

POST-DOC POSITION

Location: INRAE, Occitanie Toulouse center, Castanet Tolosan, MIAT lab <https://miat.inrae.fr>

Duration: 18 months. To be filled as soon as possible and no later than June 1 , 2023.

Salary: between €2600 and €2800 gross/month depending on experience.

Contact: nathalie.vialaneix@inrae.fr and anne.goelzer@inrae.fr

OBJECTIVES

The goal is to study computational methods for reconstructing biological networks. The postdoc will take place in the framework of the SubtilNet project bringing together computer science / mathematics / statistics skills of the INRAE MIAT SaAB team on network inference and systems biology. Based on an existing real network of *Bacillus subtilis*, the aim is to evaluate current inference methods and their characteristics. The ultimate goal is to improve the state of the art in terms of inference methods by getting closer to biology, by integrating relevant biological information into the models.

REQUIRED PROFILE

PhD in computer science, bioinformatics, machine learning or statistics (PhD should have been defended for less than 3 years). We are looking for a candidate with proven experience in omics data analysis, cell biology or systems biology. Skills on inference or network analysis are also desirable or, failing that, skills in machine learning or statistics. Finally, a good level in programming, preferably with the R programming language, is required. Knowledge of Python, Matlab would be a plus. Given the necessary interactions between the various members of the project, an ability to work in a group would be appreciated. The candidate must also have a very good level of scientific English.

HOST RESEARCH LAB

Toulouse Applied Mathematics and Computer Science Unit (<https://miat.inrae.fr>) is part of INRAE (<https://www.inrae.fr>). MIAT's scientific mission is to develop and implement relevant mathematical and/or computer methods to solve problems identified with our collaborators who mainly come from other INRAE departments. The unit currently comprises two research teams (SciDyn and SaAB) and three service platforms (BIOINFO, RECORD and SIGENAE).

HOW TO APPLY

Send CV and cover letter to nathalie.vialaneix@inrae.fr and anne.goelzer@inrae.fr. We expect the cover letter to highlight the skills and experiences of the candidate in relation to the expectations of the position. A letter of recommendation from your PhD supervisors and/or previous post-docs can be added.