JOB DESCRIPTION
TELETHON KIDS INSTITUTE

Why is this Job Description being written?	☒ New Position ☐ Replacement Position ☐ Position re-designed ☐ Position not previously described

POSITION DETAILS:	Position Title:	**DATA ANALYST**		
Division:	Research Platforms		**Department:**	Telethon Kids Genome Nexus (Genomics, genome editing & supercomputing core capacity)
Position reports to: (role)	Lead Scientist – Genome Nexus & Translational Genomics			
Location: *include all possible locations*	100 Roberts Road Subiaco			

POSITION PURPOSE: In one or two sentences briefly summarise the overall purpose of this role, i.e. broadly, **what** this role does and **why**

This position will develop and support bioinformatics analysis and run pipelines required for clinical and research use of next-generation sequencing (NGS) and other big data. Expertise is required to manage the bioinformatics computational platform and to assist with analysing and developing software to analyse, large and complex datasets generated from a diverse range of sources. Research data types include next generation sequencing, population-based cohort, clinical trials, animal studies and a range of publicly available datasets. The work will contribute to the creation of a clinical pipeline utilising omics approaches to improve a patients' wellbeing.

KEY RESPONSIBILITY AREAS *(Please list in order of importance)*

Key Position Accountabilities What are the main areas for which the position is accountable	*% of Total Role*	*Inputs:* What are the key activities or tasks to be carried out?	*Outputs:* What are the expected end results?	*Measures:* How it is measured

Systems administration and bioinformatics analysis		• Responsible for the research and development of computational clusters • Design and implementation of software for the analysis of big data • Provide analytical support for pricing models and costings • Write custom codes to perform data cleaning, quality contribution, creating variables and datasets, data analysis and management using R in a Linux computing environment • Identifying potential problems with study data and collaborating with the research team to resolve issues • Install programs in a Linux environment and reformat datasets independently according to program documentation • Perform analysis of big datasets using regression techniques • Write documentation for analysed datasets and related files • Collect information by searching online bioinformatic databases • Assist in the preparation of manuscript, including create tables and figures in publication-quality format and summarizing the results of statistical analyses and present results orally to study researchers	• A stable, continually evolving bioinformatics platform • Completed projects and contributions to manuscripts • New bioinformatics tools and programs are setup and utilised on the bioinformatics systems • Presentations at seminars, meetings and contributing to presentations by others • Development of new policies and processes (or refinement) and for data and software management	• Uptime, stability, utility and user satisfaction with the bioinformatics platform • Number of new collaborations, manuscript contributions and projects completed • Costs recovered where appropriate • Number of new bioinformatics tools and programs setup or developed • Number of projects they are utilised in • Number of presentations • Number of changes or new initiatives to improve data and software management
Training and collaboration		• Assists with training and guiding research staff to enable researchers to access and utilise the bioinformatics platform • Work closely with Telethon Kids researchers to help promote the use of bioinformatics • Collaborates and integrates closely with researchers to drive a culture of excellence in research data science	• Presentations, workshops and individual meetings will be held to train assist researchers in using bioinformatics programs • Increased awareness of the issues surrounding the analysis and management of research data	• Increase in the number of researchers using the platform and/or increase in efficiency or effectiveness of platform use • Feedback from internal stakeholders • Increase in awareness/utilisation of tools and techniques for effectively managing and analysing research data

Professional Development		• Maintains up-to-date knowledge and skills of new technologies and techniques informatics (and related) through collaboration, participation in workshops and conferences and other similar opportunities • Contribute positively to Telethon Kids and broader environment, through participation in committees, working groups etc., as needed or requested	• Ongoing professional advancement (as measured across a range of areas)	• Measured by regular meetings with supervisor • Number of contributions

Qualifications: what are the minimum educational, technical or professional qualifications required to competently perform role	• PhD in Computer Science. Mathematics of Biostatistics or related field • 5-10 years of industry/academic experience
Skills, Knowledge & Experience:	• Experience in management (and use) of Linux operating environments • Knowledge of other programming languages or statistical software • Proficiency in the design, setup and querying of relational and other types of databases • Ability to rapidly learn new programming languages on the job • Experience in machine learning and graphics • Demonstrated ability to work collaboratively and form partnerships with other researchers, service providers, professional groups etc. • High level interpersonal, verbal and written communication skills enabling effective communication with both laboratory, clinical, epidemiology and other research staff • Demonstrated problem-solving skills and independent thinking

SCOPE:

Financial accountability: Does this role have accountability for a budget?			
• No			
People responsibility: Does this role have any direct reports or indirect reports (through direct reports)?			
No. of direct reports	0	No. of indirect reports	0

Next level of supervision

Director, Research Services and Innovation

Immediate level of supervision

Lead Scientist – Genome Nexus & Translational Genomics

Other roles reporting to immediate supervisor

		Data Analyst			

Direct reports (role x no.)