



Position Description

Position Title:	Research Officer
Salary Range:	MCRI Research Salaries - Research Officer Steps 1-3
Reporting Manager:	Professor David Eisenstat/Dr Maree Faux
Direct Reports:	None
Home Group:	Neuro-oncology

Children are at the heart of everything we do.

The Murdoch Children's Research Institute (MCRI) is home to significant scientific discoveries. We believe there is an answer, a cure, or a better treatment for every childhood condition – and we are determined to find it.

We are a diverse team of world-leading researchers, doctors, engineers, and hardworking professionals in corporate and scientific services from all corners of the world with one shared goal – to transform child health worldwide.

Our strength lies in our partnership and co-location with The Royal Children's Hospital and the University of Melbourne – the Melbourne Children's Campus. This rare model amplifies opportunities to quickly translate research into clinical care.

At MCRI, you will also find our subsidiary organisation, the Victorian Clinical Genetics Services (VCGS), a specialist childhood, prenatal and adult genetics service. VCGS provides an integrated genetic consultation, counselling, testing and diagnostic support service to children, adults, families, and prospective parents.

Together, we share a powerful vision: re-imagine the future of child health.

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

This is an exciting opportunity for a talented and highly motivated researcher with a strong interest in biochemical signalling and proteomics to join the Neuro-oncology group led by Prof David Eisenstat at MCRI.

Our research aims to discover new transcriptional regulatory mechanisms and characterise these at the molecular and genomic level in normal development and in cancer. We study the distalless/DLX genes, transcription factors of the homeobox gene family, that are essential for development of interneurons that express the inhibitory neurotransmitter GABA. DLX genes are an important determinant of cell fate in the developing brain by promoting GABAergic interneuron differentiation and migration and blocking oligodendroglial progenitor cell (OPC) differentiation. OPC cells

have recently been identified as the cell of origin of Diffuse intrinsic pontine glioma (DIPG), a devastating childhood brain tumour.

Our research combines advanced genomics and proteomic technologies and bioinformatic analysis with cell biology, iPSC/3D brain organoid culture systems and biochemical signalling. Thanks to the Live for Lily foundation, we have the opportunity to study the biochemical signalling mechanisms that regulate the distal-less (DLX) transcription factor in brain development.

The overall goal of this ECR research project is to discover the mechanisms that activate (“turn on”) or block (“shut off”) DLX2 by characterising key amino acid residues required for DLX2 function in brain development, in addition to identifying the critical signalling pathways in brain development and DIPG tumours.

Applicants should possess a PhD in a relevant discipline and have a strong publication track record. The position requires experimental expertise in protein biochemistry and proteomics. The position will suit enthusiastic and motivated individuals with an independent work ethic and willingness to work in a collaborative environment. The individual should have excellent communication and interpersonal skills and include the ability to present research at conferences and write for scientific publications.

Key Accountabilities

- Developing detailed and thorough knowledge of own and related subject areas, including the latest scientific research
 - Actively searches for relevant new techniques and builds expertise in specific research field
 - Planning and carries out research under limited supervision which may involve experimental design, as sole researcher or as part of a multidisciplinary collaboration
 - Conducts ethical research at the highest level of integrity and in line with the Australian Code for Responsible Conduct of Research and MCRI policies
 - Undertaking high calibre competitive research
 - Has successfully written and continues to submit grant and ethics approval applications
 - Attracting external competitive funding and has a record of high-quality publications, research impact and peer recognition
 - Working to improve skill base in research productivity and methodology
 - Follows standard operating procedures, study protocols and study guidelines
 - Conducts continuous maintenance of neat and orderly records, log books and data storage
 - Identifies ways to improve data collection/quality utilised by the team/group or research
 - Fosters relationships with key internal and external stakeholders
 - Contributes to the supervision of students and to the skill development of peers
 - Is engaged in the campus culture including professional activities, membership of campus committees and contributing to/attending internal/external campus conferences and seminars
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What we need from you

- Relevant PhD/Doctoral qualification
- Demonstrated capacity to work independently and collaboratively in a team environment
- Excellent time management, organisational and analytical problem-solving skills
- Demonstrated excellent verbal and written communication skills
- Demonstrated relevant computer skills and an understanding of a range of research methodologies and their application in empirical research
- Experience in knowledge sharing, development, mentoring and support of employees and student
- Excellent attention to detail

What skills you will bring to us

- An excellent academic record and achievements
 - Demonstrated ability and potential for excellence and productivity in research
 - Experience in protein biochemistry and proteomics
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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 MCRI 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

As MCRI evolves to meet its changing strategic and 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.