



ADVERTISEMENT

Bioinformaticist(AGRP)

Contract type: Long Term Contract

Job Level: Skilled / Middle Management

Work Location: Makhanda/Grahamstown, Eastern Cape

The National Research Foundation (NRF) supports and promotes research and human capital development through funding, the provision of National Research Facilities and science outreach platforms and programmes to the broader community in all fields of science and technology, including natural sciences, engineering, social sciences and humanities.

The South African Institute for Aquatic Biodiversity (SAIAB), based in Grahamstown, is a National Research Facility of the National Research Foundation. SAIAB is a world-renowned centre for the study of African aquatic biodiversity and invites applications from suitability qualified South Africans to this exciting opportunity.

Purpose: The primary focus of this position is to assist genomics researchers utilising the Aquatic Genomics Research Platform (AGRP) in the development of data analysis pipelines for genomics-based research. This includes assistance with a range of applications including metabarcoding, whole genome assembly, metagenomics and transcriptomics. Assistance will be rendered in the initial development of the appropriate data analysis pipeline as well as teaching AGRP researchers how to utilise these pipelines/tools to analyse their data.

Key Responsibilities:

- Develop data analysis pipelines for metagenomics, whole genome assembly and metatranscriptomics research
- Assist with troubleshooting sequence data analyses
- Stay up-to-date/current with newly developed sequence data analysis tools
- Assist in the training of students, interns and visiting researchers in bioinformatics analyses
- Assist with the coordination and presentation of training workshops to groups of learners and students
- Develop personal skills and qualifications (master new genomics techniques and methodologies)
- Assist SAIAB IT in the efficient usage and running of the AGRP server.

Key Requirements:

Qualification:

PhD degree in Genetics/Genomics/Bioinformatics or related field

Research experience in the Bioinformatics field

Minimum of three years' experience in Bioinformatics

Experience with command-line interfaces and genome assembly tools

Experience in successful transfer of knowledge to others (e.g. teaching, tutoring) in the field of genomics

Experience:

General Skills

- Ability to work as part of a team
- Good interpersonal skills
- Ability/patience to teach students in bioinformatic techniques and programs they are unfamiliar with
- Good time management skills
- Ability to work independently
- Ability to learn required new skills (i.e. ability to teach oneself new bioinformatic programmes)
- Organised with a well-developed attention to detail
- Excellent communications skills (verbal and written)

Technical skills

- Bioinformatics skills required include the ability to assemble whole genomes (using tools such as Flye, SPADES, DIAMOND, etc.), genome annotation (e.g. PROKKA, MG-RAST, etc.), analysis of metabarcoding data (e.g. QIIME, MOTHUR, DAD2, etc.), analysis of metagenomics data (e.g. Kraken, MG-RAST) and transcriptomics data (e.g. Bowtie, RSEM, Trinity, etc.)
- Ability to write small/basic command-line scripts (i.e. basic knowledge in a programming language such as python)
- Familiarity with R

Knowledge:

- Practical knowledge of Next Generation sequence technologies

Additional Notes:

Additional Application Information:

The full job description can be found on the SAIAB website(www.saiab.ac.za)

The NRF (National Research Foundation)/SAIAB(South African Institute for Aquatic Biodiversity) is committed to providing a dynamic and inclusive work environment that supports the work-life balance of our employees.

Some roles lend themselves to flexible options more than others, so if this is important to you, please raise this during your interview, as we are open to discussing flexible working opportunities during the hiring process. NRF-SAIAB has an expanded base of offices not only in Makhanda, but in Johannesburg, Durban, or Gqeberha (Port Elizabeth).

Information:

The website www.nrf.ac.za provides more details on the NRF initiatives and activities.

Applications:

Applicants should submit a comprehensive CV by logging to <https://ess.nrf.ac.za/Account/Recruitment> and apply online. Applications should be accompanied by a letter of motivation indicating the applicant's suitability for the position. The names and contact details of at least three referees should be provided.

Closing Date: 02 August 2024

The NRF offers a challenging career and competitive remuneration package which is commensurate with qualifications and experience. The NRF is committed to employment equity and redress and the appointment to the position will be made in line with the NRF Employment Equity Plan.

The NRF reserves the right not to make an appointment.

Correspondence will be sent to short-listed candidates only