



University of Liège (Belgium) – Laboratory of Molecular Biophysics at Interfaces (Gembloux Agro-Bio Tech)

Position open: Post-doctoral scientist (1-year contract) – biophysical investigation of the *in vitro* and *in silico* anti-SARS-CoV-2 activity of microbial secondary metabolites

As part of an FNRS founded project (Exceptional Research Project 2020), the successful candidate will join the Laboratory of Molecular Biophysics at Interfaces (Drs Magali Deleu and Laurence Lins, Gembloux Agro-Bio Tech). The project has multidisciplinary aspects, since it gathers molecular biology (Pr M. Garigliani), synthetic biology (Pr P. Jacques) and molecular biophysics (Drs M. Deleu and L. Lins).

Research description

During the lockdown the promoters of the project have started a collaboration to study the antiviral activity of microbial secondary metabolites on the SARS-CoV-2. They have identified a compound showing interesting activity but too high cytotoxicity. The main goals of the research are:

- to decrypt the antiSARS-CoV-2 mode of action of different natural variants of these compounds, via *in vitro*, cellular and biophysical approaches and to unravel the structure-activity relationships;
- based on the structure/activity relationships, to predict/select new derivatives of these microbial metabolite showing higher antiviral activity with less cytotoxicity.

Profile

Post-doctoral scientist with experience in molecular biophysics (fluorescence spectroscopy, Infrared spectroscopy, isothermal titration calorimetry,...) for the *in vitro* assays and molecular docking for the *in silico* part of the project). Expertise in biophysics with liposomes would be valuable.

Importantly, the candidate shall not have resided or carried out his/her main activity (job, studies...) in Belgium for more than 24 months during the last 3 years.

Candidates must have good working knowledge of English or French, a strong commitment to scientific research and an excellent academic record.

Good communication skills and ability to work in a multidisciplinary team.

Ability to organize and prioritize work duties.

Start date

4th of January 2021.

How to apply?

Candidates should submit an application before **07th of December 2020**: send your CV, PhD certificate, motivation letter (with a brief summary of previous research activities), and names plus

e-mail addresses of references to : Laurence Lins (l.lins@uliege.be) and Magali Deleu (magali.deleu@uliege.be)