



Research Technician

Position title: Research Technician

Classification: HEW 5.1 – 5.8

Division/Department: Inflammation Division

Work location: Parkville

Position reference: WEHI/MKID

Employment type: Full Time, contract

Remuneration range:

Further information: A Prof Seth Masters - masters@wehi.edu.au

Position reports to: A Prof Seth Masters

Closing date: 24 November 2017

Positions reporting to this one: Nil

Position overview

The role of Research Assistant is to contribute to the research effort and further develop their research expertise through the pursuit of defined projects within the research program to which they are appointed. Research Assistants are expected to be self-motivated and to operate under the general direction of the Laboratory Head.

The Masters' laboratory studies inflammation generated by the innate immune system. This can happen in many different contexts, including during infection, when cells die, or when genetic mutations activate innate immune pathways. Inflammation also contributes to the development of many chronic inflammatory diseases including rheumatoid arthritis, Crohn's disease and type 2 diabetes.

A particular focus for the Masters' laboratory is a protein complex known as the inflammasome, and family of innate immune receptors that make this complex, known as Nod-like receptors (NLRs). Our research has identified substances that activate the inflammasome, and mechanisms by which this inflammation causes disease. Activation of the inflammasome also triggers an inflammatory form of cell death known as pyroptosis. This project will first develop, then apply, CRISPR screening methodologies to study novel mechanisms by which the inflammasome is activated in human cells.

Organisational environment

The Walter and Eliza Hall Institute of Medical Research

The institute, established in 1915, currently houses 15 research divisions, containing around 81 laboratories and around 1,000 staff and students, with an annual budget of approximately \$100 million (AUD).

The institute's research focuses on cancer (breast, cancer, leukaemia, lymphoma, multiple myeloma, lung cancer, colon cancer, and ovarian cancer), infectious disease (malaria, tuberculosis, HIV, and hepatitis) and chronic inflammatory and immune diseases (coeliac disease, type 1 diabetes, rheumatoid arthritis and transplantation) and continues a strong tradition of collaboration and interdisciplinary programs. The institute has a strong national and international reputation for performing highly influential research and for translation that leads to long term improvements in disease, diagnosis and treatment.

The institute's main laboratories are located within the Parkville precinct, a vibrant hub for life science research, education and healthcare provision. In addition, the Walter and Eliza Hall Institute Biotechnology Centre is located 30 minutes from Parkville at La Trobe University's R&D Park in Bundoora. The Biotechnology Centre features facilities for high-throughput chemical screening, medicinal chemistry, antibody production and malaria containment. The centre also functions as an incubator for the institute's biotechnology companies.

Organisational objectives

Discovery and translation

To make discoveries that shape contemporary scientific thinking, increase understanding and improve prevention, diagnosis and treatment of cancer, immune disorders and infectious diseases.

Education and training

To educate and train world class scientists and to attract, develop and retain the best and brightest workforce.

Organisational culture

To provide a vibrant and inspiring organisational culture that encourages, promotes and rewards excellence, collaboration, innovation, creativity and respect.

Engagement

To engage with our stakeholders to improve outcomes, building support and secure resources for medical research.

Sustainability

To build infrastructure, professional services and funding that sustains our research and maximises the time our scientists can spend making discoveries.

Organisational values

- Pursuit of excellence
- Integrity and mutual respect
- Collaboration and teamwork
- Creativity
- Contribution to society
- Accountability

Key responsibilities

Activities	Performance Indicators
Innovation and Planning	
<ul style="list-style-type: none"> • Work within defined projects as directed by the Laboratory Head • Undertake experimental design • Recommend new approaches and techniques for assigned projects • Adapt to experimental progress 	<ul style="list-style-type: none"> • New approaches to design of experiment are introduced to projects and the laboratory • Appropriate new techniques are introduced • Initiative taken in identifying and recommending effective modifications to planned work • Effective adaptability changing situations shown
Knowledge and Skill Acquisition	
<ul style="list-style-type: none"> • Undertake literature search on assigned projects • Identify skill needs and how to acquire them • Attend meetings associated with the research work of the Laboratory, Division, and Institute 	<ul style="list-style-type: none"> • In-depth knowledge and understanding of allocated projects gained • All skills relevant to allocated projects are kept up-to-date or acquired and developed • Demonstrated understanding of the broader field of research •
Research Performance	
<ul style="list-style-type: none"> • Take initiative and independently solve problems in progressing assigned projects • Make intellectual contributions in generating, analysing and interpreting research data 	<ul style="list-style-type: none"> • Problem solving skills applied independently • Observations recorded and documented diligently and objectively • Experimental approach effectively defended • Authorship on papers produced by the laboratory

<ul style="list-style-type: none"> Contribute to the production of research papers for publication 	
Research Methods and Techniques	
<ul style="list-style-type: none"> Conduct advanced research procedures Operate advanced laboratory and technical equipment 	<ul style="list-style-type: none"> A wide range of methods and techniques successfully used Protocols modified according to conditions and experimental requirements
Research Communication	
<ul style="list-style-type: none"> Give research reports at relevant internal meetings Contribute to the production of conference and seminar materials 	<ul style="list-style-type: none"> Sound writing skills demonstrated Effective oral presentations given
Collaboration	
<ul style="list-style-type: none"> Contribute to scientific discussion within the laboratory Work in cooperation with laboratory members and support services to achieve project goals 	<ul style="list-style-type: none"> Ideas contributed to progress of other projects in the laboratory
Supervision	
Funding	
Contribution to Broader Goals of the Institute	
<ul style="list-style-type: none"> Actively participate in professional activities Contribute to community engagement with research 	<ul style="list-style-type: none"> Contributions to the advancement of the research field Contributions to institute mission and key objective of engagement

Key selection criteria

Knowledge and skills

- A relevant Bachelor Degree (with Honours) qualification or equivalent
- An good academic record and achievements
- Demonstrated ability and potential for excellence and productivity in research
- Research experience that has resulted in publications, conference papers or reports
- Experience with CRISPR and molecular biology desirable but not necessary
- Proven interpersonal and collaborative skills in achieving research outcomes

Occupational Health and Safety

- Comply with institute Health and Safety Policies and Procedures.
- Take reasonable care of own safety and the safety of others around.
- Use Personal Protective Equipment (PPE) and safety devices appropriately.
- Report all hazards, incidents and injuries.
- Attend training programs as documented in individual training needs matrices.

How and where to apply

Applicants are encouraged to submit a cover letter, current resume and three referees to jobapplications@wehi.edu.au quoting the position number **WEHI/MKID** in the subject line.

Please address each of the key selection criteria separately in a written document.

Diversity

The Walter and Eliza Hall Institute is an Equal Opportunity Employer.

The institute encourages and welcomes interest from Aboriginal and Torres Strait Islanders for roles within the institute.

Privacy notification

The collection and handling of declarations and personal information relevant to your employment will be consistent with the requirements of the *Privacy Act 1988*.