

OCTOBER 2021

GUIDELINES TO APPLICANTS

1. If you meet the requirements, kindly forward a concise CV to The relevant Practitioner/Administrator (Human Resources) by email or logging on to the NHLS career page <http://careers.nhls.ac.za> (I-Recruitment), quoting the reference number and the job title.
2. Response Email addresses of the relevant HR representative and or Region is supplied at the end of each regional adverts. The onus is on the applicant to ensure that their application has been received. Incomplete applications and applications received after the closing date will not be considered.
3. Any credentials of the contract of employment will be subject to criminal record checks, citizen verification, financial record checks, qualification/Study verification, previous employment verification, social media accounts behavior/comments verifications, competency/psychometric assessments, signing of performance contract on appointment, signing of an employment contract on appointment, presentation etc.
4. All health professional roles may be subjected to further assessment in line with the applicable proficiency matrix to determine the correct level and or grade.
5. The NHLS reserves the right, at its discretion, to remove the advertisement and or not to appoint.
6. Internal employees are required to complete a period of twelve months in current role before they can be eligible to apply for transfer.
7. Proof of registration with a Professional body (e.g. HPCSA, SANC etc.) and other supporting documents should accompany all applications.
8. These positions are open to all employees of the NHLS Including the employees who are on contract in similar or different positions.
9. Correspondence will be limited to shortlisted candidates only.
10. The NHLS is an equal opportunity, affirmative action employer. The filling of posts will be guided by the NHLS employment Equity Targets.
11. Successful applicants will be remunerated on the published scale associated with the grade of the post. This means that the remuneration of an applicant who is successful for a position that is lower than his/her current job grade will be adjusted downward with effect from the date of appointment.
12. External applicants shall be responsible for all expenditure related to attendance of interviews.

This is an open bulletin; External applicants are welcome to apply for this bulletin.

NB: The NHLS/NICD is an equal opportunity employer thus the filling of posts will be guided by the NHLS/NICD Employment Equity Targets. Suitably qualified candidates from all designated groups are encouraged to apply.

CLOSING DATE: 22 OCTOBER 2021

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BUSINESS UNIT: NICD
DISCIPLINE: CENTRE FOR HEALTHCARE-ASSOCIATED INFECTIONS,
ANTIMICROBIAL RESISTANCE AND MYCOSES
LOCATION: SANDRINGHAM
POSITION: PATHOLOGIST
PAY GRADE: PHI
REFERENCE NUMBER: NICD1021/001-06

To contribute to the management of Centre reference laboratories within the framework of a quality system. To ensure that the reference diagnostic and surveillance/ research output is delivered in accordance with the principles of good laboratory practice and to provide a professional consultative service to clinicians and other centre stakeholders. To promote appropriate and cost effective utilisation of laboratory services so as to facilitate optimization of patient management and the public health objectives of the centre. To contribute to training and research outputs.

Key Job Responsibilities

Service

- Responsible for management of centre reference laboratories and supervision of laboratory staff in collaboration with the laboratory managers
- Contribute to the strategy of the centre as a member of the centre management team
- Responsible for implementation of short and longer term laboratory surveillance and research projects
- Support and/or coordinate national stock culture collections
- Provide expert advice to all internal and external customers in order to resolve clinical, reference diagnostic and infection outbreak-related queries and concerns in a professional and timely manner and responds to complaints about any aspect of the pathology service output in a professional and timely manner to promote sound customer relations
- Provide input into changes and improvement to SOPs
- Contribute to the adherence and compliance to quality systems in the centre to comply with SANAS requirements and ensure continuous quality improvement
- Comply with the principles of good laboratory practice, full SANAS accreditation requirements and relevant legislation
- Validate new instruments/tests for laboratory or national programmes.

Teaching and Training

- Teach and train pathology staff (Registrars, Scientists, Technologists, Technicians) and other healthcare workers
- Work with the team to coordinate teaching modules
- Contribute to the departmental CPD-accredited programmes
- Be involved in under graduate and post graduate teaching.

Research and surveillance

- Seek external funding for surveillance and research
- Responsible to design, implement and report on relevant surveillance programmes at a national and international level in collaboration with centre epidemiologists
- Conduct infection outbreak investigations in collaboration with centre epidemiologists and advise on appropriate reference laboratory investigations
- Conduct research in order to contribute to publications and other technical/scientific outputs and towards translation of policy and service
- Collaborate with other departments/ organisations at a national and international level and represent the NICD on national and international working groups/ committees.

Minimum requirements and Key Competencies

- Medical degree plus FCPATH or MMed in microbiology or clinical pathology (essential) ■ MSc or PhD in clinical microbiology or a related field (desirable) ■ Post-graduate qualification in epidemiology or infection control (desirable) ■ Registration with the HPCSA as a pathologist in microbiology or clinical pathology (Independent practice category) ■ At least 3 years' experience as pathologist consultant; at least 1 year of laboratory management experience ■ Successfully supervised undergraduate and post graduate students (BSc-Hons, MSc, MMed, PhD) ■ Evidence of peer recognition such as invitations to national conferences/ working groups and to review manuscripts for journals. ■ An active NRF rating would be an advantage ■ Active as a co-investigator/collaborator on research projects ■ Familiar with laboratory safety procedures ■ Working knowledge in medical conditions, in particular clinical pathological correlation ■ Principles of analytical methodology ■ Laboratory quality assurance processes ■ Method validation including statistical calculations ■ Familiar with the principles of applied research methodology with evidence of at least 3-5 peer reviewed publications in clinical microbiology over last 3 years (average 1-2 per year) ■ Practical laboratory techniques where relevant ■ Computer literacy ■ Communication skills ■ Presentation skills ■ Analytical and diagnosing ■ Problem solving.

Enquiries may be directed to Azia Nxumalo @ 011 555 0581, email application to Recruiter4@nicd.ac.za

BUSINESS UNIT:	NICD
DISCIPLINE:	CENTRE FOR RESPIRATORY DISEASES AND MENINGITIS
LOCATION:	SANDRINGHAM
POSITION:	MEDICAL SCIENTIST
PAY GRADE:	PRINCIPAL (MSP)
REFERENCE NUMBER:	NICD1021/001-07

The successful candidate will optimise, manage and lead the laboratory working group for respiratory viruses, in collaboration with the microbiology and diagnostic laboratories and the epidemiology team, within the Centre for Respiratory Diseases and Meningitis (CRDM). This is a challenging and exciting post offering great career potential for the right person. The laboratory is a World Health Organization (WHO) National Influenza Center (NIC) and this person will become the director of this centre. In addition, there are regional and international opportunities for collaboration and funding in the field of influenza and respiratory viruses that can be explored and built upon going forward.

Key Job Responsibilities

■ Overall supervision and responsibility of the centre's National Influenza Centre (NIC) laboratory to ensure compliance with the mandate of the National Institute for Communicable Diseases (NICD) ■ Attend WHO regional and international meetings, assist with WHO training priorities, advise WHO expert committees etc. ■ Establish processes to ensure optimal diagnosis, surveillance and research befitting a national reference laboratory and to understand the phenotypic and genotypic characteristics of viruses, including SARS-CoV-2, RSV and influenza, which cause respiratory disease and meningitis to improve public health management ■ Improve the design and functioning of the laboratories for the Centre with an appropriate spectrum of laboratory tests for assessing and carrying out appropriate research into viral causes of respiratory infections and meningitis ■ Institute, design and manage virological research programmes to assess impact of infections and disease due to respiratory viruses relevant to national public health programmes ■ Provide expert virological advice and guidance for the Centre to ensure the proper management of such infections/disease and outbreaks due to such disease ■ Provide expert virological advice to internal (NICD and NHLS) and external (Department of Health, Centers for Disease Control and Prevention [CDC], WHO, etc.) stakeholders ■ Design, supervise, manage and analyse data from research projects within the Centre ■ Lead a team of scientists to develop a research agenda related to viral respiratory disease and meningitis and publish and present virological research findings within the NHLS and at scientific congresses ■ Provide teaching and training to registrars, scientists in the Centre and at NICD in order to increase capacity in the Institute ■ Be a member of expert committees related to advising and guiding the Department of Health and other professionals on issues related to above.

Minimum Requirements and Key Competency

■ PhD ■ Registration with HPCSA as a Medical Scientist (microbiology, virology, or molecular microbiology) ■ At least 10 years' post-PhD experience in microbiology or virology, including laboratory bench skills; ■ At least 5 years managerial experience in the laboratory environment or related medical field ■ Experience with tissue cultures and techniques, serology and viral sequencing will be an advantage ■ Knowledge of research methodologies with an established and consistent publication record ■ Evidence of successful scientific grant applications and budget management ■ The ability to conduct scientific research, with evidence of ongoing national and international collaborations ■ Evidence of a teaching portfolio, with experience in supervision of MSc and PhD students ■ Experience in working in the public health space, with contributions to policy development will be an advantage ■ Rating with a national or international organisation ■ Knowledge of data management ■ Good communication (verbal and written) and interpersonal skills ■ Good presentation skills ■ Computer literacy ■ Management skills ■ Planning and organising skills ■ Analytical skills ■ Basic financial management skills.

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BUSINESS UNIT: NICD
DISCIPLINE: MANAGEMENT AND ADMINISTRATION
LOCATION: SANDRINGHAM
POSITION: TECHNICAL LEAD: ETL
PAY GRADE: D2
REFERENCE NUMBER: NICD1021/001-08

The ETL Technical Lead role is to plan, coordinate and supervise and/or participate in all activities related to the integration of data across various sources into an organised and unified view within the surveillance data warehouse to ensure the delivery of timely, accurate information in support of the NICD mandate.

Key Job Responsibilities

■Orchestrate integration projects and corresponding strategies between business units, data stewards and development teams ■Ensure that integration projects meet business requirements and goals, fulfil end-user requirements, and identify and resolve systems issues ■Develop standards and processes to support and facilitate integration projects and initiatives ■Revise data integration architectures when required to be compatible with changing business needs and client standards so that all legal, compliance and operational requirements, such as data security and privacy policies are accounted for ■Maintain high standards of data quality through the introduction and enforcement of information handling processes and organisation of the data integration processes ■Collaborate with Business Intelligence specialists to establish overarching strategies and service oriented architecture ■Conduct research on emerging data integration products, languages and standards in support of procurement, development, security and integration efforts in relation to Business Intelligence, big data management and Master Data Management ■Manage the selection, deployment and maintenance of data integration tools for the organisation ■Lead testing phase of data integration development in order to identify and remedy potential problem areas ■Liaise with developers as well as specialists within the team to address issues in data patterns and ETL architecture ■Build relationships with development and infrastructure engineering teams to gain an understanding of different data architectures and required functionality ■Monitor, measure and manage the data integration solutions.

Minimum Requirements and Key Competency

■Four-year university degree in Information Technology, Engineering or Biological Sciences (Master's degree is desirable) ■Relevant technical certifications e.g. Informatica (highly advantageous), Datastage ■Data quality training ■ Minimum 15 years' experience in informatics ■10 -12 years' experience using relational databases e.g. Oracle, IBM, Netezza, SQL Server ■10-12 years structured/procedural query language (SQL and PL/SQL) and use of data query tools ■10 -12 years' experience in data warehousing and/or data analysis and/or data quality ■10-12 years' experience development data integration solutions using enterprise tools e.g. Informatica or Datastage ■Experience specific to healthcare industry ■Proven experience in overseeing the linking of cross functional databases between disparate business units and systems ■Experience with business and technical requirements analysis and data mapping ■ Extensive experience with data integration architectures ■Technically fluent in programming languages, including PL/SQL, XML and OS (Microsoft and Linux) scripting ■Knowledge of relational database design and data modeling ■Good project management skills and/or substantial exposure to project-based work structures, project lifecycle models etc. ■ Knowledge of network protocols and standards, including firewalls and secure file transfer protocols ■ Knowledge of data quality management practices ■Knowledge of data quality management practices ■Knowledge of Python and or R advantageous ■Exposure to an LIS (Laboratory Information System) for minimum of 1 year.

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GRANTS MANAGEMENT AND ADMINISTRATION

BUSINESS UNIT:	NICD
DISCIPLINE:	CENTRE FOR TUBERCULOSIS
LOCATION:	SANDRINGHAM
POSITION:	BIOINFORMATICS SCIENTIST (FIXED TERM CONTRACT: 12 MONTHS)
PAY GRADE:	D1
REFERENCE NUMBER:	NICDCDC1021/001-01

To promote, build expertise and provide high-level bioinformatics solutions to all NICD users involve in both surveillance and research activities.

Key Job Responsibilities

■ Engage with NICD users and assist with next-generation sequencing (NGS) data analysis ■ Perform basic and advanced analysis and interpretation on data produced from next generation sequencing systems (e.g. Illumina, PacBio or Ion torrent platforms) as well as develop, improve, modify, and operate data analysis pipelines ■ Conduct and initiate research in the area of NGS data analysis ■ Work closely with researchers and collaborators to generate/provide data analysis reports, project reports and perform custom analysis as requested ■ Participate in training employees or staff with bioinformatics skills and build confidence amongst users to analyze and understand their own data resulting in improved and effective research outcomes ■ Perform a total Data Quality Management of the facility which involves the implementation and monitoring of systems to ensure accurate and reliable results ■ Monitor and manage bioinformatics requests or projects to ensure objectives are achieved in terms of turnaround times, cost control, quality and service ■ Responsible for overseeing and monitoring of software tools and data resources to ensure smooth operation of the sequencing facility ■ Develop and implement costing model for Bioinformatics solutions ■ Maintain hardware and software infrastructure ■ Establish strong collaborative links with experts in the area of bioinformatics.

Minimum requirements and Key Competency

■ MSc in Bioinformatics or related relevant field/PhD desirable ■ 2 years' experience with Next-generation sequencing data analysis ■ TB-related experience will be advantageous ■ Experience with the relevant sequence analysis tools / best practices ■ Background, or experience in molecular biology or microbiology ■ Experience with working in a Linux/UNIX environment ■ Strong bioinformatics analysis and scripting experience including proficiency with a scripting language (e.g. Python, Java, Perl) ■ TCP/IP knowledge will be an added advantage ■ Project Management knowledge ■ Have proven ability in formulating and/or implementing high-level bioinformatics solutions ■ Project management, financial management and costing skills ■ Innovation and problem-solving skills ■ Ability to write successful grant applications and reports to funders and to publish findings in scientific journals ■ Ability to work with others including international collaborators and to manage junior staff and students.

Enquiries may be directed to Zinhle Buthelezi @ 011 885 5404, email application to Recruiter1@nicd.ac.za

BUSINESS UNIT: NICD
DISCIPLINE: ADMINISTRATION AND MANAGEMENT
LOCATION: SANDRINGHAM
POSITION: ANALYST DEVELOPER (FIXED TERM CONTRACT: 12 MONTHS)
(RE-ADVERTISEMENT)
PAY GRADE: C5
REFERENCE NUMBER: NICDCDC0621/001-02

Provide complex IT software solutions by working closely with business users throughout all phases of the software development lifecycles (SDLC) in support of the Institutes business processes.

Key Job Responsibilities

- Follow and use proper project management principles on all projects
- Participate in projects to understand new target systems' processes and provisioning needs and implement solutions
- Communicates any and all progress, roadblocks, issues to the team and management in a timely manner
- Facilitate Joint Analysis and Design (JAD) sessions, conduct business interviews and other information gathering techniques in order to determine business requirements
- Analyse and document business requirements in consultation with users according to appropriate methodology and techniques
- Design complex technical solutions in line with the Business requirements to ensure clarity and completeness of the solution
- Develop and debug complex system components in line with technical specifications for quality implementation purposes
- Determine and evaluate performance measures of the system to ensure optimal utilization
- Scrub, manipulate and load data from other sources into the systems to ensure accuracy and correctness of information
- Provides code review, testing, debugging, technical documentation, general testing instructions, and lead/assist in go-live planning, go-live moves, and post-live support
- Troubleshoot and support issues identified
- Ensure all change management and compliance procedures are being followed
- Oversee resources associated with the design, development, testing and implementation phases of projects to ensure quality deliverables and assist in their growth
- Provide training and documentation to relevant stakeholders to ensure they understand and can achieve optimal system utilization
- Perform other duties as required or assigned by emergency or other operational reasons for which the employee is qualified to perform.

Minimum requirements and Key Competency

- Three year Degree (Computer Science/ Software Development/ Software Engineering)
- Project management qualification (desirable)
- 3-4 years' experience as a Software Development
- 3+ years Microsoft .NET 3.5+ development using C#
- 3+ years Microsoft .NET technologies including: WCT, WPF, WF, LINQ and EF
- 3+ years' experience with web development ASP .NET, MVC3, JavaScript, AJAX and CSS
- **1+ years' experience with mobile development** using either Xamarin .Forms, Xamarin.Android or Xamarin.iOS
- 3+ experience with database development including relational database design, SQL and ORM technologies
- 3+ experience with user interface design and prototyping
- Experience with source control management systems and continuous integration / deployment environments
- Experience in leading and managing the delivery of system/ software development projects in a structured environment
- Experience in usage of UML
- Experience configuring and development customizations for Microsoft SharePoint
- SDLC
- Automated testing
- Software development approaches and methodologies including Agile and Waterfall
- Multi-threading and concurrency Debugging, performance profiling and optimization
- Comprehensive understanding of object-oriented and service-oriented application development techniques and theories.

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