

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.

— Recently, the European Commission has proposed to set up a EU Health Emergency Preparedness and Response Authority (HERA). Amongst others, HERA aims to enhance Whole Genome Sequencing (WGS) national infrastructures and capacities to respond to the COVID-19 pandemic in the European Union and European Economic Area. Moreover, these national infrastructures will enable preparedness and response capacity, which will contribute to improvement of the timeliness and efficiency of the identification and management of future cross-border outbreaks and pandemics of infectious diseases. Sciensano therefore is currently looking for a senior bioinformatician to aid in building this national infrastructure within Belgium.

Your function

- Manage the bioinformatics implementation of Belgian national WGS infrastructure to enable preparedness and response capacity for SARS-CoV-2 and other microbiological pathogens. You will report directly to, and be supervised by, the head of the Bioinformatics Platform at Sciensano, but will indirectly also report and provide feedback to the different stakeholders involved in the implementation of this national infrastructure.
- Interact closely with other bioinformaticians from the Bioinformatics Platform, supervise a junior bioinformatician active on the same project, collaborate with engineers from Healthdata.be and other ICT experts to deploy developed and validated solutions on state-of-the-art high-end infrastructure by searching for and identifying novel solutions to manage, process and analyze large WGS data volumes.
- Collaborate closely with multiple public health experts in pathogen surveillance, epidemiology, and other relevant domains, within and outside of Sciensano, to ensure the necessary national infrastructure is implemented according to the necessary requirements and specifications.
- Design and develop bioinformatics workflows for the analysis of WGS data from microbiological samples. Tweak, optimize, and validate quality control and performance metrics for the analysis of microbiological genomics data to assure the optimal quality of results. Progressively scale up the national infrastructure to be able to deal with thousands of genomes.
- Manage budgets and follow-up required administrative tasks, provide scientifically motivated expert advice and opinions to the competent authorities, supporting the implementation of microbiological genomics into public health policy.

- Be capable to independently initiate, realize, and manage original scientific research, devise and initiate research strategies, and communicate research findings in the form of scientific reports, peer-reviewed publications, and presentations at conferences.

Your profile

- PhD with a specialization track in bioinformatics or equivalent through experience with demonstrated proficiency in bioinformatics.
- Prior experience with the analysis of WGS data.
- High proficiency with scripting languages such as Python.
- Strong familiarity with working on the Linux command line.
- Good knowledge of statistics and epidemiology.
- 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.

Complementary strengths: prior exposure and/or collaboration within an applied public health setting is considered a strong asset; familiarity with High-Performance-Computing (SGE, PBS, SLURM...), statistical/mathematical packages (Matlab, R, SAS, SPSS...), and other programming languages (Java, Perl, C...); knowledge of relational databases (MySQL, PostgreSQL...), web servers (Apache, nginx...), and automation systems (Ansible...); Dutch and/or French language proficiency; strong mathematical background.

We offer

- A one-year contract, 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 young enthusiastic team of colleagues.
- Be paid according to the Belgian government barema SW21.
- Advantages: insurances, flexible hours in a 38-hour working week, reimbursement of public transport...
- Starting date: as soon as possible.

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
- Kevin Vanneste (Bioinformatics Platform): kevin.vanneste@sciensano.be