

The **Bernhard Nocht Institute for Tropical Medicine** (www.bnitm.de) is the largest Research Institute for Tropical Medicine in Germany and is the National Reference Centre for Tropical Pathogens, a WHO Collaborating Centre and member of the Leibniz Research Association.

The Department of Virology at the Bernhard Nocht Institute for Tropical Medicine in Hamburg invites applicants for a position starting as of 15 June 2019 or later for the role:

Computational scientist/bioinformatician (m/f/d)

You will explore, assess and implement bioinformatics algorithms, analysis pipelines, applications and tools from next generation sequencing (NGS) technologies to improve the bioinformatics analyses capacity of the Virology department of the BNITM. Activities occur with a moderate degree of supervision with latitude for independent judgement.

Responsibilities:

- Develop, implement and maintain high-quality pipelines for the processing of NGS data
- Develop custom scripts using open source available software, published methods and custom-made code to fully analyze NGS data
- Perform complex computational analysis, exploration of parameter settings, and comparison of results across different methods
- Manage biomedical data with databases, query interfaces; retrieve biomedical NGS data from public resources and organize them for easy analysis and sharing
- Perform quality control, assembly, annotation and analysis of pathogen genome sequences and manage genome files and databases, including uploads to NCBI
- Travel to partner countries, mainly Africa, for implementation and capacity building
- Provide training and assistance to the team in the use of bioinformatics tools

Qualifications:

- Minimum of a Bachelor's degree or any other equivalent combination of education and experience in computational science, informatics, mathematics, bioinformatics, or equivalent will be considered. Specific qualifications include:
- Experience with Unix (BASH scripting) and working in a Linux cluster environment
- Experience with programming languages such as Python, Java, C, C++, R, etc.
- Experience with Github and DockerHub
- Working knowledge of bioinformatics software tools and database resources (e.g. BWA, Bowtie, STAR, GATK, samtools, bcftools) desirable
- Experience with NGS data analysis preferred
- Experience in developing bioinformatics pipelines for analysis of NGS data is a plus
- Ability to work independently and apply critical thinking and sound judgment
- Excellent organizational and time management skills

- Ability to work and communicate effectively in a multi-disciplinary team
- Willingness to travel to Africa (about two months/year)
- Good oral and written communication skills in English required; French is an asset

The position is initially limited to 1.5 years and is remunerated in accordance with the German salary scheme for the public service (TV-AVH Hamburg).

We support our employees in achieving a work-life balance and promote the professional equality of women and men. We strive to assist women in their scientific career, increase the number of women in research and reduce under-representation in all areas and positions in general.



Applicants with disabilities will be given preference when equally qualified.

Please send your application by 01.06.2019 with the usual documents (cover letter, high school and university certificates with grades, if applicable references) referring to "Computational scientist" preferably by e-mail in a PDF file to Ms. Jeannette Meurer (bewerbung@bnitm.de) or by mail to:

Bernhard-Nocht-Institut für Tropenmedizin, Human Resources Department, Bernhard-Nocht-Str. 74, 20359 Hamburg, Germany.

For further questions please contact Dr. Sophie Duraffour (<u>duraffour@bnitm.de</u>, phone: +49 40 42818-932), Department of Virology.