

## Position Description

### Principal Research Fellow

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<b>Position No:</b>	NEW
<b>Business Unit:</b>	PROVOST
<b>Division:</b>	School of Agriculture Biomedicine and Soil Sciences
<b>Department:</b>	Animal Plant and Soil Sciences
<b>Classification Level:</b>	Level D (Research Only)
<b>Employment Type:</b>	Full-time, fixed-term
<b>Campus Location:</b>	Melbourne (Bundoora)
<b>Other Benefits:</b>	<a href="http://www.latrobe.edu.au/jobs/working/benefits">http://www.latrobe.edu.au/jobs/working/benefits</a>

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

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## Position Context/Purpose

The La Trobe Institute for Sustainable Agriculture and Food (LISAF) is a key strategic initiative that supports La Trobe University's (La Trobe) world-class research and research training in agriculture, agri-food and medicinal agriculture. LISAF's vision is to use a holistic approach to deliver innovative solutions for sustainable and nutritious food production in a resource and climate-constrained world, fostering outcome-focused research and education through its interdisciplinary research domains

To deliver on this vision, LISAF requires a suite of genome-wide technologies that span from molecular-to macro-scale to generate the data that will underpin the next generation of crop plants. Therefore, in conjunction with BioPlatforms Australia (BPA) and the VHESIF (Victorian Government), La Trobe University has invested over \$3M in a platform that can provide cellular resolution for 'omic' analyses in agricultural systems, specifically tissue imaging mass spectrometry capability. The position of Principal Research Fellow will lead the tissue imaging mass spectrometry capability of the Agriculture Cellular Resolution 'OMICS' Facility. We are seeking an experienced imaging mass spectrometrist to operate a new state-of-the-art Bruker timsTOF flex MALDI-2 LC-MS cellular imaging system, manage the facility, establish collaborations, and seek and/or participate in research grant applications.

## Duties at this level will include:

- Lead new Imaging MS facility by:
  - performing expert data collection, processing, and analysis,
  - training users in the safe and effective operation of the MALDI-MS Platform and associated sample preparation equipment.
  - overseeing repair work and manage major service contracts for facility,
  - implementing and maintaining user policies and booking systems.
- Establish collaborative research programs with LISAF staff and students, industry partners and other external/internal stakeholders by providing expert professional or consultancy advice.
- Effective management and maintenance of the Imaging MS 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.
- Compile high quality data related to the use of the facility including usage, engagement, and research outcomes to feed KPI records, grant applications, funding bodies and/or university reports.
- Building capability by advising on future technologies and operational matters and applying for internal and external funding for new equipment.
- Conduct and lead outstanding innovative and high impact research and produce conference and seminar papers and publications arising from the research.
- As a leader in research, make a significant contribution to the discipline at the national and international level, demonstrated by a strong record of published work or other scholarly activities to further enhance the University's reputation.
- Manage and mentor research support staff involved in the research and, where appropriate, supervise the research of less senior research employees, to develop their research knowledge and performance.
- Seek external funding needed for research and/or continued employment and be responsible for the financial management of research grants.
- Supervise Higher Degree by Research (HDR) and major Honours or postgraduate research projects.
- Engage and build with industry and other external stakeholders to develop research partnerships and progress the interests of the School and the University.
- Promote and represent LISAF, the University and discipline/profession by participating in appropriate local, national and international organisations and events.
- Undertake other duties and administrative functions commensurate with the classification and scope of the position as required by the Director, LISAF.

- Other duties as required.

## **Essential Criteria**

### **Skills and knowledge required for the position**

- Completion of a PhD in mass spectrometry or equivalent accreditation and standing together with subsequent research experience using cutting-edge imaging technology (i.e. MALDI-MS Platforms)
- Demonstrated experience and knowledge in molecular characterisation and component profiling using mass spectrometry, and the application of high-throughput metabolomic, proteomic and/or glycomic approaches;
- Sound analytical skills with an ability to communicate complex information clearly both orally and in writing with an emphasis on the ability to evaluate, analyse and communicate information clearly.
- Excellent record of nationally and/or internationally recognised independent research, with evidence of its impact and significance.
- Strong record of publications, including papers in top-tier and high-impact journals, conference papers, reports and/or professional and/or technical contributions in the relevant discipline area.
- Proven experience in supervising, mentoring and fostering the research activities of others.
- Significant experience in preparing research proposal submissions to external funding bodies and a strong record of securing research funding through competitive grants, industry grants or consultancies.
- Proven ability to build sustainable relationships with a range of industry partners and evidence of the ability to promote research links with outside organisations/agencies.
- High level analytical capability with an ability to communicate complex information clearly both verbally and in writing.
- Proven experience and success in managing staff performance and development.
- In-depth knowledge of all aspects of Mass Spectrometry analysis for biological applications.
- Demonstrated experience with cellular level metabolite, protein and/or glycan analyses using state-of-the-art tissue imaging (MALDI)- mass spectrometry (IMS)
- A working knowledge and experience with computational support pipelines for analysis, visualisation and integration of data
- Demonstrated experience in sample preparation techniques for IMS; having worked with plant tissues would be an advantage but not essential
- Experience in taking responsibility for the broad operation of the IMS platform, including ensuring that it is kept in optimal operating status, liaising with researchers and collaborators, and oversight of other users
- Experience in writing or contributing to equipment grant applications

### **Capabilities required to be successful in the position**

- Ability to work collaboratively across functions, tailor communication in a way that is meaningful to the audience and contribute to a safe, inclusive, high-performing culture – consistently modelling accountability, connectedness, innovation and care.
- Demonstrated creative, critical and systems thinking – generating ideas and recommending solutions to local and organisational problems.
- Ability to operationalise strategy, adapt quickly to disruption and actively contribute to a healthy team culture to successfully navigate change – implementing improvements to local and organisational practice.

## **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.
- Comply with the Australian Government Department of Health Office of Drug Control guideline standards for Fit and Proper Persons and Suitable Staff <https://www.odc.gov.au/>; AND
- undertake a current (within the last 12 months) national police and bankruptcy check; AND
- The position will involve sponsored research with industry partners requiring the employee to agree to confidentiality clauses as well as assignment of Intellectual Property (IP) rights to the University. While this will not prevent publication, it may cause some delays as processes to protect IP are implemented.

### 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

La Trobe University is committed to providing a diverse, inclusive and respectful working environment for all staff. 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.

We are forward-looking and culturally inclusive. We continuously review, improve and transform our processes to embrace new, flexible approaches. That means you'll always have the opportunity to succeed and make a difference.

### La Trobe's Cultural Qualities:



#### **We are accountable**

*We strive for excellence in everything we do. We hold each other and ourselves to account, and work to the highest standard.*



#### **We are connected**

*We connect to the world outside – the students and communities we serve, both locally and globally*



#### **We are innovative**

*We tackle the big issues of our time to transform the lives of our students and society.*



#### **We care**

*We care about what we do and why we do it. We believe in the power of education and research to transform lives and global society. We care about being the difference in the lives of our students and communities*

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Initials:              Date: