

Position Description

Electron Microscopist

Position No:	50145392
Business Unit:	Senior Deputy Vice-Chancellor, Research & Industry Engagement
Division:	Pro Vice-Chancellor, Research Capability
Department:	Research Platforms
Classification Level:	HEO8
Employment Type:	Full time, fixed term
Campus Location:	Melbourne (Bundoora)
Other Benefits:	http://www.latrobe.edu.au/jobs/working/benefits

Further information about:

La Trobe University - <http://www.latrobe.edu.au/about>

Proteomics & Metabolomics Platform – <http://latrobe.edu.au/bioimaging>

For enquiries only contact:

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Position Context/Purpose

Research excellence is at the core of La Trobe University's Research 2030 strategic plan that will bolster La Trobe's reach and impact, grow research collaboration and partnerships and enhance the experience and outcomes for graduate researchers. In order to support researchers and enhance their capacity to produce high quality research, La Trobe has established a number of Research Platforms. The Bioimaging Platform supports a wide range of research projects by providing researchers with expert advice and access to cutting-edge equipment and technologies in optical and electron microscopy, flow cytometry and image analysis.

A full-time position for an electron microscopist is now available reporting to Director, Research Infrastructure, and based at the Melbourne (Bundoora) campus. With an initial term of three years, the role will support electron microscopy services and capabilities within the Bioimaging Platform. The appointee will be responsible for managing the electron microscopy capability and be proficient working with a wide range of biological material from viruses, bacteria, fungi, plants and animals, as well as occasional sample types from materials science disciplines.

The key function of this role is to provide high level expert advice, training and technical support on sample preparation techniques and electron microscopy, for research groups across the University in a variety of disciplines to enable and accelerate their research programs. It is also expected that the appointee will lead the development of new sample preparation methods and imaging techniques and drive their adoption amongst the wider community. The appointee will also collaborate on research projects, contribute to publications and preparation of grant proposals for new equipment. The successful applicant will have started to build an international track record in electron microscopy and other analytical techniques.

Duties at this level will include:

- Effective management and maintenance of the electron microscopes and associated equipment (including performing routine maintenance activities) through a current understanding of the theory and knowledge of its operation and by liaising with service engineers.
- Training users in the safe and effective operation of both scanning and transmission electron microscopes and associated sample preparation equipment.
- Providing technical support and training for a range of sample preparation techniques including cryo-TEM and SEM, specimen fixation and benchtop and microwave assisted processing, embedding, ultrathin sectioning, staining, immuno-gold labelling.
- Managing access of users to the microscopy equipment through a registration and safety assessment process and online equipment booking system
- Providing microscopy services for industry partners, including quoting on time and cost, and ensuring that each project is delivered to specification, time and budget.
- Developing and/or implementing data analysis workflows, pipelines and tools to process, manage and analyse images.
- Providing academic and industry researchers/users with expert advice and technical support across a range of disciplines and identifying innovative solutions.
- Provision of microscopy and image analysis related educational workshops and contribution to an established user group forum to build researcher knowledge.
- Contributing to high quality scientific reports and research outcomes including publications and grant applications.
- Developing an internal and external network of relationships with colleagues, stakeholders, researchers, industry partners and working collaboratively with staff at other facilities and across the Research Platforms Program.
- Building capacity across all of the platforms through engagement with the research community, including providing specialized training courses and establishing a community of practice, user group and seminar program.

- Providing expert professional or consultancy advice to achieve intellectual standing outside the University through, for example, presentations at events and meetings.
- Reporting on metrics associated with the platform, including usage, engagement and research outcomes, and contributing to the compilation of the annual report.
- Supporting the day-to-day operations of the platform and other duties, including maintaining stocks and consumables and efficient lab workflows, developing standard operating procedures, complying with OH&S and other compliance requirements, and involvement in the implementation of ISO accreditation for the platform.
- Building capability in the platform by advising on future needs and operational matters and applying for internal and external funding for new equipment.
- Occasional outreach activities to support the use of electron microscopy at the regional campuses
- Other duties as required.

Essential Criteria

Skills and knowledge required for the position

- A PhD degree in a relevant discipline plus substantial experience and expertise in electron microscopy, preferably on biological samples, or an equivalent combination of relevant knowledge and experience.
- In-depth knowledge in all aspects of electron microscopy, including experience operating and maintaining scanning and transmission electron microscopes and associated sample preparation equipment, particularly for biological applications.
- Demonstrated experience in a range of sample preparation techniques, including preparation of vitreous material and cryosectioning for cryo-EM, fixation, embedding and ultrathin sectioning of various samples, particularly those of plant and animal origin.
- Experience and expertise in the use of software and ability to develop and adapt data algorithms and scripts for the analysis of images.
- Experience in training a range of users, such as students and staff, in electron microscopy, sample preparation techniques, equipment and data analysis.
- Demonstrated leadership skills to promote a cohesive and effective team, build relationships with researchers, students and external clients, and effectively manage resourcing.
- Well-developed communication skills, with an emphasis on the ability to evaluate, analyse and communicate information clearly.
- Experience working in ISO accredited laboratories, in a research environment and GLP experience.
- Strong record of publications, including papers in high-impact journals, conference papers, reports and/or professional and/or technical contributions in the relevant discipline area.
- Ability to develop innovative methodologies or take a leading role in the application of proven techniques involving considerable theoretical and technical sophistication.

Capabilities required to be successful in the position

- High level analytical capability with an ability to communicate complex information clearly both verbally and in writing.
- Knowledge of own strengths, weaknesses and biases – modifying behaviour, based on self-reflection and feedback, to respond to others with empathy and act on feedback to improve knowledge, skills and behaviour.
- Ability to work collaboratively, demonstrate inclusivity and tailor communication in a way that is meaningful to the audience – consistently modelling accountability, connectedness, innovation and care.
- Demonstrated creative and critical thinking, ability to generate ideas to solve local problems and recommend improvements to current work practices.

- Ability to make sense of data to inform decision making – implementing ideas to improve local practices.

Essential Compliance Requirements

To hold this La Trobe University position the occupant must:

- hold, or be willing to undertake and pass, a Victorian Working With Children Check; AND
- take personal accountability to comply with all University policies, procedures and legislative or regulatory obligations; including but not limited to TEQSA and the Higher Education Threshold Standards.

Other Information

The position description is indicative of the initial expectation of the role and subject to changes to University goals and priorities, activities or focus of the job.

Position Flexibility

We offer flexible work arrangements that can assist you in balancing your work and other responsibilities.

Why La Trobe:

- Develop your career at an innovative, global university where you'll collaborate with community and industry to create impact.
- Enjoy working on our inspiring and stunning campuses – the perfect hub for industry, students and academics
- Help transform the lives of students, partners and communities now and in the future

This is more than just a job. Working at La Trobe offers opportunities to demonstrate excellence and transform lives.

Here, you'll join exceptional people, partners and communities, who power our operations with ambition and purpose.

Our success can be attributed to its strong sense of community. We have a long-standing commitment to diversity, inclusion and social justice; we are committed to providing a workplace where all staff feel valued, respected and supported to achieve their full potential. We strive to build a workplace where all employees of diverse backgrounds, abilities, experiences, sexuality, gender, religion and age are welcome, valued, respected and one that is representative of our community. We demonstrate our cultural qualities by holding ourselves accountable and creating a culture of trust and innovation while genuinely caring for one another.

La Trobe's Cultural Qualities:

WE ARE CONNECTED



We are **connected** to each other and the communities around us. We engage with those communities to learn from our past, inform our present and impact our future.

WE ARE INNOVATIVE



We are **innovative** in tackling the most important issues of our time. We are inquisitive and seek to develop new ideas that positively impact the way we work and the world around us.

WE ARE ACCOUNTABLE



We are **accountable** for what we do and share a commitment to excellence. We are courageous and respectful in the way we hold ourselves and each other to account.

WE CARE



We **care** about what we do and value the power of education and research. We care about each other and strive to create a safe and inclusive community.

For Human Resource Use Only

Initials:

Date: