

Center for Infection and Immunity of Lille – CIIL Inserm U1019-CNRS UMR 8204 Institut Pasteur de Lille 1, rue du Pr Calmette, BP 245, 59019 Lille Cedex, France www.ciil.fr

## **BIOINFORMATICIAN POSITION AT INSTITUT PASTEUR DE LILLE** "Omics analysis of host-directed therapies of bacterial pneumonia"

Full Time, 2 years Closing Date: 15<sup>th</sup> of December 2019 Starting Date: February 2020

A bioinformatician position is available in the team "Bacteria, Antibiotics, and Immunity" headed by Jean-Claude Sirard at the Centre for Infection and Immunity of Lille of Institut Pasteur de Lille, France.

Transcriptomic, proteomic, lipidomic, and metabolomic analysis from tissues or single cells have revolutionized our understanding of the biologic processes including the immune system. Our team focuses on identifying and studying biologicals regulating respiratory innate immune responses to pathogenic bacteria making use of the animal and cell models. The project aims at identifying immune effectors and pathways that are linked to therapeutic efficacy of biologicals against respiratory bacterial infections. The scientist will work in the context of the H2020 project FAIR. The FAIR consortium gathers scientists from Denmark, France, Germany, Ireland, Netherlands, United Kingdom, and Switzerland, with multidisciplinary expertise in translational PK/PD modeling, innate immunity, animal models, biologicals, systems biology of infectious diseases, phase I clinical trial, and respiratory infections with antibiotic-resistant *Pseudomonas aeruginosa, Klebsiella pneumoniae,* and *Streptococcus pneumoniae.* The project will combine multivariate tissue and single cell Omic profiling to study mechanisms regulating the therapeutic efficacy.

We are looking for a candidate with proficiency and documented laboratory research experience, particularly in bioinformatics analysis. The candidate will lead pipelines and will be responsible for the development of analysis of multi-omic data in various models.

## **Specific requirements**

Solid skills and experience in **bioinformatics** with proven track record in handling NGS datasets and developing **pipelines for analysis** 

Good knowledge in **biostatistics** and experience in **programming** (R, perl, C or python)

Highly motivated with interest in immunology and infectiology

Ability to work in a team / consortium effort

Fluency in both spoken and written English

Wet lab experience on library preparation will be an advantage but is not mandatory

Experience or motivation to learn biological experimentation would be an added value

The candidate will benefit from the top-level scientific environment of Institut Pasteur de Lille, the European consortium, and the Systems Epigenetics Team at Sorbonne Universities in Paris and of state-of-the-art technological platforms, including Genomic and Bioinformatics laboratories.

## Application

Please send: CV including publications, a statement of interest, and the names and email addresses of 2-3 potential referees to <u>jean-claude.sirard@inserm.fr</u> indicating "LASTNAME\_Postdoc application" in the subject.

