

## Senior Bioinformatics scientist

The Armauer Hansen Research Institute (AHRI) has a position open for a senior bioinformatics scientist holding a Ph.D. in Bioinformatics /Computer science/ computational biology/Mathematics, with proven experience in biomedical research and who is passionate about making a difference in human health and pathogen genomics. This new post offers an exciting opportunity to do cutting edge research whilst building bioinformatics capacity in Africa. TBGEN Africa is part of the Human Heredity and Health in Africa (H3Africa) Initiative funded by the Alliance for Accelerating Excellence in Science in Africa (AESAA) working in partnership with the Wellcome Trust. The project will investigate host-pathogen interactions in tuberculosis in Ethiopia, Sudan, Eritrea and Cameroon. The Wellcome Trust Sanger Institute and H3ABioNet are TBGENAfrica collaborators. The candidate is expected to have expert level competence in developing computational algorithms, performing data-mining, applying machine-learning and statistical modeling in genetic data. The post-holder will, amongst other things, participate in designing analytical and NGS lab studies, perform data analysis in support of R&D activities and also play a wider role in developing the newly-established **Regional Bioinformatics Training Centre** at AHRI. The Bioinformatics Scientist will have an opportunity to work on human and pathogen NGS data, in a collaborative and multidisciplinary research environment. The candidate will engage in developing quality research in translational genomics and engage in high level regional capacity building in bioinformatics in Africa.

### Essential Duties & Responsibilities:

- Apply machine-learning techniques and statistical modeling to learn patterns, select features, and classify genetic data from Next Generation Sequencing and SNP Bead Array. Ability to develop new algorithms to address complex data analysis questions is an asset
- Work independently, lead problem-solving efforts, and mentor junior team members.
- Participate (at the senior level lead) in designing analytical and NGS lab studies.
- Performing data analysis in support of R&D activities.
- Communicating effectively with laboratory researchers to define required solutions.
- Identify and formulate quality control metrics and participate in related development activities.

### Requirements:

- Ph.D. in a quantitative field of science (Bioinformatics, Computational biology, or equivalent).
- Ph.D. with a minimum of 3+ years of experience (this is a non-entry-level position and relevant research experience is essential).
- Background knowledge in any of the life sciences (molecular and cellular biology, chemistry, genetics, immunology, epidemiology)
- Skills in text mining, ontology, data integration, machine learning, information

architecture. Solid background/training in algorithm development, machine-learning, and software development an asset.

- Solid understanding of high-throughput sequencing, bioinformatics pipeline design and genetic information.
- Proficient in working with High-Performance Computing (HPC).
- Excellent communication and interpersonal skills

**Location:** The post-holder will be based in Addis Ababa but is expected to travel between partner countries to support training and research. Close interaction with advanced Genomics and Bioinformatics laboratories in Africa and elsewhere is encouraged.

**Salary and benefits:** Negotiable according to the qualifications of the applicant. We offer an international salary commensurate with the responsibilities of the post. The Institute will provide a well-furnished and equipped staff house in a large private garden located in a pleasant environment. Staff houses are linked with a 24-hour broadband wireless internet connectivity. Education allowance is offered for children. Several international schools are available in the city. Living expenses in Ethiopia are modest.

**Duration of employment:** three years, renewable.

**Contacts:** Interested applicants are invited to submit their CV and 2 letters of reference by email to Human Resources Department, Armauer Hansen Research Institute at [wochemulat@gmail.com](mailto:wochemulat@gmail.com) with a copy to Dr Taye Tolera, Director General, email: [tayetolera@yahoo.com](mailto:tayetolera@yahoo.com) and Dr Abraham Aseffa, [aseffaa@gmail.com](mailto:aseffaa@gmail.com) or alternatively at [aseffaa@ahri.gov.et](mailto:aseffaa@ahri.gov.et).

**Application deadline:** 6 September 2018.