



POSITION DESCRIPTION

School of BioSciences
Faculty of Science

BioSciences Microscopy Facility Manager

POSITION NO	0009702
CLASSIFICATION	Level B
SALARY	\$95,434 – \$113,323 p.a.
SUPERANNUATION	Employer contribution of 17%
EMPLOYMENT TYPE	Full Time (fixed-term) position available for 3 years Fixed term contract type: Externally funded contract employment This is an Academic Specialist position
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
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	Professor Geoffrey McFadden Tel +61 414 189 905 Email: fad1@mac.com <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
joining.unimelb.edu.au

Position Summary

The BioSciences Microscopy Facility Manager is responsible for the safe, efficient operation of the School of BioSciences Microscopy Facility, which is a node of the Melbourne Advanced Microscopy Facility (<http://microscopy.unimelb.edu.au>). The BioSciences node currently includes three electron microscopes, three laser confocal microscopes, several light microscopes, a preparatory laboratory, and sundry microscopy related equipment.

The BioSciences Microscopy Facility Manager oversees the operational running of the Facility, training of staff and student users, and the service and maintenance of equipment. The Manager will be responsible for compliance with safety, quarantine and Office for Gene Technology Regulator requirements within the Facility.

A key responsibility of the role is to drive the growth of the Facility, in line with the Strategic Plan. The incumbent is required to demonstrate an increase the revenue through expansion of the commercial fee-for-service business.

The position may have supervision of 1-3 staff members during the length of the contract.

1. Selection Criteria

1.1 ESSENTIAL

- ▶ A PhD or equivalent in science or engineering or facility imaging experience
- ▶ Advanced postdoctoral experience and expertise in TEM, SEM and fluorescence light microscopy of biological materials
- ▶ Advanced postdoctoral research experience in using EM, and light and fluorescence microscopy techniques to investigate complex biological systems
- ▶ Demonstrated potential and enthusiasm to actively contribute to strategic growth of a business unit
- ▶ Demonstrated potential and enthusiasm to manage staff, including active engagement in staff development
- ▶ Demonstrable training skills of facility users (including research students & post-doctoral fellows)
- ▶ High quality research publications in peer-reviewed journals in a relevant research field
- ▶ High-level interpersonal communications skills and the ability to liaise with staff and research students, professional/ technical staff and clients from industry
- ▶ Demonstrated ability to listen to others, actively contribute to the team and demonstrate flexibility in adapting to team priorities

1.2 DESIRABLE

- ▶ Demonstrated high level skills and experience in Cryo-TEM microscopy
- ▶ Demonstrated high level skills in immuno-labelling techniques for both TEM and fluorescence light microscopy
- ▶ Experience in the application of algorithms to EM data to provide high level tomography for life sciences applications

- ▶ Experience in the development of new techniques that extend the capabilities of electron microscopy and light microscopy experiments, either through the development of new methodologies and/or instrumentation and/or software and/or theories
- ▶ Demonstrated experience in managing staff including successfully engaging in staff development

2. Special Requirements

- ▶ N/A

3. Key Responsibilities

The responsibilities of the BioSciences Microscopy Facility Manager will relate to both the School's and University's academic research and industry engagement programs.

3.1 FACILITY MANAGEMENT

- ▶ Responsible for the overall management of the BioSciences Microscopy Facility including adoption of safe work practices for all users, facility access and related agreements for all external users
- ▶ Provide regular reports and high level advice to the supervising academic regarding the day-to-day operation and long term strategic aims of the BioSciences Microscopy Facility
- ▶ Keep up to date with the major software for image analysis, including Imaris, Fiji and XMIPP and provide high level advice and initial training to the Facility users
- ▶ Develop and implement programs that ensure the longevity and optimum performance of BioSciences Microscopy Facility equipment. This includes overseeing the negotiation of instrument service contracts with the microscope service provider/s
- ▶ Establish a program of training for internal and external users, as well as training programs for School of BioSciences based postgraduate students
- ▶ Provide high-level expertise, advice and assistance to BioSciences Microscopy Facility users to undertake research projects using these instruments
- ▶ Maintain appropriate safety and training records
- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5

3.2 FACILITY DEVELOPMENT

- ▶ Ensure the BioSciences Facility is integrated into the Melbourne Advanced Microscopy Facility (at Bio21) and the Biological Optical Microscopy Platform (across University of Melbourne) through strong liaison with key stakeholders and in consultation with the Facility Director
- ▶ Identify emerging trends and opportunities and provide recommendations to stakeholders to help grow the Facility, adopt new technologies and pursue new equipment
- ▶ Assist with the preparation and submission of competitive grants for new equipment in the BioSciences Microscopy Facility according to the strategic goals of the Facility
- ▶ Deliver high quality presentations within and outside the University to promote the technology capabilities of the Facility

3.3 RESEARCH

- ▶ Acquire and analyse complex data at a high-level for University research projects, and external clients, using these instruments
- ▶ Collaborate with University researchers on specific research projects, as required
- ▶ Apply for research infrastructure grants to maintain state-of-the-art facilities
- ▶ Apply for research grants to support the Manager's own research program

4. Other Information

4.1 ORGANISATION UNIT

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

The School of BioSciences was formed in 2015 through the amalgamation of the School of Botany and the Departments of Genetics and Zoology thus bringing together a critical mass of 160 Academic staff and 240 Research Higher Degree students undertaking world class teaching and research in the biological sciences. Academics within the School are aligned to four research clusters: Ecology, Evolution and Environmental Science; Genetics, Genomics and Development; Plant Science and Computational Biology. Through cross-disciplinary collaborations within the School and with external partners the School is a major recipient of grant and contract funding.

The School is a major contributor to the Bachelor of Science, Bachelor of Biomedical Science and the Environmental Science programs, its teaching program reflecting the research interests within the School.

4.2 FACULTY OF SCIENCE

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

Science at the University of Melbourne is the most highly ranked Faculty of Science in Australia.* Science is defined by its research excellence in the physical and life sciences and is at the forefront of research addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

We have over 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research, which empowers our STEM students and graduates to understand and address complexities that impact real world issues and the challenges of tomorrow.

We aspire to engage the broader community with the impact that Science has on our everyday lives. Through the strength of our internships and research project offerings, our students are provided opportunities to engage with industry partners to solve real-world issues.

The Faculty of Science has over 40,000 alumni and is one of the largest faculties in the University comprising seven schools: BioSciences, Chemistry, Earth Sciences, Ecosystem and Forest Sciences, Geography, Mathematics and Statistics, and Physics.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Office for Environmental Programs and home to numerous Centres.

Science manages more than \$280 million of income per annum, with a staff base in the order of 220 professional staff, and more than 540 academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 7,500 undergraduate and graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science) with enrolments of approximately 6,200 students.

The Faculty of Science is a leader in research, contributing approximately \$50 million in HERDC income per annum. The Faculty of Science is highly research focused, performing strongly in the ARC competitive grants schemes, often out-performing the national average. The Faculty of Science is currently growing its competitiveness and standing in the NHMRC space.

The Faculty of Science provides community services and industry partnerships based on a solid foundation of research in the pure and applied sciences. The Faculty has an endowment of approximately \$50 million. The annual income from the endowment supports more than 120 prizes, scholarships and research awards.

*Figures from the latest available data for 2015, including published international rankings data.

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.