

# Bioinformatician (bacterial/phage genomics)

## Sciensano

The Belgian Institute of Health (Sciensano) provides support for health policy through scientific research, expert opinions and divisional tasks. On the basis of scientific research, we formulate recommendations and solutions for a proactive health policy at the Belgian, European and international levels; assess the status of health (indicators) within a certified quality framework; and develop advanced solutions for the diagnosis, prevention and treatment of current and emerging diseases.

— To support the research projects and routine activities of the service 'Bacterial Diseases', we are currently looking for a bioinformatician with a background in genomics to work on the SAPHETY and MenB (meningococcal group B bacteria) vaccine coverage projects. The SAPHETY project will assess the safety of personalized phage therapeutic products by using, amongst others, whole-genome sequencing (WGS) of bacterial phage production hosts and phage production lots; and the MenB project will evaluate the coverage of the meningococcal serogroup B vaccine in Belgium by characterizing via WGS a broad selection of meningococcal serogroup B infections in Belgium.

## Your function

- Contribute to the genomics WGS analysis within the SAPHETY and MenB vaccine coverage projects. You will be integrated into the Bioinformatics Platform at Sciensano and be actively supervised by a senior bioinformatician, but you will also report frequently to scientific experts from the service Bacterial Diseases who are coordinating both projects.
- Interact closely with other bioinformaticians from the Bioinformatics Platform working on a variety of different research projects and routine activities to implement and utilize genomics tools, databases and pipelines on state-of-the-art high-end computational infrastructure.
- Interact actively with scientific experts in the domain of pathogen typing and characterization for bacterial diseases, and phage therapy, to ensure that the genomics capacity is implemented and the available WGS data is analyzed accordingly to meet their direct needs.
- Design and develop bioinformatics workflows for the analysis of genomics data for bacterial pathogens and phage therapy. Tweak and optimize genomics methods to assure the optimal quality of results. Progressively scale up the developed genomics capacity and data analysis to meet additional needs and demands from the scientific experts of the service Bacterial Diseases.
- Follow-up required administrative tasks, and assist in providing scientifically motivated advice concerning genomics methods to support the implementation of bacterial and phage genomics into public health policy.
- Be capable to realize and manage original scientific research, and communicate research findings in the form of scientific reports, peer-reviewed publications, and presentations at conferences.

## Your profile

- MSc with a specialization track in bioinformatics or equivalent through experience.
- Prior experience with the analysis of WGS data for bacterial and/or phage genomics.
- High proficiency with scripting languages such as Python and R.
- Strong familiarity with working on the Linux command line.
- Good knowledge of statistics and public health.
- Good insight of (micro-)biology and its interplay with genomics.
- English language proficiency.
- A team player with excellent interpersonal, organizational, and communication skills.
- Solution-oriented with strong strategic and analytical problem-solving skills, being able to tackle tough problems independently.
- A quick learner that feels at home in a fast evolving environment.

### We offer

- A contract for initially 18 months, with options for extension.
- A challenging and fascinating project in a fast evolving domain.
- A knowledge-intensive position in a renowned health institute that operates on an international level.
- A dynamic enthusiastic team of colleagues.
- Be paid according to the Belgian government barema SW11.
- Several advantages such as insurance, flexible hours in a 38-hour working week, reimbursement of public transport and meal cheques.
- Starting date: ASAP.

### Interested?

Send your application via our website (<https://www.sciensano.be/en/working-sciensano/my-employment-opportunities>).

For more information about Sciensano and/or the job description, contact:

- Sciensano Jobcenter: [jobs@sciensano.be](mailto:jobs@sciensano.be)
- Kevin Vanneste (Bioinformatics Platform): [kevin.vanneste@sciensano.be](mailto:kevin.vanneste@sciensano.be)