



## 6-month Bioinformatics and Systems Biology Internship at the European Institute for Systems Biology and Medicine, Lyon, France Exploitation of the -omics data of the U-BIOPRED project on severe asthma

Employer: CNRS / EISBM

Website: <http://www.eisbm.org>

Location: CNRS-EISBM, Lyon, France

Expires: 15th December 2015

Internship allowance: € 554.40 per month

Qualification: Master student

Employment type: Internship

Job hours: Full-time

Duration: 6 months

Starting date: January/February 2016

Keywords: R, Bioconductor, Clustering, Machine learning, Bioinformatics, Systems Biology

An internship position is available as a part of the exploitation of the data generated during the U-BIOPRED (Unbiased BIOMarkers in PREdiction of respiratory disease outcomes) project, funded by the Innovative Medicines Initiative (IMI) of the European Commission 7<sup>th</sup> Framework Programme and the European Federation of Pharmaceutical Industries and Associates.

U-BIOPRED website: <http://www.europeanlung.org/en/projects-and-research/projects/u-biopred/home>.

The selected candidate will be based in Lyon-Gerland within the CNRS-EISBM team led by Charles Auffray, hosted by the Claude Bernard University on the Charles Mérieux campus.

The goal of the project is to generate phenotypic 'handprints' based on the integrated analysis of omics data from several platforms (transcriptomics, proteomics, lipidomics...) and clinical data collected during the U-BIOPRED project. The primary objective is to generate clusters of participants sharing common molecular profiles from several platforms, characterize them and generate predictive models. The

analysis is done using freely available R and Bioconductor tools and will benefit from the expertise and guidance of the EISBM team.

The position allows an intern to participate in the legacy of a state-of-the-art EU Systems Medicine project. The work conducted during the internship will contribute to the publication of at least one high-level scientific article.

**Required Skills:** Proficiency in R and Bioconductor programming. Good background in biostatistics and good communication skills in English.

**Desired Skills:** Knowledge in biology in general and in asthma in particular, as well as experience with -omics data analysis would be helpful.

Enthusiastic and motivated candidates are encouraged to contact Prof. Charles Auffray [jobs@eisbm.org](mailto:jobs@eisbm.org) with a CV and a brief motivation letter.