



POSITION DESCRIPTION

Department of Medicine – Austin Health
Faculty of Medicine, Dentistry and Health Sciences

Casual Research Assistant – Liver Group

POSITION NO	0042664
CLASSIFICATION	Research Assistant (RA2) (Casual)
SALARY	Casual \$43.26 per hour
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Casual (0.6 FTE)
EMPLOYMENT TYPE	Casual/fixed-term position available for six months
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	Vacant
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Dr Chandana Herath Ph 03 9496 2549 Email: cherath@unimelb.edu.au <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our websites:

about.unimelb.edu.au/careers

Position Summary

The Liver Research Group of the Department of Medicine of The University of Melbourne at Austin Health is located at Austin Hospital Heidelberg Campus. The Liver Research Group at Austin Health (AH) is an expanding group conducting some exciting studies aimed at understanding the role of the renin angiotensin system (RAS) in the development of liver fibrosis and cirrhosis. The expected outcome of these studies is improved treatments for the prevention of hepatic cirrhosis. We currently have a casual position for a motivated and dedicated Research Assistant on a part time basis for 6 months. The Research Assistant will primarily be involved in providing support to the research undertaken by the Liver group of the Department of Medicine, AH. Current and proposed projects involve;

- i. Experimental gene therapy studies using viral vectors in mice,
- ii. Characterization and intervention of hepatic fibrosis in Mas receptor gene knockout mice,
- iii. Hemodynamic effects of the components of the RAS axis,
- iv. Characterization of the contribution of advanced glycation end products (AGEs) to progression of liver disease, and
- v. The role of AGEs and their receptor RAGE in the progression of liver inflammation and fibrosis in rodents with non-alcoholic steatohepatitis (NASH).

The Research Assistant position provides general research support to academics in the group, and also supports research higher degree students (PhD) as necessary. The Research Assistant will be required to use a number of experimental techniques, including RT-PCR, western blot, immunohistochemistry.

The incumbent must keep adequate records of all on-going and completed works as well as being able to present this work when required. The position is available on casual of approx. 21.75 hours per week for six months.

The Research Assistant will report to Dr Chandana Herath and Professor Peter Angus as required.

1. Selection Criteria

1.1 ESSENTIAL

- ▶ An Honours Degree or equivalent in the biological sciences and research experience in a relevant discipline.
- ▶ Experience in laboratory techniques such as western blot, gene expression analysis using real time QPCR, immunohistochemistry and cell culture work.
- ▶ Experience and/or willing to work with laboratory animals.
- ▶ Good communication skills.
- ▶ Demonstrated ability to work independently with minimal supervision as well as part of a team.
- ▶ Demonstrated ability to collect and collate information accurately and reliably.
- ▶ Good organisational skills.

1.2 DESIRABLE

- ▶ Knowledge of liver pathophysiology with special reference to liver cirrhosis and RAS.

- ▶ Previous experience in molecular biological techniques such as bacterial cloning, plasmid DNA and viral vector preparation.
- ▶ Experience in immunofluorescence technique.

2. Special requirements

None

3. Key Responsibilities

RESEARCH AND RESEARCH TRAINING

Contribute to the research effort of the liver research group by

- Undertaking key techniques in the laboratory related to the study of liver disease in small animals, including assisting researchers/higher degree students during surgical procedures and regular monitoring and record keeping of the animals.
- Perform routine histological/immunohistochemical staining procedures as required.
- Perform biochemical analyses including OH-proline assay, and protein and gene quantitation analyses such as western immunoblotting and QPCR, respectively, and perform other assays as directed by Dr Chandana Herath and Dr Kai Mak.
- Help PhD students with their experimental work using rats and mice.

Maintaining accurate documentation and record keeping of the work and laboratory consumable/reagents lists, helping to prepare ordering documents, keeping the laboratory tidy and clean and participating in departmental seminars.

Support high degree students (PhD) in experimental work and help them developing methods/protocols for sample analyses.

Participating in weekly group meetings/discussions.

General direction is provided by Dr Herath. The Research Assistant will be expected to perform these tasks with broad supervision after appropriate training, referring more complex problems to supervisor.

Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

4. Other information

4.1 DEPARTMENT OF MEDICINE

<http://www.austinmedicine.unimelb.edu.au/>

The Department of Medicine, Austin Health is a large department in the School of Medicine and is committed to high standards of teaching, research and clinical care. The Department has major programs in basic and applied research, has clinical responsibilities at Austin Hospital and Heidelberg Repatriation and contributes significantly to the undergraduate teaching program for medical students. The research base is broad with significant funding from NH&MRC and other competitive grant schemes. There are 70 academic, technical

and administrative staff, and 55 students who are enrolled to pursue higher degrees from BSc (Hons), MSc, PhD and MD.

4.2 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

www.mdhs.unimelb.edu.au

The Faculty of Medicine, Dentistry and Health Sciences (MDHS) plays a vital role in the delivery of the University of Melbourne's Strategic Plan 2015-2020: Growing Esteem by providing current and future generations with education and research equal to the best in the world. It is Australia's largest and leading biomedical research faculty. It employs more than 1,700 members of staff, has more than 8,000 students, and total revenue of \$607 million for 2015. Reflecting the complexity of today's global health landscape, the Faculty is made up of six different Schools and four Strategic Research Initiatives, and draws together all areas of human health, ranging from the most basic to the most applied areas of research. The Faculty contributes close to 50 per cent of research conducted at the University.

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.

4.3 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at <http://futurestudents.unimelb.edu.au/explore/why-choose-melbourne/reputation-rankings>.

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus 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.

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>.

4.4 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/index.html#home>

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.

4.5 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

4.6 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/unisec/governance.html>.

5. 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.