



POSITION DESCRIPTION

Department of Biochemistry and Pharmacology
Faculty of Medicine, Dentistry and Health Sciences

Research Officer in Clinical Multi-Omics

POSITION NO	0055201
CLASSIFICATION	Level A
SALARY	\$80,258 - \$108,906 p.a.
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full time
BASIS OF EMPLOYMENT	Fixed term for 2 years
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Malcolm McConville Tel +61 3 8344 2342 malcolm@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 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 has received funding from the Medical Research Future Fund to establish a novel multi-omics platform, RDMassSpec, to fast-track the diagnosis of rare genetic diseases. The platform will be established in the University of Melbourne Bio21 Institute, under the supervision of Dr David Stroud and Professor Malcolm McConville and will undertake detailed metabolomic and proteomics analyses of patient samples to identify underlying pathology and disease biomarkers. We are looking for a highly motivated individual with expertise in biological mass spectrometry to undertake the metabolomics analyses. This position will utilize advanced metabolomics approaches, including high resolution mass spectrometry and stable isotope labelling. The appointee will be embedded in the Metabolomics Australia team, located in the Bio21 Institute, and will work closely with other partners in the RDMassSpec consortium in developing the platform and integrating multi-omic data. The appointee will be involved in the preparation of manuscripts and oral presentations as well as co-supervision of research students.

The position is suitable for an individual with strong undergraduate and Honours/MSc degree in biochemistry/cell biology/microbiology and a PhD in a related discipline (or near completion of PhD). The position offers the opportunity to develop as an independent researcher, with the host lab and department having a strong emphasis on mentorship and career development.

The appointee will be located in the Bio21 Molecular Science and Biotechnology Institute, within the University of Melbourne Parkville precinct. The institute houses one of the largest metabolomics facilities in Australia, including more than 30 high-end, mass spectrometry instruments, as well as advanced facilities for proteomics, cell imaging, structural biology and drug discovery and provides a world-class working environment. The appointee should have some experience in one or more of the following areas: biological mass spectrometry, metabolomics/proteomics, computational biology, and/or metabolic research. The appointee will interact with departmental administration, research scientists and students and will be offered mentorship structures for career development.

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
- Compassion
- Respect
- Integrity
- Accountability

1. Key Responsibilities

1.1 RESEARCH AND RESEARCH TRAINING

- ▶ Work independently on MRRF funded research projects overseen by the McConville and Stroud groups.
- ▶ Provide intellectual leadership of defined elements of a research project(s) and coordination of other research project(s).
- ▶ Supervision of honours or postgraduate research projects within research area (subject to completion of a PhD).
- ▶ Contribute to laboratory maintenance and the collection and curation of data and methods.
- ▶ Contribute to preparation of publications in peer reviewed journals/books.
- ▶ Contribute to conference presentations and seminars where appropriate.
- ▶ Occasional contributions to teaching within research field.

1.2 LEADERSHIP AND SERVICE

- ▶ Actively participate at School and/or Faculty meetings and with guidance, contribute to planning activities or committee work to support capacity-building in the School/discipline.
- ▶ Identification of sources of funding to support individual or collaborative projects, relating to research and engagement practice in the discipline.
- ▶ Effective training of research support staff where required.
- ▶ Participate in community and professional activities related to the relevant disciplinary area.
- ▶ Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity.
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

2. Selection Criteria

2.1 ESSENTIAL

- ▶ PhD (or close to submission) in relevant area.
- ▶ Experience with biological mass spectrometry (metabolomics/proteomics) and computational biology.
- ▶ Experience in broad range of biochemistry techniques (protein expression, purification, enzymology).
- ▶ Authorship on at least one peer-reviewed publication (or equivalent).
- ▶ Experience in working independently on a day-to-day basis, under broad guidelines established by the supervisor and execute experiments within those guidelines.
- ▶ Demonstrable skills in initiative and commitment to achieving scientific goals.

2.2 DESIRABLE

- ▶ Experience working within a PC2 laboratory environment and handling/culturing clinical samples.
- ▶ Experience in maintenance and operation of one or more mass spectrometry platforms.
- ▶ Experience in biostatistics and use of different software packages for data analysis.
- ▶ Demonstrated potential for initiating and participating in collaborative research programs with other research teams.
- ▶ Demonstrated potential to supervise or co-supervise and mentor undergraduate, honours and graduate diploma stage postgraduate students where appropriate.

2.3 OTHER JOB RELATED INFORMATION

- ▶ Occasional work out of ordinary hours, travel, etc.

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 addresses 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:

<https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel>

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 PHARMACOLOGY

<https://biomedicalsciences.unimelb.edu.au/departments/department-of-biochemistry-and-pharmacology>

The Department of Biochemistry and Pharmacology has critical mass, interdisciplinary teaching and a remarkable breadth and depth in research expertise that underpin our key themes of molecular understanding of biology and disease, translational research, drug discovery and development.

It is envisaged to consolidate the research activities of the new Department. With respect to teaching, the departments' offerings are complementary, and we are looking forward to developing new courses across our joint areas of expertise.

5.2 SCHOOL OF BIOMEDICAL SCIENCES

<https://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.

5.3 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.

5.4 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>

5.5 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.

5.6 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 <https://about.unimelb.edu.au/strategy/governance>