



Senior Research Officer

Position title: Senior Research Officer	Classification: dependent upon experience
Division/Department: Population Health & Immunity Division	Work location: Parkville
Position reference: WEHI/CAIM	Employment type: Contract
Remuneration range:	Further information:
Position reports to: Laboratory Head	Closing date: 23 October 2016
Positions reporting to this one:	

Position overview

The role of Senior Research Officer is to carry out innovative research in their field of expertise within the research program to which they are appointed. Senior Research Officers are expected to be self-motivated and to operate with minimal supervision under the general direction of the Laboratory Head and provide increasing input on scientific direction of their projects.

Project Details:

Upon entry into liver-stages, *P. vivax* sporozoites take two distinct developmental pathways with some directly developing in tissue schizonts that cause blood infections within 10-12 days, while others become 'dormant' hypnozoites, that remain developmentally arrested before reactivating weeks or months later to cause relapsing blood-stage infections. While the processes that govern this developmental switch are unknown, it is likely that the switch is pre-determined in sporozoites. We have started to analyse sporozoite transcriptional, translational and epigenetic patterns to identify potential markers for the developmental fate of sporozoites. Once sporozoites enter a human hepatocyte, they need to keep their cell alive long enough to complete their development. For hypnozoites, this means preventing host cell apoptosis for up to 2-3 years. In our preliminary studies, we have identified a number of highly expressed sporozoite proteins that may be interfering with the host apoptotic system. We now want to extend these studies in two directions: i) single cell transcriptomic analyses of *P. vivax* sporozoites and ii) screening sporozoite mRNA for proteins that interfere with apoptosis in human hepatocytes.

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 the research plans as directed by the Laboratory Head • Conceive and design research projects within the research program 	<ul style="list-style-type: none"> • New approaches to experimental design are introduced to projects and the laboratory • Alternative courses proposed and new approaches advanced
Knowledge and Skill Acquisition	
<ul style="list-style-type: none"> • Maintain broader professional reading • Develop grant and submission writing skills • 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"> • Scientific knowledge or methods outside research area acquired • Research project management skills demonstrated
Research Performance	
<ul style="list-style-type: none"> • Give research reports at relevant internal meetings • Contribute to the production of and conference and seminar materials • Draft own research findings for publication of papers 	<ul style="list-style-type: none"> • Demonstrated capacity to conceive, design, execute and publish high quality scientific research • Substantial contribution to drafting of papers for publication • Authorship of research publications in high ranked journals • Evidence of growing reputation
Research Methods and Techniques	
<ul style="list-style-type: none"> • Develop and modify methods • Give research reports at relevant internal and external meetings • Contribute to the production of and conference and seminar materials 	<ul style="list-style-type: none"> • Methods and techniques of use to other projects introduced • Significant parts of publications drafted • Demonstrated capacity to publish high quality

Position description – Senior Research Officer

<ul style="list-style-type: none"> • Draft own research findings for publication of papers 	<p>scientific research</p>
<p>Research Communication</p>	
<ul style="list-style-type: none"> • Give research reports at relevant internal and external meetings • Contribute to the production of and conference and seminar materials • Draft own research findings for publication of papers 	<ul style="list-style-type: none"> • Methods and techniques of use to other projects introduced • Significant parts of publications drafted • Demonstrated capacity to publish high quality scientific research
<p>Collaboration</p>	
<ul style="list-style-type: none"> • Work in cooperation with members of laboratory and support services to achieve project goals • Develop connections with other institute researchers 	<ul style="list-style-type: none"> • Influential contribution to collaborations • Coordinated input of ideas to projects
<p>Supervision</p>	
<ul style="list-style-type: none"> • Provide guidance and day-to-day supervision of support staff • Contribute to research training and provide advice to research students 	<ul style="list-style-type: none"> • Effective delegation of work to technical staff • Contribution to evaluation of support staff • Co-supervision and guidance of research students
<p>Funding</p>	
<ul style="list-style-type: none"> • Ensure salary support funding opportunities are taken through fellowships and projects applied for • Work with the Laboratory Head to ensure research funding support 	<ul style="list-style-type: none"> • Salary support funding obtained • Funding support attracted for work on agreed projects • Laboratory Head support for research grant applications • Successful research grant applications written
<p>Contribution to Broader Goals of the Institute</p>	
<ul style="list-style-type: none"> • Participate in written assessment activities • Contribute to journal peer review • Independently contribute to the academic life of the institute • Independently contribute to engagement with the community, education, business development, or clinical translation 	<ul style="list-style-type: none"> • Contributions to the advancement of the research field • Contributions to institute mission and key objective of engagement • Achievement of expectations of funding bodies

Key selection criteria

Requirements

- PhD in molecular parasitology or systems biology
- Experience with DNaseq, RNAseq and/or ChIPseq
- Basic knowledge of bioinformatics analyses of DNaseq, RNAseq and/or ChIPseq data
- High degree of self-motivation and ability to work independently
- Willingness to work in international collaborative environment (incl. spending time in malaria endemic countries and/or overseas laboratory)

Desirables

- Previous work in malaria or other tropical infectious disease
- Experience with single cell methodologies
- Experience with high-throughput screening

Knowledge and skills

- A relevant doctoral qualification, or equivalent, and appropriate research experience
- Superior performance within period of Research Officer appointment or equivalent
- Strong evidence of original intellectual input into research
- Demonstrated ability to make high quality scientific contributions including publications and presentations
- Demonstrated ability and likelihood of continued excellence and productivity in research
- Evidence of contribution to the stimulation of student learning and interest in the discipline
- Broad knowledge of research discipline

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.

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.

Position description – Senior Research Officer

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*.