

Position Title:	Genomics Informatics Specialist
Reports To:	Science Team Leader - GenomNZ
Direct Reports:	Nil
Group:	Digital Agriculture
Key Relationships:	Laboratory employees, Scientists, Bioinformaticians, Statisticians, Information Technology employees, Internal and external customers
Location:	Invermay Campus, Dunedin

WHO WE ARE

As part of the Government's reset of the science, innovation and technology system, on 1 July 2025, AgResearch, Manaaki Whenua – Landcare Research, Plant & Food Research, and Scion merged to form the New Zealand Institute for Bioeconomy Science, trading as the Bioeconomy Science Institute.

This merger has created a world-class research organisation of globally significant size and scale, with over 2,000 employees — including scientists, researchers, and support staff. It brings together fundamental science knowledge and expertise in the natural resources that underpin the bioeconomy and the native estate, alongside applied research capabilities in manufacturing, agritech and biotech, and the food and fibre sectors.

Our people drive innovation and commercial outcomes in the bioeconomy, using research and technology to support enduring economic growth and resilience, a healthy environment, and positive social outcomes for Aotearoa New Zealand.

This position sits under the current AgResearch group of the Bioeconomy Science Institute.

POSITION SCOPE & PURPOSE

Genomnz™ is a leading commercial genotyping laboratory within the AgResearch group, based at the Invermay Campus in Mosgiel (www.agresearch.co.nz/genomnz). *Genomnz™*, provides genomic solutions including parentage assignment, genomic relationships and single gene tests for animal breeders and researchers in the agricultural and aquaculture industries, and works closely with the Animal Genomics Team.

The Genomics Informatics Specialist position will utilise databases and computational pipelines at all stages of genetic data analysis, from the laboratory information management system to DNA assignment of pedigrees, generation of genomic breeding values and mating allocations, reporting and commercial service delivery under tight timeframes, and rigorous quality standards.



KEY ACCOUNTABILITY AREAS

MAIN RESPONSIBILITIES

- Become familiar with a number of in-house relational databases that support our data processing pipelines, genomic analysis and service delivery, and be able to provide data management support when needed to help solve specific problems.
- Perform routine analysis on large genetic datasets for delivery to the agricultural and aquaculture industries, primarily using R, ASReml and Python.
- Maintain and improve several in-house pipelines to generate and report genomic breeding values for a wide range of species.
- Work with colleagues to develop and implement tools, pipelines and applications to support acquisition, access and analysis of data.
- Follow, promote, and apply best practices for data management, data security, code development and quality control.
- Ensure current systems and guidelines for data analysis are adhered to and identify and set up new systems as appropriate. Includes writing/updating standard operating procedures in line with our accreditation responsibilities under ISO 17025.
- Maintain familiarity with the current open-source and commercial software ecosystem.
- Build a collaborative and effective working relationship with the wider information technology and data science employees in the company.

HEALTH AND SAFETY

- Maintain current knowledge of AgResearch's Health and Safety Management policies, systems, and procedures.
- Ensure awareness of own responsibilities and the procedures to follow in relation to health and safety.
- Identify and report any hazards, near misses or incidents as per prescribed policy and procedures.
- Demonstrate safe workplace behaviour by taking all practicable steps to ensure own and other's safety in the workplace.
- Attend scheduled Health and Safety training and development initiatives on a regular basis.

ORGANISATIONAL OBJECTIVES

- Apply and implement prescribed project management methodology into all project work.
- Apply principles of continuous improvement by taking ownership for identification, analysis and investigation of work-related matters with the intent to improve, manage compliance and initiate



best practice in our place of work.

- Actively participate in and contribute to performance conversations and personal development.
- Embrace the AgResearch Values framework and develop own behaviours to support these Values on a continuous basis.
- Take responsibility to understand and apply AgResearch policy, processes, systems, and procedures on a daily basis.
- Commit to accurate and timely information sharing and recordkeeping as per set organisational standards.
- Perform additional tasks, duties and/or responsibilities as directed by your people leader.
- Assist and support AgResearch business across different science groups and business units, as agreed with your people leader.

INFORMATION MANAGEMENT

- Ensure that all information created or received during the course of your work is managed as per  AgResearch Information Management policy. This includes naming, storing, classifying and ensuring it is available to other staff as per the policy.



PERSON SPECIFICATIONS

The person best suited to this position will possess the following:

EDUCATION & QUALIFICATIONS

- Tertiary qualification in computational genetics or a related field of study

CAPABILITIES & EXPERIENCE

- Minimum of 5 years' relevant practical experience
- Proficient in R and at least one of the following Python, SQL, Bash, Git, Linux
- Knowledge of relational databases such as MS Access and SQL Server
- Experience working in a Linux/Unix environment
- Knowledge of genetic data analysis and understanding relevant biological concepts, including large genomic analyses
- Familiarity with high-performance computing environment and/or cloud computing is desirable
- Demonstrated ability to collaborate closely and communicate well with a wide range of staff relevant to the position, such as laboratory staff, statisticians, scientists, infrastructure technicians and managers and software developers
- Excellent written and spoken English skills, with the ability to effectively articulate complex, technical information to internal and external clients
- Excellent time management skills with the ability to work independently and as part of a team
- Knowledge and interest in New Zealand pastoral agriculture industries.



COMPETENCIES

Organisational wide competencies – these are the competencies determined by the organisation as critical to every role.	
Accountability	Accepts responsibility for one's actions regardless of outcomes.
Caring About People	Displays sensitivity towards the attitudes, feelings, or circumstances of others.
Developing People	Provides support, coaching, training, and career direction to others.
Integrity	Acts honestly in accordance with moral or ethical principles
Driving Results	Accomplishes goals, completes tasks, and achieves results.
Leveraging Diversity	Respects and values individual differences to obtain a desired effect or result.
Relationship Building	Develops collaborative relationships to facilitate current and future objectives.
Self-Development	Actively acquires new knowledge and skills to remain current with and/or grow beyond job requirements.
Role based competencies – these are the competencies required to perform this role.	
Anticipating Problems	Forecasts and detects errors, gaps, and potential flaws
Detail Focus	Performs work with care, accuracy, and attention to detail
Listening to Others	Listens and restates the ideas and opinions of others to improve mutual understanding
Processing Information	Gathers, organises, and analyses diverse sources of information
Quality Focus	Strives to meet quality standards and produce quality work products.
Solving Problems	Identifies solutions given available information
Teamwork	Collaborates with others to achieve goals.
Financial Insight	Applies financial knowledge to achieve organizational goals and objectives.
Time Management	Plans and prioritises work to maximise efficiency and minimise downtime
Customer Focus	Provides courteous, timely, and helpful service to encourage client loyalty.

