



Position Description

Position title:	Medical Scientist
Salary range:	VCGS Medical Scientist Salaries – Grade 1 - Victorian Public Health Sector (Medical Scientists, Pharmacists & Psychologists) Enterprise Agreement (EA)
Reporting manager:	Deputy Head Biochemical Genetics
Direct reports:	0
Home group:	Biochemical Genetics

Who we are

Victorian Clinical Genetics Services (VCGS) is a not-for-profit subsidiary of the Murdoch Children's Research Institute. We provide a wholly integrated genetic testing, diagnostic and counselling service for health professionals, patients, and their families across Australia and New Zealand.

Our clinical geneticists and genetic counsellors work closely with our medical scientists to provide the most accurate interpretation for complex genetic tests. VCGS also plays an important role in research and development, driving translational research and policy development in genetics.

Our values

People at VCGS follow our values



Value people first

People are at the core of our business. We lead with empathy. We display compassion and respect towards each other, our patients and the community.



Build trust

We communicate and act with transparency, sincerity, and truthfulness in all aspects of our work.



Pursue excellence

We share a commitment to delivering high-quality, sustainable science and services. We acknowledge mistakes and encourage each other to learn and grow.



Be innovative

We encourage curiosity, collaboration and critical thinking. We value new ideas, and continuous improvement.

Position Overview

The Medical Scientist is a key member of a multidisciplinary laboratory that is responsible for the reliable, accurate, and timely provision of Newborn Screening (NBS) and Metabolic laboratory services for the state of Victoria. The incumbent will perform critical daily routine laboratory tasks while utilising their skills in clinical mass spectrometry, data sciences and other specialised paediatric testing for the benefit of Victorian babies within the accreditation framework of ISO15189:2022. The laboratory is moving to a six-day week from Monday to Saturday as regular hours and the incumbent is also required to participate in normal day shift hours, rostered overtime, the on-call roster and other out-of-hours duties as required operationally.

The duties include supporting the overall quality of the laboratory. S/he will work as an effective member of a small team with sufficient flexibility to adapt to changing daily laboratory and work-load requirements.

Key Accountabilities

Clinical Operations & Routine Testing

- Provision of real-time services to meet internal and external stakeholder needs
- Perform the "fundamentals": Execute daily, high-volume, hands-on laboratory operations for NBS and Metabolic sections, including sample receipt, preparation, and analysis
- Acknowledge and perform the routine tasks necessary to maintain a state-wide screening service.
- Ensure all testing procedures adhere to the laboratory's Standard Operating Procedure (SOP)
- Ensure all results are delivered within strictly defined clinical turnaround times to support neonatal healthcare
- Ability to enter accurate data and generate precise reports

Instrumentation & Methodology

- Maintain, troubleshoot, and operate advanced instrumentation, including LC-MS/MS, GC-MS, genomic testing, automated immunoassay and high-throughput robotics
- Undertake routine equipment maintenance, troubleshooting and calibration commensurate with experience and training and in accordance with operator / training manual
- Contribute to the validation and implementation of new methodologies under the direction of senior staff

Quality & Compliance

- Adhere strictly to ISO 15189:2022 standards and internal Quality Management Systems
- Participate in internal and external quality assurance (EQA) programs to maintain laboratory accreditation
- Organisation of IQC and EQA including enrolment, timely submission of results and distribution and filing of records
- Work with other staff to investigate IQC and EQA non-conformances
- Support method improvements, method validation and troubleshooting
- Support automation of processes
- Participate in quality activities, to ensure laboratory compliance with National Association of Testing Authorities (NATA), International Organization for Standardization (ISO) and other relevant standards

Technical Innovation & Data Science

- Utilise Data Science tools (e.g., Python, R, or SQL) to assist with the interpretation of large-scale Biochemical Genetics datasets and automate manual laboratory workflows
- Bridge the gap between laboratory bench work and modern informatics to enhance diagnostic accuracy and reporting efficiency

Professional Development

- Commit to lifelong learning through active participation in continuing professional development (CPD) activities
- Engage in self-motivated education to stay abreast of emerging trends in biochemical genetics and clinical data science

- Assist in/contribution to generate data for research and publications
- Participate in training of other team members and students
- Participate in the laboratory's on-going education program through participation, including presentation, in multi-disciplinary team meetings, education sessions and relevant external meetings
- Is engaged in the campus culture including professional development activities and attending internal/external campus conferences and seminars

Laboratory Organisation

- Maintain laboratory documents and equipment
- Maintain a tidy and safe laboratory and workplace
- Maintain waste collection and disposal
- Maintain laboratory stock inventory and ensure that stocks are kept in supply
- Maintain laboratory reagents and equipment records

Selection Criteria

Essential

- Bachelor of Science, Bachelor of Applied Science and/or Honours, ideally with a major in Biochemistry, or an equivalent qualification recognised for professional membership of HGSA/AACB
- Demonstrated practical experience in clinical mass spectrometry within a diagnostic or research setting
- Experience participating in internal quality control (IQC) and/or external quality assurance (EQA) activities
- Good working knowledge of Excel, statistics and data analysis software or programming languages (e.g. Python or R) applicable to clinical datasets
- A strong background in, or demonstrated interest in, paediatric laboratory diagnostics, Biochemical Genetics and/or Newborn Screening
- Strong organisational skills, attention to detail, and the ability to work effectively both independently and as part of a team
- Availability to participate in Saturday shifts, overtime and on-call duties once fully trained

Desirable

- Experience working within an ISO 15189 accredited laboratory environment
- Experience undertaking method validation activities to support clinical implementation
- Experience with specialised instrumentation such as LC-MS/MS, GC-MS, automated immunoassays and/or high-throughput robotics
- Experience using Python, R or SQL to automate workflows or interrogate large clinical datasets
- Previous experience in Newborn Screening or Biochemical Genetics diagnostic services
- Experience supporting process improvement, troubleshooting or automation initiatives
- Experience contributing to research activities, publications or presentations
- Eligibility for, or membership of, HGSA and/or AACB

Conditions of employment

- Keeping children safe is our highest priority. We maintain rigorous safeguarding standards and employ comprehensive screening processes to ensure the safety of the children we work with. This includes mandatory screening processes for all successful candidates, including:
 - Valid Working with Children Check (or equivalent)
 - Satisfactory criminal record check
- The right to reside and work in Australia and you meeting any applicable visa conditions

Health, Safety & Wellbeing

- We are committed to providing and maintaining a working environment which protects the health, safety and wellbeing of our people, partners and the community

- Employees conducting duties on behalf of VCGS are expected to meet the environment, health and wellbeing requirements and responsibilities specifically required for the role
- We are committed to supporting children in their right to be safe and adhere to the responsibilities we have to ensure their protection and safety as per the Child Safety Policy
- The Institute is committed to the safety of children and young people, and takes a zero-tolerance approach to all forms of child abuse, exploitation and harm. The Institute prioritises child safety in our decision-making at all levels of the Institute and supports our employees to understand and enact their safeguarding responsibilities
- We are committed to a diverse, inclusive workplace where all staff are supported to reach their full potential, regardless of gender, career status, age, disability, cultural background, religion or sexual orientation. Staff contribute to campus efforts in gender equity, diversity, inclusion and wellbeing through participation, active learning and by role modelling our values
- Specified positions may be subject to medical review to ensure that the inherent requirements of the role can be undertaken safely

As VCGS evolves to meet its changing strategic & operational needs and objectives, so will the roles required of its employees. As such, this document is not intended to represent the position which the occupant will perform in perpetuity. This position description is intended to provide an overall view of the incumbent's role as at the date of this statement.