



Postdoctoral Position in Systems Biology of Neurodegenerative Diseases

Applications are invited for one postdoc position in the team Brain-C at the Institute of Biology Paris-Seine and UPMC/CNRS Unit 'Biology of Adaptation and Aging' on the Jussieu Campus in Paris.

The position is supported for two years starting July 2018 with possible renewal for a third year. **Interested candidates should apply immediately.** The successful applicant will work on modeling the dynamics of Huntington's disease (HD) on a system level. HD is a neurodegenerative disease for which a large amount of multi-layer data (*e.g.* RNAseq, miRNAseq, ChIPseq, proteomics) are available in the team, providing a strong basis for the successful applicant to generate innovative models of the dynamics of HD in collaboration with the mathematicians and bioinformaticians of the team. We use several type of data integration methods (*e.g.* network-based, tree-based) to address key questions about the rules that govern the molecular dynamics of HD over time, the mechanisms specifically associated with critical phases of HD and the therapeutic and diagnostic implications of such knowledge.

The candidates are expected to be highly qualified, independent and highly motivated with a strong interest for research. Postdoc candidates should hold:

- a Ph.D. in Informatics, or in Physics or in Mathematics

OR

- a diploma from a major Engineer School (*e.g.* Ecole Polytechnique, Supélec, Centrale, EPFL, ETZ).

Postdoc candidates should have no more than 2-3 year postdoctoral experience if already working in France, and no more than 4-5 years postdoctoral experience if working abroad.

Essential qualifications:

- Demonstrated experience and autonomy in programming (in at least one the following languages: python, C/C++, java) and in database languages (MySQL)
- Good autonomy in machine learning and/or statistical modeling (probabilistic models, R)
- A good knowledge of network concepts will be a plus.
- Skills in web technologies (javascript, php) are desirable but not mandatory.

The successful candidate will work in a multi-disciplinary lab that brings together computer science, cell biology and clinical research, which provides an excellent opportunity for a highly motivated fellow to study neurodegenerative diseases by using the latest approaches in systems modeling and an excellent path towards career plans in academia or industry.

For informal inquiry please contact Dr Christian Neri: Christian.neri@inserm.fr

Application Instructions: Provide a detailed CV, a letter of motivation and a minimum of 3 letters of reference to Christian.neri@inserm.fr