# POST DOC POSITION IN STATISTICAL GENETICS

• Recruitment grade: post-doctoral researcher

• Work place: INSERM CESP, Villejuif (France), possibly at Imperial College, London (UK)

• Duration: 12 to 24 months, starting date: from February 2019

• Deadline: position open until filled

• Salary: INSERM salary grid

#### Context

This position is one of the two postdoctoral positions funded by the project CCGIP (Cross Cancer Genomic Investigation of Pleiotropy effect and GxE interactions at pathway level: application to breast and thyroid cancers) which is granted by "La Ligue contre le Cancer".

Our objective is to develop novel statistical methods for testing GxE interactions and pleiotropy through gene set analysis (GSA). These methods will be applied to data from GWAS of differentiated thyroid cancer and breast cancer. Both tumors have been shown to be associated to common hormonal risk factors and shared genetic susceptibility is suspected. We aim to elucidate the common mechanisms between the two cancers. We will extend methods that test for pleiotropic effects for testing GxE interactions. This project will permit the development of new statistical methods that will benefit both the epidemiology and statistical communities.

Details about the other position are listed here https://lma-umr5142.univ-pau.fr/fr/vie-du-laboratoire/recrutement/post-doctorat.html. The two successful postdoctoral researchers will work both in parallel as well as collaboratively for achieving the tasks of the funded project.

## Profile requirements

- Phd in Biostatistics, Statistical Genetics or Computer Science
- Strong experience in computer programming.
- Experience in the development and application of Bayesian and Frequentist methods for computationally challenging problems.
- Knowledge of genetics will be appreciated.
- Good communication skills and interest in working in a cross-disciplinary team.

### Supervision

- Therese Truong, INSERM-CESP, Villejuif, France
- Marina Evangelou, Imperial College London

#### Location

- CESP, Team of Cancer Epidemiology: Genes and Environment, 16 avenue Paul Vaillant Couturier 94807 Villejuif, France (http://cesp.inserm.fr/)
- Imperial College London, Department of Mathematics, Statistics Section, 180 Queens Gate London SW7 2RH UK

# Applications

Please submit your application by email to Therese Truong (therese.truong@inserm.fr) and Marina Evangelou (m.evangelou@imperial.ac.uk). Please attach the following documents as a single pdf file: motivational letter (max 1 page), CV (max 2 pages) and publication list. Include also contact information of two persons who can provide a reference letter based on request.