



## POSITION DESCRIPTION

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

### Research Assistant

<b>POSITION NO</b>	0043834
<b>CLASSIFICATION</b>	Research Assistant (Level A)
<b>SALARY</b>	\$69,148 - \$93,830 p.a.
<b>SUPERANNUATION</b>	Employer contribution of 9.5%
<b>WORKING HOURS</b>	Full-time
<b>BASIS OF EMPLOYMENT</b>	Fixed-term until 31 August 2018 Fixed term contract type: Externally funded contract employment
<b>OTHER BENEFITS</b>	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
<b>HOW TO APPLY</b>	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
<b>CONTACT FOR ENQUIRIES ONLY</b>	Professor Kanta Subbarao Tel +61 3 9342 9310 Email <a href="mailto:kanta.subbarao@influenzacentre.org">kanta.subbarao@influenzacentre.org</a> <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our website:  
[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)

### Position Summary

The Research Assistant will conduct laboratory research in the Department of Microbiology and Immunology at the Peter Doherty Institute for Infection and Immunity under the supervision of Professor Kanta Subbarao (Director, WHO Collaborating Centre for Reference and Research on Influenza, also at the Doherty Institute) and in collaboration with Professor Lorena Brown.

The research focuses on influenza virus biology and pathogenesis and immune responses to infection and vaccination. Studies involve preclinical and clinical evaluations of vaccines, basic questions of molecular virology, viral antigenicity, genetic and antigenic relatedness among influenza viruses, host response to influenza virus infection and viral pathogenesis. Technical work involves cell culture, virology, animal studies, molecular biology, immunology and basic computer skills.

With the support and guidance from senior academic staff, the successful candidate will be expected to design and perform experiments as well as analyse data. The Research Assistant will also be expected to undertake appropriate laboratory and departmental administrative duties.

## **1. Key Responsibilities**

### **1.1 RESEARCH AND RESEARCH TRAINING**

- ▶ Contribute to the design, development and execution of the laboratory's program of research on influenza
- ▶ Perform relevant laboratory techniques including cell culture, virus isolation, plasmid-based reverse genetics, site-specific mutagenesis, animal studies, RT-PCR and sequencing, serologic techniques including haemagglutination inhibition, virus neutralisation and ELISA, ELISPOT assays and flow cytometry
- ▶ Independently plan and carry out experiments focused on completion of research project aims to meet agreed timelines and milestones
- ▶ Show ability to perform experimental techniques accurately and reproducibly
- ▶ Maintain accurate and detailed records of all experiments conducted
- ▶ Assist other researchers in carrying out experiments in order to work as a team and further the Department's research output

### **1.2 TEACHING AND LEARNING**

- ▶ Contribute to teaching, training, scientific mentoring and supervision of students and new laboratory staff as required

### **1.3 ENGAGEMENT**

- ▶ Attend and contribute to lab meetings
- ▶ Evaluate and report results to the Principal Investigators and collaborators
- ▶ Contribute the preparation of manuscripts for publication in peer-reviewed journals
- ▶ Attend and actively participate in departmental seminars, meetings and/or committees

### **1.4 SERVICE AND LEADERSHIP**

- ▶ Assist with administrative duties such as maintaining laboratory databases, records of training, SOPs and inventories, submission of animal ethics and OGTR approvals
- ▶ Take a leading role in maintaining lab wash-up and cleanliness
- ▶ Contribute to the day to day organisation of the laboratory including ordering reagents, maintenance of equipment, maintain stocks of reagents
- ▶ Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5

## ***2. Selection Criteria***

### **2.1 ESSENTIAL**

- ▶ Completion of a BSc (Honours) degree in virology, immunology or microbiology
- ▶ Proven ability to work with senior researchers and help design, perform and analyse experiments in a timely manner, involving both molecular and cellular aspects of immunity
- ▶ Demonstrated ability to work as a member of a research team and interact in a courteous and effective manner with academic, administrative and support staff
- ▶ Strong organisational skills and initiative in problem solving
- ▶ Demonstrated ability to undertake administrative duties relating to the management of the laboratory appropriate to the level of appointment
- ▶ Ability to adhere to the principles of good laboratory practice
- ▶ Demonstrated capacity to develop expertise in research to undertake tasks with increased autonomy
- ▶ Demonstrated ability to learn the required technical skills/aseptic techniques
- ▶ Excellent oral and written communication skills

### **2.2 DESIRABLE**

- ▶ Demonstrated ability to be an integral part of a research team
- ▶ Experience handling laboratory mice and ferrets including immunisation and infection
- ▶ Sound knowledge of biosafety issues in handling infectious agents
- ▶ Experience with molecular biology and cell culture techniques such as RT-PCR, qPCR, DNA sequencing, flow cytometric analysis, maintenance of cell lines
- ▶ Experience with Microsoft Word, Excel, PowerPoint

### **2.3 SPECIAL REQUIREMENTS**

- ▶ N/A

## ***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 University's People Strategy 2015-2020 and policies 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 strive to service for excellence and reach the targets of Growing Esteem.

## ***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**

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. Further information is available at <http://www.microbiol.unimelb.edu.au/> and <http://bsac.unimelb.edu.au/>.

### **5.2 THE PETER DOHERTY INSTITUTE FOR INFECTION AND IMMUNITY**

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.

Further information about the Doherty Institute is available at:  
<http://www.doherty.unimelb.edu.au>

### 5.3 SCHOOL OF BIOMEDICAL SCIENCES

[www.biomedicalsciences.unimelb.edu.au](http://www.biomedicalsciences.unimelb.edu.au)

The School of Biomedical Sciences is part of the Faculty of Medicine Dentistry and Health Sciences. It was established on 1 January 2015 and comprises the Departments of Anatomy and Neuroscience, Biochemistry and Molecular Biology, Microbiology and Immunology, Pathology, Pharmacology and Therapeutics, and Physiology.

Situated on the University's Parkville Campus in a rich medical practice and research precinct the School has much to offer research and teaching staff alike.

### 5.4 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

[www.mdhs.unimelb.edu.au](http://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 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.

<http://research.unimelb.edu.au/our-research/research-at-melbourne>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

- ▶ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.
- ▶ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.
- ▶ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

## 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>