

Position Title: Senior LIMS Developer

Salary Range: Professional & Administrative Salaries

Reporting Manager: TBA

Direct Reports: NA

Home Group: Software Systems and Integration Unit

Who are we?

Victorian Clinical Genetics Services (VCGS) is a not-for-profit subsidiary of the Murdoch Children's Research Institute www.mcri.edu.au and provides a wholly integrated genetic testing, diagnostic and counselling service for health professionals, patients and their families across Victoria, Australia and globally. Our clinical geneticists and genetic counsellors work in close consultation with our medical scientists to provide the most accurate interpretation for complex genetic tests. VCGS also plays a pivotal role in research and development, driving translational research and policy development in the field of genetics.

What is it like to work for us?

We are committed to ensuring a positive working environment that values all backgrounds and experiences. We cultivate an inclusive culture that is underpinned by equal opportunity for all and a culture based on respect, consideration and dignity. We are also committed to developing our people and fostering an environment where learning and development is central to our staff reaching their full potential.

Position Overview

VCGS' operations are supported by a growing list of software tools and solutions, deployed across all business units. These include patient and laboratory information management systems, data analytics and integration capabilities. To achieve its purpose as a translational partner of MCRI, VCGS recognises the importance of early adoption of new technologies and systems that aid data integration and interoperability.

The Software Systems and Integration Unit is charged with the delivery, maintenance and management of core pathology software. Unit staff cooperate closely with MCRI IT and the VCGS Clinical Bioinformatics and Development Teams and form part of VCGS' unique ecosystem of clinical variant curators, clinical bioinformaticians, laboratory professionals, clinical geneticists and genetic counsellors, commercial and operations staff who are all committed to supporting the delivery of world-leading genetics and genomics services.

The Senior LIMS Developer is responsible for the development, enhancement, and optimisation of LIMS, translating laboratory needs into streamlined code and ensuring efficient, high-quality outcomes. They conduct detailed code reviews to uphold development standards, fostering best practices and continuous improvement. By working closely with lab technicians, scientists, and stakeholders, they ensure the system aligns with operational workflows and integrates seamlessly with instruments and processes. They take the initiative to identify areas for improvement, designing innovative solutions that enhance system functionality and maximise efficiency. They prioritise safe and accurate deployment of system modifications, ensuring data integrity, system stability, and compliance with internal protocols and regulatory requirements. This role also champions data security within LIMS, safeguarding sensitive information and ensuring compliance with relevant industry regulations. Clear, well-maintained documentation is a priority, supporting traceability, auditability, and future development.

In addition to providing leadership and technical guidance, the Senior LIMS Developer mentors junior developers, sharing knowledge and fostering their growth. They promote compliance with safety, ethical, and quality standards, actively modelling best practice in line with Australian regulations. Staying current with LIMS trends and emerging technologies, they drive the evolution of the system to maintain a cutting-edge platform. They also support business continuity, ensuring system availability and providing coverage during critical periods to meet operational needs. Their

expertise ensures seamless delivery of solutions, enabling smooth workflows and sustained performance across the laboratory environment.

The person will work closely with team members, LIMS Lead and the Lead of the SSI Unit, the heads of the business units to ensure a full understanding of the operational, strategic and management context and consequences of the decisions associated with projects and associated alterations to work practices.

Key Accountabilities

LIMS Development

- Design, develop, and implement efficient code tailored for laboratory information management systems, ensuring streamlined laboratory processes and data management.
- Conduct code reviews to ensure LIMS code conforms to team standards, meets the highest quality and provides opportunities for feedback to the team regarding best practice.
- Show initiative by identifying opportunities to improve the systems and designing relevant solutions.
- Provide guidance on optimal strategies and best practices for implementing changes in the LIMS, ensuring minimal disruption to workflows and maximising system efficiency.
- Ensure that modifications in the LIMS are deployed correctly and safely, guaranteeing data integrity, system stability, and adherence to established protocols.
- Collaborate closely with lab technicians, scientists, and other stakeholders to understand specific needs and deliver a system that aligns with laboratory workflows and requirements.
- Conduct thorough testing of LIMS applications in a lab environment, identifying potential gaps and ensuring seamless integration with laboratory instruments and other associated systems.
- Stay updated with the latest trends in LIMS best practices to ensure the development of cutting-edge and efficient systems.
- Maintain clear documentation for LIMS code, workflows, and data processes, ensuring data integrity, traceability, and compliance with laboratory standards.
- Prioritise data security within the LIMS, safeguarding sensitive laboratory data and ensuring compliance with industryspecific regulations and standards.
- Support the delivery of training sessions for LIMS developers, ensuring they possess a thorough understanding and proficiency in utilising and enhancing the LIMS for optimal performance and adaptability.
- Support duties as necessary to assist the Unit e.g. providing coverage and support in times of leave and absence.

Leadership

- Provide guidance and mentorship to junior team members, helping them grow their technical skills.
- Champion policies and processes and role model compliance including successful completion of compliance training.
- Actively practise and promote all required safety, ethical and 'good practice' procedures.
- Workplace compliance with Australian Standards and accept the delegated responsibility.
- Act as a role model for staff members, demonstrating professionalism and adherence to organisational values.

Finance/Administration

- Compliance with VCGS and MCRI financial management policies and procedures.
- Meet targets within required timeframes, displaying good organisational, time management and prioritisation skills.
- Excellent communication skills, both written and verbal.
- Take on projects relevant to the position.
- Ensure a strong understanding of the organisational context of the systems and operations changes and how they will impact on administrative and finance systems at VCGS and MCRI.

Innovation

- Exercise initiative and offer suggestions for improving processes.
- Involve others in the identification of change initiatives and the implementation process.
- Develop and implement innovative and new processes and solutions that will enhance the operation of VCGS and MCRI.

Contribution to VCGS

- Contribution to the culture of the group through attendance at meetings associated with the work.
- Membership of a limited number of committees relevant to the group's outputs.

Selection Criteria

Essential

- A tertiary qualification in BSc or BA/Honours/Masters in computer science, software engineering, information technology or related discipline or an appropriate level of expertise gained from a combination of experience, training or professional accreditation.
- Demonstrated experience in designing, developing, and implementing LIMS, with proficiency in relevant programming languages and frameworks.
- Proven ability to conduct detailed code reviews, ensuring adherence to best practices and team standards, with a focus on delivering high-quality solutions.
- Strong technical expertise in querying databases, database management, and system integrations specific to LIMS.
- Strong analytical and problem-solving skills, with the ability to identify system improvement opportunities and design innovative solutions that enhance efficiency.
- Experience working closely with cross-functional teams, including scientists, lab technicians, and management, to gather requirements and deliver aligned system solutions.
- Expertise in ensuring data integrity, system stability, and compliance with industry regulations, with a focus on safeguarding sensitive information within the LIMS.
- Ability to manage multiple projects effectively, meeting deadlines and prioritising tasks while maintaining attention to detail and ensuring operational continuity.
- Demonstrated capability to mentor and guide junior developers, fostering professional growth and promoting a collaborative team environment.
- In-depth understanding of relevant industry standards, including Australian regulations and good laboratory practices, with a commitment to workplace compliance.
- Proven skills in maintaining clear documentation, ensuring traceability, and delivering clear and comprehensive reports to stakeholders.
- Exceptional verbal and written communication abilities, adept at presenting complex technical concepts in a clear and understandable manner to diverse audiences.
- Experience in diagnostic and/or research lab operations.

Desirable

- Experience with LabWare LIMS configuration and writing LIMS Basic.
- Experience creating and modifying Crystal Reports.
- Experience administering Microsoft SQL Server databases.
- Experience with software version control systems such as Git.
- Experience using Python or JavaScript.

<u>Attitude</u>

- A demonstrated commitment to high levels of professionalism.
- A strong work ethic, attendance and punctuality.
- A willingness to take on ad hoc tasks as required and display flexibility of approach.
- A commitment to maintain confidentiality.
- A commitment to develop a sound knowledge of the organisation.
- A willingness to show a high motivation, in order to establish priorities, set and maintain deadlines with a
 demonstrated ability to use initiative.

Conditions of Employment

- Working with Children & National Police Clearance (if appointed) in compliance with the Victorian Governments Child Safety Standards.
- 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 Standards Policy.
- Specified positions may be subject to medical review to ensure that the inherent requirements of the role can be undertaken safely