Title of Position: Scientific Computing Evaluation Specialist
Employer: University of the Western Cape -> South African National Bioinformatics Institute
Type of Position: Fixed Term Contract
Length of Contract Period: 1 Year contract position
Location: Main Campus - Bellville, WC ZA (Primary)
Closing Date: 31/12/2024

Job Overview

We are seeking a highly motivated individual with a background in scientific computing (with knowledge of bioinformatics and advantage) to assess and support the scientific computing infrastructure of public health laboratories engaged in pathogen genomic sequencing. This critical role is part of a South African National Bioinformatics Institute (SANBI) led project, which aims to better understand bioinformatics and information processing capabilities in African public health laboratories.

The ideal candidate will conduct in-depth evaluations of computing systems, bioinformatics tools, and data processing workflows, providing insights that will guide infrastructure improvements. This position involves regular travel to laboratories to perform on-site assessments and engage with laboratory teams.

Key Responsibilities

Technical assessment
- Develop and implement evaluation frameworks to assess hardware, software and data management systems and their interfaces with information systems outside of the pathogen genomic sequencing laboratory.
- Conduct technical assessments of the computing infrastructure used in chosen public health laboratories' processing and storage of pathogen genomic sequencing data.
- Evaluate laboratory capacity for pathogen genomic sequence analysis, including hardware, software, and data management systems.
- Document assessments in comprehensive reports and contribute to project updates and presentations.

Stakeholder collaboration
- Collaborate with other team members in production of assessment instruments and reports
- Engage with public health laboratory staff and leadership to conduct technical assessments
- Present results of assessments and collect feedback from stakeholders including but not limited to public health laboratory leadership and staff.

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Minimum requirements

Essential:
- Honours or Masters degree in Bioinformatics, Computer Science, or a related field.
- Demonstrated experience in scientific computing including high performance / high throughput computing.
- Proven ability to assess and analyze complex IT and bioinformatics infrastructure including hardware and software.
- Strong experience with the use of Linux operating systems and container technologies (Docker, Singularity).
- Excellent communication skills, including the ability to convey technical concepts to diverse audiences.
- Willingness to travel frequently to laboratory sites, both nationally and internationally within Africa.

Desirable:
- Knowledge of bioinformatics tools, data processing pipelines, and genomic sequencing workflows.
- Knowledge of scientific workflow management systems (e.g. Galaxy or Nextflow).
- Experience working with public health applications of pathogen genomic sequencing.
- Familiarity with ISO accreditation processes and standards for laboratories.
- Strong understanding of challenges in bioinformatics for resource-limited settings.

This post is a 12 month, fixed term contract that may be renewed based on performance. Only applicants with South African citizenship, work permit or residency will be considered.

For enquiries about this post, please contact Alan Christoffels at alan@sanbi.ac.za.

To apply, please email the below documents in a **single pdf file** to fungiwe@sanbi.ac.za.
- Cover letter
- Curriculum vitae (CV)

Please ensure that the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete. Only shortlisted candidates will be contacted and may be required to undergo a competency test.

DISCLAIMER: By applying for the position, you consent to the University sharing your application, including curriculum vitae, with University stakeholders to process the application. In line with the University's commitment to diversifying its workforce, preference will be given to suitably qualified applicants in line with our Employment Equity Targets. The official retirement age at UWC is 65 years. The University reserves the right to not make an appointment, make an appointment at a different level, seek additional candidates and may conduct competency assessments.