

BUSINESS UNIT: NICD  
DISCIPLINE: SEQUENCING CORE FACILITY  
LOCATION: SANDRINGHAM  
POSITION: BIOINFORMATICS SCIENTIST X2  
PAY GRADE: D1  
REFERENCE NUMBER: NICD0121/001-02

**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 & key competencies

■MSc in Bioinformatics or related relevant field/PhD desirable ■Five (5) years' experience with Next-generation sequencing data analysis ■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.

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