



POSITION DESCRIPTION

Department of Biochemistry and Molecular Biology
Faculty of Medicine, Dentistry and Health Sciences

Research Assistant or Research Fellow

POSITION NO	0044203
CLASSIFICATION	Research Assistant Grade 2, Level A, Research Fellow Grade 1, Level A or Research Fellow Grade 2, Level B Level of appointment is subject to qualifications and experience.
WORK FOCUS CATEGORY	Research Focused
SALARY	Level A \$69,148 - \$93,830 pa Level B \$98,775 - \$117,290 pa
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time (fixed term) position available for 12 months
BASIS OF EMPLOYMENT	Fixed Term Contract Type: Research
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 David Stroud Tel +61 3 8344 2321 Email biochem-admin@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

An experienced research assistant or enthusiastic and ambitious early career researcher is sought to join the Department of Biochemistry & Molecular Biology, Faculty of Medicine, Dentistry & Health Sciences in the University of Melbourne. The successful applicant will report to the laboratory head, Dr David Stroud. She/he will have extensive experience in molecular, protein and cell biology techniques, with a passion for mitochondrial biology and disease and/or functional proteomics and systems biology techniques.

The Research Assistant or Research Fellow will undertake all aspects of a project concerning the assembly of mitochondrial membrane protein complexes. This will include the experimental design, planning, and execution of experiments involving extensive mammalian cell culture and protein biochemistry, as well as interpretation and presentation of data. Practical experience in computational proteomics is advantageous.

1. Key Responsibilities

1.1 RESEARCH AND RESEARCH TRAINING

- ▶ Participate in research independently and as a member of a research team.
- ▶ Undertake experimental procedures required to acquire the data.
- ▶ Interpret and present data to the research team.
- ▶ Contribute to the preparation of publications and grant applications, as directed by the supervisor.
- ▶ Administrative functions related to the research and day to day operation of the laboratory.

For appointment as Research Fellow (Grade 1) the incumbent will also:

- ▶ Supervise research students.
- ▶ Develop an academic research profile in the area of mitochondrial biology.
- ▶ Attend and present at conferences and seminars and disseminate research findings as appropriate.

For appointment as Research Fellow (Grade 2) the incumbent will also:

- ▶ Drive research on the project either independently or in collaboration with others.
- ▶ Be critically involved in dissemination of research findings through conference attendance, seminars and preparation of publications.
- ▶ To be involved in supervision of research-support staff.

1.2 LEADERSHIP AND SERVICE

- ▶ Engage in other research administrative duties such as assisting with grant application preparation
 - ▶ Identify sources of funding to support individual or collaborative projects relating to teaching, research and engagement practice in the discipline.
 - ▶ Apply for grants to further the research study.

- ▶ Apply and maintain the ethics application.
- ▶ 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

- ▶ BSc (Hons) or relevant equivalent qualifications/experience.
- ▶ Experience in biochemical, molecular and cell biology laboratory research protocols.
- ▶ Ability to co-ordinate a study from start to finish both independently and in collaboration with other laboratory personnel.
- ▶ Excellent computer skills particularly with Microsoft Office and Adobe Creative Cloud.
- ▶ Strong commitment to the highest standards of scientific and ethical integrity and the ability to strictly adhere to study protocols.
- ▶ Excellent written and oral English-language communication skills.
- ▶ Knowledge of general laboratory OH&S procedures.

For appointment as Research Fellow (Level A) the incumbent will also have a:

- ▶ PhD in biochemistry, molecular biology, computational proteomics or a related discipline.
- ▶ Track record of publications in quality journals.
- ▶ Excellent ability to use initiative, good problem solving, judgement and organisational skills coupled with the ability to follow through detailed projects effectively and independently.

For appointment as Research Fellow (Level B) the incumbent will also have a:

- ▶ Greater research output such as a greater number and quality of publications, conference presentations, experience with grant writing, student supervision.

2.2 DESIRABLE

- ▶ Experience in research concerning mitochondrial biogenesis, membrane protein complex assembly, or computational proteomics in relation to biochemistry and cell biology based research projects.
- ▶ Experience with sample preparation for quantitative proteomics and the MaxQuant and Perseus software suites for data analysis.
- ▶ Experience in advanced statistical analyses.

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 desire to strive 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 BIOCHEMISTRY AND MOLECULAR BIOLOGY

<http://biomedicalsciences.unimelb.edu.au/departments/biochemistry/>

The Department of Biochemistry and Molecular Biology is a teaching and research Department of the School of Biomedical Sciences, Faculty of Medicine, Dentistry and Health Sciences based on the main campus at Parkville. The Department of Biochemistry and Molecular Biology has teaching responsibilities to medical, biomedicine and science students and has very active research programs with strong postgraduate research training.

The Biochemistry and Molecular Biology department houses 17 research groups working in the areas of molecular cell biology, protein biochemistry, functional genomics, structural biology, molecular microbiology and immunology, cell imaging, neurobiology, genomics, intracellular protein trafficking and signal transduction, and bioinformatics. The insights gained from this research are applied to diseases such as cancer, neurodegenerative disorders, malaria, parasite infections, and inflammatory autoimmune diseases. We place a strong emphasis on research and research training with over 70 graduate students currently enrolled.

The Department is a major collaborator within the University of Melbourne's Bio21 Molecular Science and Biotechnology Institute, a multidisciplinary research centre specialising in medical, agricultural and environmental biotechnology which supports major technology platforms around mass spectrometry (proteomics/metabolomics/analytical), advanced electron and fluorescence microscopy, NMR and protein structural characterization.

The Department has expertise in a very broad range of technologies: bioinformatics, cryo-electron tomography, flow cytometry, genetic manipulation of primary cells and whole organisms, viral delivery systems, animal models, DNA and RNA sequencing, high-resolution fluorescence imaging, light microscopy imaging, mass spectrometry, proteomics, metabolomics, nuclear magnetic resonance spectroscopy, cryo-electron microscopy, small-angle X-ray scattering and X-ray crystallography.

The Department has a dynamic research profile and has established an extensive set of collaborations with other University Departments both within and outside the Bio21 Molecular Science and Biotechnology Institute.

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.

For more information please visit the School web-site.

<http://bsac.unimelb.edu.au/>

5.2 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.

5.3 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>.

5.4 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/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.

5.5 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>