Health New Zealand
Te Whatu Ora

Position Description | Te whakaturanga ō mahi
Health New Zealand | Te Whatu Ora

Title	Scientific Officer - Bioinformatician			
Reports to	Genetics Section Head			
Location	Canterbury Health Laboratories			
Department	Genetics			
Direct Reports	0		**Total FTE**	1
Budget Size	**Opex**	n/a	**Capex**	n/a
Delegated Authority	**HR**	n/a	**Finance**	n/a
Date	14/01/2026			
Job band (indicative)	Degree designated, Band TBC			

The Health System in Aotearoa is entering a period of transformation as we implement the Pae Ora/Healthy Futures vision of a reformed system where people live longer in good health, have improved quality of life, and there is equity between all groups.

We want to build a healthcare system that works collectively and cohesively around a shared set of values and a culture that enables everyone to bring their best to work and feel proud when they go home to their whānau, friends and community. The reforms are expected to achieve five system shifts. These are:

1. The health system will reinforce Te Tiriti principles and obligations.
2. All people will be able to access a comprehensive range of support in their local communities to help them stay well.
3. Everyone will have equal access to high quality emergency and specialist care when they need it.
4. Digital services will provide more people the care they need in their homes and communities.
5. Health and care workers will be valued and well-trained for the future health system.

Te Mauri o Rongo – The New Zealand Health Charter

The foundation for how we ensure our people are empowered, safe and supported while working to deliver a successful healthcare system, is Te Mauri o Rongo – the New Zealand Health Charter. It guides all of us as we work towards a healthcare system that is more responsive to the needs of, and accessible to all people in Aotearoa New Zealand.

It applies to everyone in our organisation and sits alongside our code of conduct as our guiding document.

Te Mauri o Rongo consists of four pou (pillars) within it, including:

Wairuatanga – working with heart, the strong sense of purpose and commitment to service that health workers bring to their mahi.

Rangatiratanga – as organisations we support our people to lead. We will know our people; we will grow those around us and be accountable with them in contributing to Pae Ora for all.

Whanaungatanga – we are a team, and together a team of teams. Regardless of our role, we work together for a common purpose. We look out for each other and keep each other safe.

Te Korowai Āhuru – a cloak which seeks to provide safety and comfort to the workforce.

These values underpin how we relate to each other as we serve our whānau and communities.

Together we will do this by:

- caring for the people.
- Recognising, supporting and valuing our people and the work we all do.
- working together to design and deliver services.
- defining the competencies and behaviours we expect from everyone.

About the role

The primary purpose of the role is to:

1. Provide bioinformatic leadership within the laboratory.
2. Work collaboratively with the Genetics laboratory team, extended CHL laboratory team and other related health professionals to provide person centred, high quality, innovative clinical pathology services.
3. Work collaboratively with the Clinical Director, Genetic Pathologist(s), Service Manager and Section Head to identify and develop opportunities for continual improvement of clinical bioinformatics tools, processes, and workflows for delivery of diagnostic genomic services.
4. Validation, verification, and maintenance of clinical bioinformatics software.
5. Documentation and support of clinical bioinformatics software.
6. Planning and management of bioinformatics software deployment; includes working closely with technical, scientific and clinical functions of the genomic laboratory.
7. Investigation and resolution of complex bioinformatics issues by examination of input and output data, and associated bioinformatics processes; includes communication to technical, scientific, and clinical staff.
8. Innovate for the delivery of sustainable, high quality pathology services to enhance patient care and related scientific endeavours.
9. Participate in teaching students and staff in scientific techniques as required.

Key Result Area	Expected Outcomes / Performance Indicators
Bioinformatical operational responsibilities	• Assume responsibility for daily bioinformatics support of massively parallel short read sequencing and related workflows, including but not limited to running of analysis pipelines, data management, follow-up of service errors and quality control failures. • Following SOPs, quality and operational policy. • Aid in the maintenance and development of databases containing clinical data. • Responsible for maintaining, implementing, and informing laboratory staff of software updates, and ensuring changes and procedures are documented appropriately. • Attend and actively participate in departmental meetings and take on meeting responsibilities as requested.
Quality	• Monitor the quality of data produced by massively parallel sequencing (MPS) and other technologies, to ensure it meets the standards required for the diagnostic service, according to laboratory protocols and national/international guidelines. • Maintain an accurate record of the work undertaken, including both manual and computerised records, and preserve the confidentiality of patient, laboratory and clinical information. • Assist in the continuous assessment of procedures for data processing, analysis, interpretation, storage, and including the application of an independent verification/validation system. • Ensure bioinformatics software tools and pipelines are appropriately maintained, updated, and monitored for deprecations, compatibility issues, and security updates. • Assist with extraction of data for completion of audit requirements.
Development & Validation	• To support the development, implementation and (re)validation of changes to existing and new MPS software, pipelines and processes, under guidance from Genetic Pathologist(s). • Aid in the development of bioinformatic tools and processes for the analysis of data from other technologies as required – including raw data analysis, exploratory analysis, summarising findings and writing evaluation reports. • Review, assess and validate 3rd party bioinformatics software for clinical laboratory use. • Monitor new developments and future trends in bioinformatics to ensure the laboratory uses the most efficient and effective tools and methods available to deliver a high-quality diagnostic service. • Review, assess and validate bioinformatic tools and resources available to annotate and aid in the interpretation of novel gene sequence and structural variants.

	• Assist in the evaluation and procurement of software and IT hardware for the Genetics Laboratories.
Time Management	• Project objectives are set in conjunction with the project supervisor and other relevant senior staff as appropriate. • Projects are regularly reviewed with the project supervisor. • Projects are completed within the planned time frame and procedures are fully documented. • Work is performed and completed in the required time consistent with CHL quality standards.
Teaching & Training	• Lead teaching and mentoring initiatives, training staff and students in advanced scientific techniques and competency frameworks. • Ensure new bioinformatic knowledge/information is communicated through CHL and incorporated in training
Research & Development	• Initiate, undertake and collaborate in relevant research and development focused on applying bioinformatics for improving diagnostic genomic services. • Present the research and/or service delivery improvements at scientific meetings.
Continual Professional Development	• Maintain professional development and uphold health & safety standards, ensuring continuous improvement and adherence to Te Tiriti principles. • Complete success and development objectives agreed to between the incumbent and appropriate senior staff • Maintain a personal development plan relevant to scientific needs and personal interest.
Te Tiriti o Waitangi	• Remain focused on the pursuit of Māori health gain as well as achieving equitable health outcomes for Māori. • Support tangata whenua- and mana whenua-led change to deliver mana motuhake and Māori self-determination in the design, delivery and monitoring of health care. • Actively support kaimahi Māori by improving attraction, recruitment, retention, development, and leadership.
Equity	• Commit to helping all people achieve equitable health outcomes. • Demonstrate awareness of colonisation and power relationships. • Demonstrate critical consciousness and on-going self-reflection and self-awareness in terms of the impact of their own culture on interactions and service delivery. • Show a willingness to personally take a stand for equity. • Support Māori-led and Pacific-led responses.
Innovation & Improvement	• Be open to new ideas and create a culture where individuals at all levels bring their ideas on how to ‘do it better’ to the table.

	• Model an agile approach – tries new approaches, learns quickly, adapts fast. • Develop and maintain appropriate external networks to support current knowledge of leading practices.
Leadership	• Operates with a high degree of professional autonomy in managing scientific and technical activities, including assay development, research coordination, and mentoring. • Ensure oversight and governance are provided by the Section Head and Clinical Director to ensure alignment with departmental priorities, quality standards, and organisational objectives. • Ensure decisions on day-to-day work, troubleshooting, and project execution are made independently, while strategic initiatives and resource allocation are agreed in consultation with the Section Head and Service Manager. • Exercise judgement within defined policies and compliance frameworks, escalating issues or risks promptly to leadership.
Collaboration and Relationship Management	• Model good team player behaviour, working with colleagues to not allow silo thinking and behaviour at decision making level to get in the way of doing our best and collegially supports others to do the same. • Work with peers in Hauora Māori Service and Pacific Health Business Unit to ensure the voice of and direct aspirations of Māori and Pacific People are reflected in planning and delivery of services. Ensure clients receive polite, courteous, and prompt responses to their requests or enquiries.
Health & safety	• Exercise leadership and due diligence in Health and Safety matters and ensures the successful implementation of Health and Safety strategy and initiatives. • Take all reasonably practicable steps to eliminate and mitigate risks and hazards in the workplace that could cause harm, placing employee, contractor and others' health, safety, and wellbeing centrally, alongside high-quality patient outcomes. • Lead, champion, and promote continual improvement in health and wellbeing to create a healthy and safe culture.
Compliance and Risk	• Take responsibility to ensure appropriate risk reporting, management and mitigation activities are in place. • Ensure compliance with all relevant statutory, safety and regulatory requirements applicable to the Business Unit. • Understand, and operate within, the financial & operational delegations of the role, ensuring peers and team members are also similarly aware.
Other duties	• Undertake out of hours duties as required to meet the operational needs of the laboratory and the efficient performance of the diagnostic service

Matters which must be referred to the Section Head

- Strategic decisions: Changes to service scope, introduction of new test platforms, or significant research directions.
- Resource allocation: Requests for additional FTE, major equipment purchases, or budget variations.
- External communications: Media engagement, conference presentations representing CHL, or collaborations with external organisations.
- Clinical or operational risk: Any issue that could impact patient safety, accreditation compliance, or turnaround times.
- Policy exceptions: Deviations from standard operating procedures, ISO 15189 requirements, or organisational policies.
- Conflict resolution: Escalation of staff performance issues, complaints from clinicians, or disputes affecting service delivery.

Relationships

External	Internal
• Clients and patients of Health NZ • Other Health NZ laboratories • Company representatives • Other Health NZ staff • Government and other Agencies	• Section Head, Genetics • Service Manager, Genetics • Divisional Lead, CHL • Clinical Director, Genetics • Genetic Pathologist(s) • Genetics team • LIS team • Digital services team • CHL team • Students and trainees

About you – to succeed in this role

You will have

Essential:

- An appropriate post-graduate qualification in Bioinformatics.
- Experience in developing and using bioinformatics tools and resources.
- Experience of analysing massively parallel sequencing data, ideally in a diagnostic laboratory setting.
- Knowledge of underlying methods and sequencing technologies.
- Experience of software development using an object-oriented language (e.g., Python).
- Experience in analysing high throughput datasets.
- Strong working knowledge of UNIV/Linux environment
- Proficiency in at least one programming or scripting language (e.g., Python, Bash, R)
- To have good knowledge of general software development procedures, including Git version control.

Knowledge of data protection requirements.

- **Desired:**
- Be registered/ working towards registration as a Medical Laboratory Scientist with the MLSC under the Health Practitioners Competence Assurance Act.
- The ability to maintain a high professional standard in line with the Competence Standards for Medical Laboratory Science Practitioners in Aotearoa New Zealand (Revised November 2018).
- A current Practising Certificate issued by the Medical Sciences Council of New Zealand.
- Experience in implementing Te Tiriti o Waitangi in action.

You will be able to

Essential:

- Demonstrate an understanding of the significance of and obligations under Te Tiriti o Waitangi, including how to apply Te Tiriti principles in a meaningful way in your role.
- Take care of own physical and mental wellbeing, and have the stamina needed to go the distance.
- Maximise the quality and contributions of individuals and teams to achieve the organisation's vision, purpose and goals.
- Establish and maintain positive working relationships with people at all levels within the public and private sectors, related industry and community interest groups and the wider national and international communities.
- Demonstrate a strong drive to deliver and take personal responsibility.
- Demonstrate self-awareness of your impact on people and invests in your own leadership practice to continuously grow and improve.
- Demonstrate the highest standards of personal, professional, and institutional behaviour through commitment, loyalty and integrity.

Desired:

- Able to conduct Research and Development activities.
- Able to organise and manage complex activities.
- Able to maintain intense concentration on important tasks despite frequent interruptions.
- Able to recognise patterns of abnormality and relate them to clinical situations and provide appropriate advice.
- Good verbal and written communication skills including writing technical documents, scientific papers and operating procedures.
- Able to prepare and present complex scientific and clinical information at meetings or as part of a teaching commitment.

This position description is intended as an insight to the main tasks and responsibilities required in the role and is not intended to be exhaustive. It may be subject to change, in consultation with the job holder.