



## Position Description

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<b>Position Title:</b>	Research Officer
<b>Salary Range:</b>	MCRI Research Salaries- Research Officer Steps 1-3
<b>Reporting Manager:</b>	Andrew Elefanty & Elizabeth Ng
<b>Direct Reports:</b>	None
<b>Home Group:</b>	Blood Development

### Who are we?

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're 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'll 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.

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### Position Overview

The Research Officer will be working as part of a team on a project whose aim is the characterisation of in vitro blood cell generation from in vitro differentiated human pluripotent stem cells, and the generation of repopulating hematopoietic stem cells. This is a challenging project that requires the successful development of both an in vitro differentiation protocol to generate engrafting haematopoietic cells, and also upon a robust transplantation model in which the capacity of the cells can be assayed. Our group has considerable experience in both these areas, with the identification of differentiation factors that pattern pluripotent stem cells to phenotype similar to the first human HSCs emerging from the aortic wall during embryonic development, and the establishment of an immunocompromised mouse model that can read out engrafting human haematopoietic cells.

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The Research Officer will immunophenotype and functionally evaluate subsets of haematopoietically differentiated hPSCs, and use this data to inform modifications to the differentiation protocol and evaluate growth factor combinations and stromal layers for maintenance and expansion of putative haematopoietic stem cells.

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### **Key Accountabilities**

- In vitro culture, haematopoietic differentiation and analysis of human pluripotent stem cells.
  - Conducts ethical research at the highest level of integrity and in line with the Australian Code for Responsible Conduct of Research and MCRI policies.
  - Undertakes high calibre competitive research.
  - Has successfully written and continues to submit grant and ethics approval applications.
  - Attracts external competitive funding and has a record of high quality publications, research impact and peer recognition.
  - Works 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.
  - Understands and follows field work guidelines GCP/ICH.
  - 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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### **Selection Criteria**

- Relevant PhD/Doctoral qualification.
  - 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 culture and haematopoietic differentiation of pluripotent stem cells.
  - Experience in analysis of haematopoietic cells using a range of techniques including flow cytometry and clonogenic assays.
  - Preparation of samples for transcriptomic analysis including bulk and single cell RNA seq data.
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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.
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### **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.
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*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.*