

Position Description

Position title	Biomedical Engineer Class 1 Gait Analysis Laboratory
Department / Division	Hugh Williamson Gait Analysis Laboratory / Allied Health
Classification	Biomedical Engineer Class 1 Year 2 to Year 5 (PH2 – PH5)
Position reports to	Operational: Gait Analysis Laboratory Manager Professional: Senior Biomedical Engineer Gait Analysis Laboratory
No. of direct & indirect reports	N/A
Location	The Royal Children's Hospital, Flemington Road, Parkville
Risk category	Category A - works in a direct patient contact role and has or potential to have exposure to blood or body fluids.

The Royal Children's Hospital
The Royal Children's Hospital's (RCH) vision is <i>a world where all kids thrive</i>. RCH is located within the Melbourne Biomedical Precinct, with more than 45 world-class biomedical organisations and more than 50,000 of the brightest minds working together to make the Precinct number one in the Asia Pacific region for health, education, research, and training. Within this, RCH is also a cornerstone member of the Melbourne Children's Campus, partnering with Murdoch Children's Research Institute, The University of Melbourne Department of Paediatrics and The Royal Children's Hospital Foundation. Each organisation contributes to a paediatric academic health centre which is greater than the sum of its parts. RCH has cared for the children and young people of Victoria for more than 150 years since it was founded in 1870. A full range of paediatric and adolescent health services are provided plus tertiary and quaternary care for the most critically ill and medically complex patients in Victoria, Tasmania, southern NSW and other states around Australia and overseas. The RCH is the only provider of heart transplant services and CAR T-cell therapy for paediatrics in Australia. RCH is an effective advocate for patients and their families with a particular focus on vulnerable children and increasingly, mental health in young people. The hospital also supports many health promotion and prevention programs. The Hospital has more than 6,000 staff, a budget of \$850M, 12 wards and 350 beds. Annually, the RCH has 300,000+ Specialist Clinic appointments, 90,000+ Emergency Department presentations and 20,000 elective surgeries. We work collaboratively with hospitals to deliver the right care, in the right place, at the right time. The RCH is committed to the Child Safe Standards https://www.rch.org.au/quality/child-safety/. RCH enjoys high employee engagement and is committed to staff safety and a positive culture through enactment of our Compact. Further information on RCH is available at www.rch.org.au

ROLE CONTEXT
This role is within the Hugh Williamson Gait Analysis Laboratory which is part of the Division of Allied Health. The Gait Analysis Laboratory is responsible for the evaluation of gait function in children who have difficulty with walking. The Gait Analysis Laboratory team includes physiotherapists, biomedical engineers, orthopaedic surgeons, and an allied health assistant. We work closely with other professionals in a variety of different hospital departments including Orthopaedics, Orthotics, Physiotherapy and Rehabilitation.
ROLE PURPOSE
The Biomedical Engineer provides technical support for the delivery of clinical gait analysis services, with responsibility for the operation of 3D motion capture systems and the collection, processing and analysis of gait data for children with walking disabilities. Working closely with physiotherapists and other members of the multidisciplinary team, the role contributes to the generation of accurate, reliable and clinically meaningful information that supports patient assessment, treatment planning and ongoing care. The role is responsible for maintaining the integrity, quality and safety of gait analysis systems and data, ensuring clinical, research and operational decisions are informed by robust evidence. The Biomedical Engineer also contributes to service improvement initiatives, supports the advancement of evidence-based practice, and maintains awareness of emerging developments in gait analysis, biomechanics and healthcare technology to enhance the quality, efficiency and effectiveness of the Gait Analysis Laboratory.
KEY ACCOUNTABILITIES
Clinical Gait Analysis Deliver high-quality clinical gait analysis services in collaboration with physiotherapists, ensuring the accurate collection, processing, interpretation and reporting of biomechanical data to support clinical decision-making and family and child centred care. Clinical Support and Specialist Advice Provide specialist biomechanical expertise to clinicians and multidisciplinary team members, contributing to assessments, case discussions and interpretation of gait analysis findings. Laboratory Equipment and Technology Management Ensure gait analysis laboratory equipment, systems and technologies are maintained, monitored and operated safely, reliably and in accordance with manufacturer recommendations, Australian Standards and organisational requirements. Data Quality and Integrity Maintain the quality, accuracy and integrity of gait analysis data, laboratory records and associated databases through effective monitoring, validation and management practices. Research, Innovation and Service Improvement Contribute to audit, research, service development and innovation activities, including the ongoing enhancement of biomechanical models and laboratory systems Professional Practice and Collaboration Actively contribute to a collaborative, respectful and professional team environment, supporting service protocols, organisational objectives and multidisciplinary working relationships. Continuous Professional Development Maintain and enhance professional knowledge, technical expertise and clinical competence through ongoing learning, development and participation in professional development activities.

QUALIFICATIONS AND EXPERIENCE

Essential:

- Bachelor of Biomedical/Medical Engineering or equivalent with interest in the field of biomechanics (Honours degree or higher preferred).
- Demonstrated computer and programming skills, experience in MATLAB, python, or similar environments.
- Confidence in day-to-day management of biomedical equipment and elementary trouble shooting.

Desirable:

- Experience in operating a motion analysis system, or analysis of motion data through either project work or coursework.

Previous coursework or project work in Biomechanics.

KEY SELECTION CRITERIA

Analytical and problem-solving skills

- Demonstrate ability to investigate technical issues, analyse information, identify solutions, and apply engineering principles to support the maintenance, evaluation, of gait analysis systems.

Communication and interpersonal skills

- Well-developed written and verbal communication skills, with the ability to work effectively with clinical staff, children with disabilities and their families and multidisciplinary teams.

Commitment to learning, quality, and safety

- Demonstrate willingness to learn and develop professionally, with an understanding of quality, risk management, workplace health and safety, and the importance of delivering safe and effective healthcare technology services.

OTHER REQUIREMENTS

- Employees are required to undertake a National Criminal Record Check and a Working with Children Check prior to commencing employment
- Employees are required to maintain a valid Working with Children Check throughout their employment
- A current, full driver's licence for the State of Victoria which is appropriate for the type of vehicle being driven, and comply with any restrictions on their licence (e.g. wearing glasses) while undertaking hospital duties (If applicable)
- Employees are required to maintain compliance with RCHs "Staff Immunisation - Prevention of Vaccine Preventable Diseases" procedure.

IMPORTANT INFORMATION

All employees are required to adhere to the Royal Children's Hospital Values:

- Curious - We are creative, playful and collaborative
- Courageous - We pursue our goals with determination, ambition and confidence
- Inclusive - We embrace diversity, communicate well, build connections and celebrate our successes together
- Kind - We are generous, warm and understanding

RCH COMPACT

All new and existing employees commit to the RCH Compact to contribute to a strong and respectful culture.

- We do better work caring for children and families when we also care for each other
- I bring a positive attitude to work – I share, I laugh, I enjoy other's company
- I take responsibility for my behaviour and its impact on others
- I am curious and seek out ways to constantly learn and improve
- I celebrate the good stuff, the small stuff, the big stuff – it all matters
- I speak up when things aren't right
- I value the many different roles it takes to deliver great patient care
- I actively listen because I want to understand others and make better decisions
- I am inclusive and value diversity
- When it comes to teamwork, I don't hold back – I'm all in

QUALITY, SAFETY AND IMPROVEMENT

RCH employees have a responsibility and accountability to contribute to the organisation's commitment to Quality, Safety and Improvement by:

- Acting in accordance and complying with all relevant Safety and Quality policies and procedures
- Identifying risks, reporting and being actively involved in risk mitigation strategies
- Participating in and actively contributing to quality improvement programs
- Complying with the requirements of the National Safety & Quality Health Service Standards
- Complying with all relevant clinical and/or competency standards
- Complying with the principles of Patient and Family Centred Care that relate to this position

The RCH is committed to a diverse and inclusive workforce. We encourage applications from Aboriginal and Torres Strait Islander people, people from culturally and/or linguistically diverse backgrounds, all members of the LGBTQI community and people with disability.

Position description last updated

August 2026