Department of Microbiology and Immunology
School of Biomedical Sciences
Faculty of Medicine, Dentistry and Health Sciences

Research Officer

POSITION NO 0051042
CLASSIFICATION Level A
SALARY $80,258 - $108,906 p.a. (pro rata for part time)
SUPERANNUATION Employer contribution of 17%
WORKING HOURS Full-time
BASIS OF EMPLOYMENT Fixed term for 1 year
Fixed term reason: Externally funded
OTHER BENEFITS http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY Online applications are preferred. Go to http://about.unimelb.edu.au/careers, under ‘Job Search and Job Alerts’, select the relevant option (‘Current Staff’ or ‘Prospective Staff’), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY Dr Sidonia Eckle
Email seckle@unimelb.edu.au
Please do not send your application to this contact

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers
Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students we are privileged to work and learn every day with Indigenous colleagues and partners.

Position Summary

The University of Melbourne seeks a Research Officer to join Dr Sidonia Eckle’s Group as part of the MAIT cell programme within the Department of Microbiology and Immunology, located at the Doherty Institute. At the cross-roads of cellular immunology and biochemistry, the Eckle Group focuses on understanding the role unconventional, innate-like T cells, with major focus on Mucosal-associated invariant T (MAIT) cells, in infectious diseases and allergies with the overall vision to develop MAIT cell-based therapies and vaccines.

The Research Officer is responsible for conducting independent and collaborative research on investigating the role of MAIT cells in infectious diseases and the mechanisms of MAIT cell-mediated immunity with a focus on the interaction between T cell receptor (TCR) and antigen-MR1. In collaboration with Dr Catarina Almeida (Godfrey lab), some research also involves NKT cells and other CD1-lipid reactive T cells.

The position is initially for 12 months, with the opportunity for an ongoing role anticipated.

The successful candidate will be enthusiastic with a strong interest in immunology and biochemistry, and in particular in unconventional T cells. They must have exceptional organisational skills, possess the ability to work within a team atmosphere and be a self-starter.

The School of Biomedical Sciences and its Departments foster a values-based culture of innovation and creativity to enhance the research performance of the University and to achieve excellence in teaching and research outcomes.

We invest in developing the careers and wellbeing of our students and staff and expect all to live by our Faculty Values of:

- Collaboration and teamwork
- Compassion
- Respect
- Integrity
- Accountability
1. **Key Responsibilities**

1.1 **RESEARCH AND RESEARCH TRAINING**

- Independently, or under limited supervision, plan and carry out experiments ethically, accurately, reproducibly, and productively, focused on completion of research project aims to meet agreed timelines and milestones.
- Maintain accurate and detailed records of all experiments conducted.
- Be responsible for qualitative and statistical analysis of research data and to communicate this information to the Chief Investigators and collaborators.
- Assist other researchers in carrying out experiments in order to work as a team and further the laboratory’s research output.
- Consult scientific literature.
- Perform other duties as requested by the appointee’s immediate supervisor consistent with the classification of this position.
- Contribute towards publications arising from scholarships and research, such as publication in peer-reviewed journals.
- Contribute to the preparation of competitive grant applications related to the appointee’s research program.

1.2 **TEACHING AND LEARNING**

- Contribute to the day-to-day supervision, training and mentorship of Honours students, graduate researchers and staff members.

1.3 **ENGAGEMENT**

- Attend and contribute actively to lab meetings by presenting data and engaging in discussions.
- Attend and actively participate in departmental seminars, meetings and/or committees.
- Evaluate and report results to the Principal Investigators and collaborators.
- Present research findings at local, national and international conferences when opportunities arise.

1.4 **LEADERSHIP AND SERVICE**

- Assist with administrative duties such as maintaining laboratory databases, records of training, SOPs, laboratory inventories, ethics applications and reporting.
- Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4 and take responsibility for routine reviews of laboratory practice.
- Contribute to the day-to-day organisation of the laboratory, including ordering reagents, maintenance of equipment, maintaining stocks of reagents.
- Share the duties for wash-up and cleanliness in a roster system.
- Perform other duties as requested by the appointee’s immediate supervisor consistent with responsibilities of the funding bodies and the Department.
2. Selection Criteria

2.1 ESSENTIAL

- PhD or equivalent with a major in Immunology or a related discipline.
- Expert knowledge of general concepts in immunology, especially related to antigen presentation and antigen recognition.
- Comfortable with the use of experimental mice in medical research.
- Comfortable with handling human blood and tissue samples.
- Expertise in flow cytometry, mammalian cell culture, molecular biology, and in vitro immunological cell-based assays, such as proliferation assays and cytokine assays.
- Experience with handling and experimentation on mice.
- Experience in data analysis, including FlowJo and GraphPad Prism.
- Ability to independently or under limited supervision design, perform and analyse experiments in a timely manner, focused on completion of research project aims with a drive for quality and excellence.
- Demonstrated interest and capacity to learn the required skills and to develop expertise in order to undertake tasks with increased autonomy.
- Demonstrated ability to take initiative, solve problems and actively and creatively look for room for improvement.
- Demonstrated ability to develop new experimental protocols.
- Strong organisation skills and accurate recording, analysis and interpretation of data generated from research undertaken.
- Demonstrated ability to work with senior researchers and as a member of a research team, and to interact in a courteous and effective manner with academic, administrative and support staff.
- Demonstrated ability to undertake administrative duties relating to the management of both the research laboratory and department.
- Demonstrated computer skills, including use of spreadsheets and word processing (Experience in the use of Microsoft Word, Excel, PowerPoint).
- Excellent verbal and written communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscript submissions.
- Ability to adhere to the principles of ‘good laboratory practices’.

2.2 DESIRABLE

- Background in unconventional T cells and/or T cell responses to infections and/or allergies.
- Experience in lymphocyte preparation from human and mouse blood and tissues.
- Experience in generating gene knock-out and gene overexpressing reporter cell lines using CRISPR and retroviral transductions.
- Experience with PCR-based techniques (qPCR, RT-PCR).
- Experience in fluorescence activated cell sorting (FACS).
- Experience in protein biochemistry (expression and purification of recombinant proteins, ELISA, SPR).
- Experience in mass spectrometry.
Sound knowledge of biosafety issues in handling infectious agents.
Experience in supervision, training and mentorship of students.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne Strategy that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people’s age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:
http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 DEPARTMENT OF MICROBIOLOGY & IMMUNOLOGY
https://biomedicalsciences.unimelb.edu.au/departments/microbiology-Immunology

The Department of Microbiology & Immunology is one of the departments within the School of Biomedical Sciences in the Faculty of Medicine, Dentistry and Health Sciences.

5.2 THE PETER DOHERTY INSTITUTE FOR INFECTION AND IMMUNITY
www.doherty.edu.au
The Doherty Institute is a world-class institute combining research in infectious disease and immunity with teaching excellence, reference laboratory diagnostic services, epidemiology and clinical services. It is a joint venture between the University of Melbourne and Melbourne Health.

A new, purpose-built building for the Doherty Institute was completed in early 2014. The members of the Doherty include the Department of Microbiology and Immunology and the Microbiological Diagnostic Unit Public Health Laboratory of the University of Melbourne, the Victorian Nosocomial Infection Surveillance System, The Victorian Infectious Diseases Reference Laboratory, The Victorian Infectious Diseases Service, and The World Health Organisation Collaborating Centre for Reference and Research on Influenza.

5.3 SCHOOL OF BIOMEDICAL SCIENCES

www.biomedicalsciences.unimelb.edu.au

The School of Biomedical Sciences is one of the most prominent and diverse Schools in the Faculty of Medicine, Dentistry & Health Sciences and is comprised of three Departments - Anatomy and Physiology, Biochemistry and Pharmacology, and Microbiology and Immunology.

The School is situated on the University’s Parkville Campus and is part of the largest biomedical precinct in the southern hemisphere, providing access to world class research facilities for staff and students.

The School fosters a values-based culture of innovation and creativity to achieve research and teaching excellence.

5.4 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

www.mdhs.unimelb.edu.au

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne’s largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty’s annual revenue is $628m with approximately 55% of this income related to research activities.

The Faculty has a student teaching load in excess of 8,500 equivalent full-time students including more than 1,300 research higher degree students. The Faculty has approximately 2,195 staff comprising 642 professional staff and 1,553 research and teaching staff.

The Faculty has appointed Australia’s first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty’s Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty’s RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

5.5 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is
recognised as the hub of Australia’s premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

5.6 ADVANCING MELBOURNE

The University’s strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University’s commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

▷ We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.

▷ We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

▷ We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.

▷ We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne’s academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

5.7 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at http://www.unimelb.edu.au/governance