

## **SANOFI R&D Chilly-Mazarin (91)**

Proposition de stage BAC+5 d'une durée de 6 mois

### **Title: Statistical methods for real-world studies**

**Subject:** Together with the creation of a Clinical Data Sciences team within the Biostatistics and Programming Department, Sanofi is currently further developing its advanced analytics capabilities on clinical data including the use of real-world data in the Life Cycle Management of its compounds.

The aim of this 6-month internship is to explore several statistical and data sciences methods to analyze large clinical datasets such as pool of clinical studies or Real-World Evidence databases (claims/Electronic Medical Records databases) in order to further characterize benefit-risks of medicines or address some clinical questions. One goal of the internship will be to assess the value of using methods such as clustering, Support Vector Machine, neural networks, deep learning beyond classical statistical methods. The statistical methods will be studied before being implemented to fully assess if they are appropriate.

Programming language will be R and if possible, Python.

. The therapeutic area of interest will be Diabetes or Cardiovascular Disease.

**Profil :** Niveau BAC + 5 avec spécialisation en Data Sciences/Biostatistiques (Grandes écoles d'ingénieur type ENSAE ou ENSAI, ISUP, INSA, Master 2 Université, ...)

Intérêt pour les données de santé / pharma.

Très bon niveau en anglais requis (rapport de stage à écrire en anglais et présentation des travaux de stage en anglais)

Programmation en R +/- Python.

Début de stage : entre Février et Avril 2018, durée : 6 mois

Indemnité de stage : 1100 euros mensuel à titre indicatif

### **Tutrice :**

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