

Post-doctoral position in environmental/omics epidemiology

SYMER Project: A systems approach to new paradigms in metabolic and epigenetic regulation

JOB PROFILE: Postdoctoral researcher (Full time) RESEARCH FIELD: Environmental Epidemiology, OMICS, Endocrine disruptors, Biomarkers STARTING DATE: January 2019 DURATION: 2 years INSTITUTION: Univ. Grenoble Alpes, University of Innovation SCIENTIFIC HOSTING DEPARTMENT: Team Environmental Epidemiology applied to Reproduction and Respiratory Health

LOCATION: France, Grenoble **SUPPORTER'S NAME (contact):** Claire Philippat (claire.philippat@inserm.fr)

The team of Environmental Epidemiology of the Inserm – CNRS – University Grenoble-Alpes IAB joint research center (Grenoble) is willing to welcome a post-doctoral researcher for two years. We seek applicants interested in working on epidemiological studies aiming at characterizing the relation between environmental factors such as endocrine disruptors, omics markers and child health.

The team of Environmental Epidemiology directed by Rémy Slama has been created in 2008 and expanded since then to reach a size of about 20 workers and students. It is part of the Inserm – CNRS – University Grenoble-Alpes IAB joint research center which hosts 17 research teams in health research, from epigenetics to epidemiology. Univ. Grenoble Alpes, is an university that enjoys an international reputation in many scientific fields, as confirmed by international rankings. The vibring ecosystem, grounded on a close interaction between research, education and companies, has earned Grenoble to be ranked as the 5th most innovative city in the world. Surrounded by mountains, the campus benefits from a natural environment and a high quality of life and work environment. It is ideally situated within the Alps, at three hours from Paris by train, less than two hours from Geneva, one hour from Lyon Saint-Exupéry international airport.

DESCRIPTION

The project is based on the French SEPAGES mother-child cohort, a new type of longitudinal mother-child cohort with repeated clinical examinations during pregnancy and childhood, extensive collection of repeated biological samples from both parents and the child, pictures to assess cosmetics and drugs use and (mostly) internet-based detailed questionnaires. Using data from this cohort, the candidate will explore the associations between prenatal exposure to two famillies of endocrine disruptors (phenols and phthalates) and the placental methylome. Several approaches will be considered including 1) agnostic approach (e.g., GWAS), 2) dimension-reduction techniques (e.g., ENET) and 3) pathway analysis.

The successful applicant is expected to conduct statistical analysis of high-dimension epidemiological studies using appropriate models in R platform, write manuscripts and make oral communications in international conferences. This project is conducted within the framework of a multidisciplinary research network and the candidate will interact with toxicologists and biologists in addition to epidemiologists. Applicants should have a PhD in epidemiology, biostatistics or bioinformatics. Experience in one of the following fields is also welcome:

- Methylome / transcriptome / 'omics / big data analysis
- Endocrine disruption / biomarkers

A good command of the English language is a plus (speaking French is not necessary).

Applicants must hold a PhD degree (or be about to earn one) or have a University degree equivalent to a European PhD (8-year duration)

Applicants should send a CV and motivation letter in English to Claire Philippat (<u>claire.philippat@inserm.fr</u>) before June 15th. A recommendation letter (English or French) is not mandatory but would be appreciable.