

POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title:	Research Fellow	Level:	A
Faculty/Division:	Science	Department/Location:	Chemistry

Primary Purpose of the Position:

The role of this position is to:

- 1) conduct research into the development of new mass spectrometry and laser-based technologies for the structural elucidation of lipids,
- 2) undertake the integration of these new technologies into protocols for shotgun lipidomic analyses of biological extracts,
- 3) assist in the development of techniques for the analysis of non-covalent interactions between lipids and other biomolecules (including proteins), and
- 4) facilitate and maintain collaborations between the UOW researchers in the fields of lipidomics, laser chemistry and mass spectrometry as well as external partners.

Position Environment:

This position is funded through an ARC Discovery Project (DP120102922) entitled "New laser and mass spectrometry-based tools for comprehensive structural elucidation of lipids and their biomolecular interactions". The project will be conducted through the Mass Spectrometry User Resource and Research Facility (Prof Blanksby) and the Laser Chemistry Laboratory (Dr Trevitt) within the School of Chemistry (Faculty of Science). The School of Chemistry at UOW is one of the leading chemistry departments in Australia receiving a maximum ranking of 5 in the 2012 Excellence in Research Australia for Chemical Sciences overall as well as the sub-disciplines of Analytical and Physical Chemistry relevant to this project. The mass spectrometry and laser laboratories house world-class infrastructure that will be deployed in this project and will be available to the research fellow. The fellow position will also work in collaboration with UOW's Lipidomics Group (Dr Mitchell) that is a part of the Illawarra Health and Medical Research Institute.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Actively conduct research as required by the project	Develop novel laser and mass spectrometry-based technologies for molecular structure elucidation and screening of biomolecular interactions	
2.	Establish and extend high throughput lipidomics protocols	Increased analytical capacity and implementation of new capabilities	
3.	Assist in the development and testing of new techniques for the analysis of the biomolecular interactions of lipids	Increased analytical capacity and experience	
4.	Dissemination of research outcomes	Publication of research data in peer-reviewed scientific journals and	

		presentation of data at national and international conferences	
5.	Liaise with collaborators	Help to establish and maintain links with external institutions and internal collaborators	
6.	Supervision of postgraduate/honours students	Pass on knowledge to research students and gain supervisory experience	
7.	Attend conferences as appropriate	Attend at least one domestic and one international conference to present results	
8.	Attract further research funding	Seek opportunities for further project funding	
9.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
10.	Have OH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/document	To ensure a safe working environment for self & others.	

Reporting Relationships:

Position Reports to:	Prof Stephen Blanksby, School of Chemistry, Faculty of Science, co-director Mass Spectrometry User Resource and Research Facility
The position supervises the following positions:	None
Other Key Contacts:	Dr Adam Trevitt, School of Chemistry, Leader of the Laser Chemistry Laboratory Dr Todd Mitchell, School of Health Sciences, Leader of the UOW Lipidomics Group A/Prof Stephen Wilson, Head of School of Chemistry

Key Relationships:

Contact/Organisation:

Professor Stephen Blanksby
Dr Todd Mitchell
Dr Adam Trevitt

Purpose & Frequency of contact

Project Supervisor - Weekly

Project co-supervisors - Fortnightly

Key Challenges:

1. Develop novel laser and mass spectrometry-based technologies for molecular structure elucidation and screening of biomolecular interactions.
2. Establish and extend high throughput lipidomics protocols.
3. Development and testing of new techniques for the analysis of the biomolecular interactions of lipids.
4. Training of PhD, MSc and honours research students.
5. Publish research findings in high impact journals.

Knowledge & Skills:

Essential:

- Skilled in mass spectrometry and allied technologies (e.g., chromatography).
- Skilled in analytical or bio-analytical chemistry.
- Working knowledge of lipids and their role(s) in biochemistry
- Ability to apply correct WHS procedures for working in a chemical laboratory.
- Good written and oral communication skills.
- Ability to work effectively as part of a research team and also independently and unsupervised.
- Ability to meet deadlines.
- Ability to deal with confidential information.

Education & Experience:

Essential:

- A PhD in Chemistry or relevant experience and/or training deemed to be equivalent.
- Experience in biomolecular extraction and purification procedures and technologies.
- Experience in the identification and quantification of lipids.
- Research track record in the areas of mass spectrometry, chromatography and/or analytical chemistry
- Experience in producing manuscripts for publication and conference presentations.

Desirable:

- Experience in establishing and maintaining research collaborations.

Personal Attributes:

- Excellent written and oral communication skills.
- The ability to work as part of a team.
- The ability to meet deadlines.

Special Job Requirements:

- May be required to work outside of normal hours from time to time.

Organisational Chart:

Organisational structure can be viewed at <http://www.uow.edu.au/science/chem/index.html>

Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____

POSITION CLASSIFICATION STANDARD - Research Only

Level: A
Title: Associate Fellow

Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.