

Reference **PhD position: Genomic inference and unsupervised clustering of longitudinal data**

Intitulé\* : **GULD**

INSERM U1220, Toulouse, France

Thèse

**Statistics and modeling of clustered longitudinal data integrating large-scale genetic data -  
Application to Parkinson's disease**

Durée du contrat: 3 ans

Rémunération: 1700/month

Date Début : Nov 2017

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The PhD candidate is expected to develop statistical genetic analyses, based on mixed linear models, for enhancing unsupervised clustering of patients from longitudinal data. Different statistical approaches and study designs will be investigated: they will vary according to the way whole-genome genetic data are integrated and used into the models. This task could be carried out by performing simulation studies.

The candidate is expected to produce original research papers published in highly-ranked journals and will have to attend international conferences to promote and share his/her results.

He/she will be involved in an interdisciplinary project (quantitative genetics, maths, neurology) funded by the ANR (French National Research Agency):

Requirements:

Hold a Master degree in biostatistics or in quantitative genetics

Knowledge in computer programming (R, C++ or Fortran 90); Unix environment; Good written & spoken skills in English