliverable will be a theranostic drug candidate characterized by a preclinical "Administration Distribution Metabolism Elimination Toxicity" profile and a proof of concept (therapeutic and imaging) in animal models representative of rheumatoid arthritis pathology.

The project involves 4 academic partners and a biotech startup company.

For this project, the candidate will integrate the team Equipe de Chimie Moléculaire with the objective to design, synthesize and characterize new small molecules inhibitors of TNF α based on the structure and biological properties of two hit compounds previously discovered by partners of the project Theranalpha.

During this study, the candidate will be specifically in charge of:

- 1 the drug design of new compounds
- 2 the synthesis of new compounds and precursors for ^{18}F radiolabelling
- 3 the establishment of structure - activity relationship
- 4 the development of physicochemistry screening

We are looking for a highly motivated, talented and enthusiastic post-doctoral researcher with a strong background and solid knowledge in chemical synthesis, medicinal and analytical chemistry. He/she should be a successful PhD student in the field of medicinal chemistry, and possibly have post-doctoral experience. He/she should have a background. Radiochemistry skills will be appreciated but not required.

He/she will be able to collaborate in strong interaction with the various teams involved in the project to optimize the best drug candidates.

Applicants should submit (in French or in English) their CV and publication list, the name and email of 2 references and a brief statement of past achievements and research interests to Pr Marc PORT (marc.port@lecnam.net)

Deadline for application: no later than February 28, 2018.

Starting: April 2018.