



Faculty of Health Sciences
School of Biomedical Sciences
UFS-NGS (Next Generation Sequencing) Unit/Division of Virology
Bloemfontein Campus
Medical Scientist (post level 8)
Job ID: 6052

KINDLY TAKE NOTE: Applications may only be submitted online through the official UFS vacancy website: <https://ufs.hua.hrsmart.com/hr/ats/JobSearch/viewAll>. Applications submitted through any other platform will not be considered.

Please ensure that all relevant documentation is attached to your application. INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED.

- A detailed curriculum vitae and cover letter.
- Copies of qualifications or proof of qualifications obtained (please provide the SAQA accreditation in the case of foreign qualifications).
- A copy of your identity document (SA ID or passport for foreign nationals).
- Proof of registration with a Professional Body (if required).
- A copy of your driver's license (if required).
- Confirmation of employment from current employer / last employer if unemployed (only applicable to external applicants).

Duties and responsibilities

- Maintain a robust workflow for genomic sequencing of enteric and respiratory viruses using the Illumina platforms and Oxford Nanopore Technologies.
- Perform data analyses and report generation of whole genome and metagenomic sequencing of viral pathogens.
- Ability to understand and troubleshoot NGS-related activities to produce intelligible and interpretable data.
- Continuous improvement of NGS workflows, including library generation, sequencing using Illumina MiSeq, NextSeq2000 platforms, Oxford Nanopore Technology, and library QC and bioinformatic analyses.
- Development of innovative solutions for sequencing and molecular biology challenges.
- Identify relevant bioinformatic tools and develop optimal bioinformatic workflows for data analyses.

- Closely collaborate and promptly communicate with stakeholders and cross-functional teammates, actively contributing to the discovery of the next generation of biologics drugs and the development of new platform technologies.
- Train and mentor students and junior scientific staff on relevant workflows and data analyses.
- Present data at team meetings to internal and external stakeholders.
- Generate, organise, and maintain meticulous records on all conducted experiments using Electronic Lab Notebook and generate SOPs.
- Applies scientific and/or technical skills and functional knowledge to conduct experiments/research/ studies in assigned areas.

Inherent requirements:

- A PhD in Virology on NQF Level 10.
- Minimum of three (3) years of experience in an academic setting focused on relevant activities around Next Generation Sequencing.
- Significant experience in conducting research on whole genome and metagenomic characterization of enteric and respiratory viruses, with a track record.
- Minimum of two (2) years' hands-on experience preparing sequencing libraries on automated liquid handlers (preferably Hamilton NGS Star and Perkin Elmer Zypher automated workstations).
- Experience in generating sequencing data on the Illumina MiSeq, Illumina NextSeq 2000, and Oxford Nanopore platforms.
- A proven research record of relevant publications in national and international accredited journals in the field of virology.

Recommendations:

- Minimum of three publications as first author and at least 10 as co-author.
- Strong foundation in molecular biology techniques, including nucleic acid extraction, DNA and RNA purification and quantification, PCR, RT-PCR.
- Familiarity with bioinformatics data analysis.
- A proven record of local and international conference presentations
- Experience with handling clients genomic service request, data compilation and report.
- Experience in formal supervision of postgraduate students.

Required competencies:

- **Results orientated:**
 - The ability to set high standards, establish tough goals, and to work to achieve success.
 - The ability to cope with a frequently changing environment and to adapt to evolving situations.
 - The ability to stick with tasks, not give up, and overcome obstacles in completing one's task.
 - The ability to be reliable, responsible, dependable and to fulfil obligations.

- **Strategic thinking:**
 - The ability to deal with several activities at a time.
 - The ability to focus on details, work towards perfection, and approach work in a neat and organised manner.
 - The ability to plan work and to follow plans.
 - The ability to be creative and open-minded when addressing work issues.
 - The ability to carefully analyse information and use logic to address issues and problems at work.
- **Business acumen:**
 - Proficient in using MS Office.
 - Excellent troubleshooting and problem-solving skills
 - Meticulous attention to detail, planning, and organizational skills
 - Ability to manage multiple projects simultaneously
 - History of timeline-driven delivery.
 - Excellent communicator, highly effective in interacting with key internal and external stakeholders
 - Team player and builder, possessing great coaching skills
 - High functioning in an environment dedicated to exceptional quality and integrity
 - High business acumen.
- **Leading:**
 - The ability to maintain high levels of personal motivation, energy and enthusiasm.
 - The ability to be cooperative with others, display good-natured attitude, and encourage people to work together.

Assumption of duties:

1 April 2025 or as soon as possible thereafter.

Closing date:

14 March 2025

Salary:

The salary is available on request.


Fringe benefits:

(Subject to specific conditions): pension scheme, medical aid scheme, group life insurance, housing allowance, leave and sick leave, service bonus and study benefits.

Enquiries:

For enquiries, please feel free to contact 051 401 9810 or email MofoloNG@ufs.ac.za or Recruit@ufs.ac.za. Additionally, kindly contact 051 401 9848/ 9813/ 9810/ 9814/ 2979 for assistance.

General:

The UFS is a designated employer and is committed to the pursuit of excellence, diversity, and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups including candidates with disabilities. Our Employment Equity Policy is available at:  [EEA13 EE Plan UFS 1 March 2022 \(003\).pdf](#)

The University processes personal information in line with its obligations under the Protection of Personal Information Act (POPIA) and any personal information provided to the University will be treated as confidential and processed in accordance with the rights provided to data subjects under POPIA.

The University reserves the right not to fill the post. The UFS will only consider applications of candidates who meet all the inherent requirements of the position. Applications that are incomplete will not be considered. Communication will be limited to shortlisted candidates only. Should you not be contacted within six weeks of the closing date for applications, you may assume that your application was unsuccessful.