

Position Description

Position title	Neurophysiology Scientist
Department / Division	Department of Neurology
Classification	Grade 3 Year 1 – Grade 3 Year 4 Grade 3 (RY9-RZ3)
Position reports to	Chief Neurophysiology Scientist
No. of direct & indirect reports	Operational: Epilepsy Program lead Professional: Chief Neurophysiology Scientist
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 *"A world where all kids thrive"*.

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

The role of a Neurophysiology Scientist in the Neurology Unit involves performing and interpreting a range of diagnostic tests to assess and monitor neurological function. Key responsibilities include conducting EEG studies and nerve conduction studies.

The scientist also participates in intraoperative electrocorticography to monitor brain activity during surgeries, especially for epilepsy and other neurological procedures. Additionally, scientists are also involved in intraoperative multimodal evoked potential monitoring testing for orthopaedics, neurosurgery and other specialities requesting neuro-intraoperative monitoring.

The role requires technical expertise in electrophysiology, data analysis, and patient care within a collaborative clinical environment.

ROLE PURPOSE

The neurophysiology department is part of the Neurology Unit. RCH neurophysiology service provides routine EEG testing, at-home video EEG monitoring, ambulatory EEG monitoring, long-term inpatient video EEG monitoring (VEM), nerve conduction studies, intraoperative multimodal evoked potential monitoring and intraoperative electrocorticography.

The neurophysiology scientist position includes the recording and analysis of EEG studies in a variety of locations within the Royal Children's Hospital, including the outpatient department, medical and surgical wards, neonatal and paediatric intensive care units. This position includes the monitoring of patients undergoing long-term video-EEG, outpatient ambulatory EEG, home-video EEG monitoring and the analysis of these studies.

Nerve conduction and EMG investigation are performed on both outpatients and inpatients by the neurologist, the role of the scientist will involve assisting the neurologist with these investigations.

A component of this role will include the scientist working in the operating theatre. Work in the operating theatre will involve the scientist performing multimodal evoked potential monitoring of spinal pathways and be involved in the analysis of these studies. In neurosurgery theatre, the scientist will be assisting the neurologist during epilepsy surgery, recording intracranial EEG.

Additionally, the neurophysiology service provides an after-hours EEG service on weekends and public holidays, and the scientist will be part of the after-hours roster.

KEY ACCOUNTABILITIES

Provision of Care

- Deliver excellent evidence-based practice neurophysiological assessments in inpatient and outpatient setting
- Perform EEG recordings in a variety of locations including, the outpatient department, medical and surgical wards, the emergency department, neonatal and paediatric intensive care units and intraoperatively during epilepsy surgery.
- Complete accurate and professional technical reports for all EEG studies, reflecting a depth of knowledge in the recognition of normal and abnormal EEG patterns, epileptic and non-epileptic behaviours in children.
- Expertly perform intracranial EEG monitoring on the neurology ward and/or provide support to the senior scientist during analysis of intracranial EEG recordings.
- Provide support to the consultant neurologist during cortical mapping in the operating theatre and on the neurology ward
- Provide support where required during vagal nerve stimulator programming, nerve conduction studies and EMG recordings.

- Expertly perform and provided comprehensive analysis of multimodal evoked potential recordings in the operating theatre and complete accurate and professional technical reports of the multimodal evoked potentials.
- Perform and provide comprehensive analysis of evoked potential recordings in the paediatric intensive care unit with accurate and professional technical report.
- Complete accurate and timely documentation of neurophysiology studies in departmental databases.
- Maintain clinical documentation, records and data as per discipline specific guidelines and RCH procedures
- Where appropriate, complete accurate and timely checking of neurophysiology reports to ensure best patient care
- Provide comprehensive review of neurophysiology referrals, ensuring timely, appropriate triaging to maximise the service coordination and collaboration.
- Participate in flexible working hours that consider the medical needs of the children.
- Participate in the after-hours EEG roster during the weekend and public holidays.

Lifelong Learning

- Actively participate in reporting sessions and clinical meetings whilst respecting the confidentiality of these meetings.
- Actively participate in continuous quality improvement of the neurophysiology recording equipment and processes
- Contribute and support members of the neurology team research or evaluation activities as required.
- Actively participate in supervision of junior scientists and support nursing staff and trainee medical staff where required
- Maintain and enhance professional knowledge and skills in all areas of neurophysiology.

Collaborative practice

- Work collaboratively with other neurophysiology scientist team members and other members of the multi-disciplinary team to provide high quality inter-disciplinary care.
- Work with initiative and autonomy while leading others in the pursuit of team goals
- Promote and develop partnerships with healthcare and community providers as well as discipline networks
- Utilise a flexible and adaptable approach to functioning in a team environment to enhance the team's performance and ensure ongoing excellence in service delivery

Communication

- Apply a highly developed verbal communication, interpersonal skills and attention to detail with the ability to interact with a variety of stakeholders
- Recognise issues that may lead to conflict, and constructively address issues as they arise
- Communicate effectively with patients and families to ensure their understanding and that their needs and views are included in plans and actions

Continuous Improvement

- Develop effective time management skills to balance clinical requirements and to contribute to continuous improvement activities
- Balance priorities between clinical load and contribution to quality improvement activities
- Contribute positively to change of processes, demonstrating flexibility and openness to change
- Develop awareness of governance requirements including safety and quality clinical practice guidelines, procedures and policies including how they apply to clinical role

- Manage local risks and escalate appropriately to line manager and relevant stakeholders

Research

- Understand the principles of evidence-based practice, and critically evaluate clinical practice in light of available evidence, experience and patient/ family values and circumstances
- Find, critically review, evaluate and interpret literature and apply to current role/service
- Support a research culture and agenda
- Contribute to research agenda through assisting research projects (e.g., contributing to participant recruitment, data entry, questionnaire/audit design as part of a research project in work area)
- Appropriately share evidence (e.g., presents at journal club, special interest groups)
- Work with team/department to identify research gaps and take opportunities to engage academic partners (e.g. contributes to ideas for honours projects)

QUALIFICATIONS AND EXPERIENCE

Essential:

- Bachelor of Science or Applied Science
- Widely experienced with sound knowledge and skills relating to an extensive range of diagnostic neurophysiology tests or procedures.
- Proven capacity for clinical leadership in a team environment and ability to work well as a senior team member
- Membership with an appropriate Professional Body (NSSA, ANTA, AAIM)

Desirable:

- Experience in a tertiary paediatric neurophysiology unit
- Post graduate qualification or undertaking a post graduate course
- Minimum 7 years' experience in health or related field

KEY SELECTION CRITERIA

- Demonstrated experience and expertise in the direct performance and interpretation of a wide range of neuro-diagnostic procedures.
- Demonstrated experience in the evaluation, operation and maintenance of complex equipment.
- Experienced and skilled with consolidated clinical assessment, formulation, and clinical reasoning abilities
- Ability to work flexibly in a fast-paced clinical environment, managing competing demands according to departmental and organisational requirements
- Capacity for effective negotiation, conflict resolution and wide consultation at all levels, to maintain and foster key interpersonal relationships.
- Demonstrated commitment to building professional skills and capacity
- Communication, supervision and education skills of a level suitable for supervision of students and junior neurophysiology scientists
- Well- developed interpersonal and communication skills, ability to build relationships with children, adolescents and their families.
- Excellent professional, interpersonal and self-reflection skills to enable effective work with people of different personalities and backgrounds

- A flexible and adaptable approach to functioning in a team environment that enhances the team's high performance.
- Demonstrated ability to manage project/research work independently

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
- 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

November 2025