

Post-doctoral position of 18 months in medicinal chemistry at Lille

Workplace: LILLE - Les Hauts de France - France

Main scientific field: Chemistry

Key words: chemistry, medicinal

Function: Research

Employer

INFINITE (U1286 Inserm) is a translational research unit dedicated to inflammation, at an international level. Its objective is to understand the mechanisms of inflammation and to develop new diagnostic and therapeutic solutions.

The candidate will join WP4 "Therapeutic innovation targeting inflammation" of the INFINITE research unit. The scientific objective of this team is the design, synthesis, biological evaluation and vectorization of new chemical entities for therapeutic purposes in the field of inflammatory diseases. The candidate will work more specifically with Doctor Natascha LELEU-CHAVAIN at ICPAL - Faculty of Pharmacy of Lille.

Web site : <http://lille-inflammation-research.org/en/>

Missions

The candidate will be integrated into the INODHEP project funded by the I-SITE ULNE Foundation. The objective of this multidisciplinary project is to develop inhibitors of the NOD1 pathway in order to limit hepatic damage from ischemia-reperfusion and thus improve the survival of transplant patients, but also to increase the number of available grafts. The preliminary results are very promising and allowed the identification of the first selective inhibitors of NOD1-RIPK2. The candidate will help strengthen the team by getting involved in this research project. He (She) will be in charge of the synthesis of innovative chemical series and the interpretation of the structure-activity relationships necessary for filing a patent.

MISSIONS:

- Design of selective NOD1-RIPK2 inhibitors
- Synthesis and purification of the designed compounds
- Characterization of the synthesized compounds
- Ensure the quality
- Interpretation of the biological and results (SAR)
- Drafting of the lab book and protocols
- Working in relation with biologists and analysts
- Drafting and preparation of publications/posters/oral presentations
- Bibliographic monitoring
- Participating in common laboratory tasks
- Management of products stocks related to the project
- Supervision of students

Geographic mobility:

No mobility

Taking office:

Position to be filled as soon as possible for a period of 18 months.

Profile

Holder of a doctorate in organic chemistry or medicinal chemistry with ideally experience abroad, the candidate should have a marked attraction for research projects at the interface between chemistry and biology. Skills and knowledge in organic synthesis as well as in drug sciences are essential in order to allow work in collaboration with physical chemists and biologists. Knowledge of molecular modeling would be a plus.

Dynamic and rigorous, the candidate will have to show organization, creativity and initiative. He (She) must have good interpersonal skills, and like teamwork. Concerned about the achievement of his (her) objectives, he (she) will have a marked interest in the management of scientific projects.

REQUIRED SKILLS:

- Organic synthesis
- Optimization of bioactive compounds
- Medicinal chemistry
- Analytical techniques: MS, NMR (1D et 2D), IR
- IT tools: electronic lab book eNovalys, Biovia Draw or Chem Draw, Reaxys or SCiFinder, Pubmed, Excel, Word, Powerpoint
- Writing of publications
- Good English skills