POSITION: DATA SCIENCE INTERN

Date: 16/10/2024	**Type of contract:** Internship
Field: Biotech / Health / Antibiotic resistance	**Duration:** 6 months
Location: Lyon Gerland, France	**Working time:** Full-time
Ref: ATX24-07	**Start date:** As soon as possible

Join a team of 20 employees, united by strong values: excellence, shared vision, team spirit and respect. In our dynamic, multicultural environment, you'll play an active part in rewarding projects while developing your skills. We offer you an environment conducive to professional and personal fulfillment. Come and share our vision and build the future with us!

Presentation of the company:

AUROBAC THERAPEUTICS is a biopharmaceutical company created in 2022 by 3 renowned life sciences innovation companies, *Boehringer Ingelheim, Evotec* and *bioMérieux,* to become a global leader in the fight against bacterial infections, Antimicrobial Resistance (AMR) and their consequences in acute hospital settings.

With strong growth ahead, within an international environment, the company is now looking for a **Data Scientist Intern** for a 6-month period.

Description:

As a **Data Science Intern** at AUROBAC, (1) you will take the lead in developing, implementing, and assessing machine learning tools for in-silico molecule screening. (2) You will engage in biomarker research projects by applying statistical methods to clinical and multi-omics databases. (3) Additionally, you will support the R&D and Business Development teams by providing insights through a range of statistical analyses.

The Data Science Intern will report to the Data Science Manager and collaborate closely with the scientific team responsible for drug pipeline development.

Missions:

- Develop, implement and assess machine learning tools for in-silico molecule screening:
  - Maintain the training database up-to-date by incorporating the latest available data, enriching it with new sources, and performing data cleaning to ensure a high level of quality
  - Conduct a literature review to identify machine learning approaches tailored to the specific needs of the program
  - Implement such approaches and evaluate them, to surpass the performance of current models, particularly in the context of small datasets
  - Regularly apply these approaches within an experimental validation framework
  - Implement explainable machine learning approaches and statistical methods to identify molecular features of interest

- Engage in biomarker research projects by applying statistical methods to clinical and multi-omics databases:
  - Help refine and specify research questions with the R&D team by providing statistical insights, including framing questions in quantitative terms
  - Participate in identifying relevant clinical and/or omics databases

- Based on the project's status, assist with data cleaning and apply statistical methods and machine learning algorithms to uncover biomarkers

Technical skills:

This internship is primarily aimed at students in their second year of a Master's program from engineering schools or universities.

- Strong understanding of core statistical concepts and methods, including key statistical tests and their applications
- Proficiency in Python, including standard data manipulation and visualization libraries (*Pandas, Matplotlib, Numpy, Seaborn*), as well as machine learning libraries (*Scikit-learn, Pytorch, TensorFlow*)
- Familiarity with basic *Unix* commands and environment is a plus
- Prior experience with omics data analysis would be a major plus

Personal skills:

- Fluency in English is a must-have, French language skills would be a major plus
- Rigorous, with analytical skills, paying attention to details, able to synthesize information
- Excellent organizational and communication skills
- Ability to work both independently and collaboratively in a fast-paced research environment
- Ability to proactively identify and propose solutions to complex problems

Perks:

Titres restaurants and catering available on site

Public transport participation

Access to gym and group classes

Concierge service

To apply, please send your **CV and cover letter** application to jobs@aurobac-tx.com mentioning the reference **ATX24-07.**

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