Associate Professor/Professor in Functional Proteomics
Macquarie University, Australia
Scientific research and discovery have been an integral part of the science and engineering story at Macquarie University since our beginnings. Our first 50 years have seen us participate in the world’s first-ever attempt to synthesise complex life, turn wi-fi into a reality, discover dancing dwarf galaxies, and set the groundwork for the development of blue LED light – the future key ingredient in everything from your smartphone to the lights in your home.

Scientific discovery – be it during our studies or working in industry or at a university – comes from a deep understanding of the fundamentals as well as from being creative. We believe that the creativity and hard work of our staff is the key to our success in science and engineering. Our academics are at the cutting edge of their field and highly active in research and development. They are also accomplished and dedicated teachers.

We have a strong and ambitious strategy and plan for the next five years. We’re investing heavily in new buildings, courses and staff, and collaborating with businesses in Australia and around the world.

Proteomics has been a key feature of Macquarie’s biomolecular research since the term proteome was coined in 1994 by PhD student Marc Wilkins.

The Australian Proteome Analysis Facility (APAF) has been located at Macquarie since its founding in 1995 providing infrastructure and support for Macquarie researchers and the wider community.

In July 2018, APAF Ltd became part of the University and has an exciting programme of developing and applying new mass spectrometric and protein analysis methods to identify and characterise proteins, their post-translational modifications and associated ligands and natural products to support Australia’s research and industrial productivity in health and medicine and food security.

We are seeking an individual with the vision and capability to take a leadership role in functional proteomic research and teaching in our Department of Molecular Sciences.

The successful applicant will also play a key role in APAF’s advisory board including contributing to its governance and scientific direction.

We offer you the opportunity to bring your outstanding academic leadership skills to Macquarie to excite researchers in the power of proteomics and its related fields to solve problems, and to deliver excellence across the full portfolio of academic activity.

We look forward to welcoming you.

Professor Barbara Messerle
EXECUTIVE DEAN
FACULTY OF SCIENCE AND ENGINEERING
Whom we are seeking

To succeed in this important position, you will be an outstanding individual with proven academic leadership and expertise across a range of scholarships relating to discovery, integration, teaching, application, and leadership and citizenship. (see Macquarie Promotion Criteria).

You will have a sustained level of academic achievement and high performance in proteomics research, the analysis of post-translational modifications of proteins and the application of these technologies to important biological questions.

You will be an eminent authority or emerging leader in your field and your dedication and expertise will have (or show the capacity to be) translated into impactful, real world outcomes.

You will have developed innovative and impactful approaches to teaching in both the classroom and online learning environments.

Your networks will illustrate your ability to work collaboratively with scientists across sectors and disciplines. Your successful track record of attracting funding through industry or government sources, and your collaborative and collegial approach to working with others, will enable you to perform effectively across different sectors to solve important problems that our world faces.

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You will enhance our current internationally recognised activity in proteomics as applied to medical and agricultural problems, including the role of protein post-translational modifications, as well as that of protein abundance, synthesis and localisation.

Your will be aligned with Macquarie’s longstanding commitment of advancing equity and diversity principles.

Your proven track record of developing trust, building commitment, modelling core university values and fostering an environment of collaboration, innovation and excellence will enable you to succeed in this role.
Key responsibilities

- Develop and lead a research group in proteomics with an emphasis on post-translational protein modifications that complements and enhances existing research at Macquarie.
- Conduct a distinctive personal research program in the context of proteomics, including the supervision of higher degree research students.
- Initiate and lead initiatives and business development to engage with internal and external researchers and industry, grow collaborations and secure funding.
- Make significant contributions to learning and teaching at your Academic level and contribute to a culture of transformative learning, innovation and excellence in teaching within the department.
- Contribute to the mentorship and development of staff to achieve their potential and sustain high performance in the scholarships of discovery, integration, teaching, application and leadership and citizenship.
- Actively participate in leadership and service roles including representing the department within the Macquarie community at meetings, forums and seminars, and identifying internal collaborative opportunities.

- Represent the University nationally and internationally.
- Take a lead role in supporting a culture of safe work practices across all aspects of academic activity.
- Contribute to the advancement of diversity and inclusion within the department, faculty and wider university.

REPORTING TO
Head of Department of Molecular Sciences.
Where you will work

The Faculty of Science and Engineering is one of Macquarie's strongest research faculties, excelling in all research indicators - publications, competitive research grants and ARC fellowships, contracts, distinguished visitors and postgraduate student numbers.

Our Approach

Within the Faculty of Science and Engineering, the Department of Molecular Sciences, in which the Australian Proteome Analysis Facility (APAF) is located, consists of 25 fixed term and continuing academics with a strong track record of collaboration as evidenced by past and current grant success of recent years, numerous co-publications and co-supervision of HDR students.

Macquarie's newly adopted Masters of Research program has ensured a strong supply of new HDR students to participate in various research projects. produce high quality biomolecular science and training of HDR students.

The Department of Molecular Sciences has one of the few research groupings that bring together a whole systems approach to biological problems. The research interests span the chemical and biomolecular sciences yet are unified by the common theme of working at the interface of these traditional subjects.

This approach promotes an excellent intellectual environment and culture of research excellence with the resulting productivity and innovation in biomolecular research, placing MQ at the forefront of research.

The department sustains a broad range of research activities and acknowledges that research excellence is a key component to delivering high-standard undergraduate and postgraduate courses. To this end we offer courses across the disciplines of Molecular Sciences from Materials, Analytical Chemistry, Biotechnology, Medicinal Chemistry, Molecular Biology, Proteomics to Bioprocessing. We encourage and support research activities that enhance our educational mission.

Department Facilities and Resources

As the successful applicant, you will be a valued member of our Department of Molecular Sciences.

You will have laboratory facilities based in the department and access to existing core department resources and infrastructure which include the extensive mass spectrometry facilities available within APAF as well as cutting-edge technologies in molecular cell biology, genomics, glycomics, immunology, chemistry and biochemistry, NMR, optical, and Raman spectroscopies, microscopy, material science, protein structure analysis and biotechnology.

APAF is currently home to 16 mass spectrometers with 5 more housed elsewhere in the department.

Access to advanced mass spectrometry is key to this appointment, and a range of high end instrumentation is maintained within APAF which provides operational efficiencies and high-quality maintenance.

The appointee will also benefit from the strong bioinformatics and statistical support available from scientists within APAF.
Our purpose, vision and values

At Macquarie, we’re not afraid to choose the less trodden path. We see life as an exhilarating source of possibilities to grow intellectually and professionally, unconstrained by traditions. We are ready to embrace new experiences and ideas.

We believe that a leader is about being a team player, and know that success in today’s world is all about collaborating with the right people on the right issues.

We are naturally curious and open to the most diverse intellectual perspectives. United by a sense of purpose, a single vision and one set of values, we actively engage in the complex issues that define the future of humanity.

UNITED BY ONE PURPOSE
We are a university of service and engagement:

- we serve and engage our students and staff through transformative learning and life experiences.
- we serve and engage our world through discovery, dissemination of knowledge and ideas, innovation and deep partnerships.
- our University is a place for staff and students to be nurtured, to grow, to develop, to learn and to explore.
- we also encourage our people to break free – literally and metaphorically.

SHARING ONE VISION
We aspire to be:

- a destination of choice for students and staff who share our values.
- deeply connected with our stakeholders and partners, and known for this globally.
- ranked among the highest performing research universities in Australia and, for key disciplines, to be recognised globally for our pre-eminence.
- known across Australia and beyond as custodians of a remarkable university campus that blends the vibrancy of a cosmopolitan university village with a natural Australian bushland setting.

EMBODYING ONE SET OF VALUES
We value:

- scholarship – We believe learning, inquiry and discovery improve lives.
- integrity – We conduct ourselves ethically, equitably and for mutual benefit.
- empowerment – We make our community a source of strength and creativity.

Through our actions as students and staff, we live these values, and it is against them that we hold ourselves accountable.
The exponential power of our collective

SUCCESS THROUGH COLLABORATION

Macquarie is a university engaged with the real and often complex problems and opportunities that define our lives.

Since our foundation 54 years ago, we have aspired to be a different type of university: one unbound by ivory towers and sandstone walls. Rather, we are focused on fostering collaboration between students, academics, industry and society, encouraging all to traverse the boundaries of their own perspective and affect change.

Over the years, we’ve grown to become the centre of a vibrant local and global community. A place of constant stimulus and human interaction. Together, we advance world-class theoretical thinking and translate it into real-world solutions.

We are connecting people across the most diverse fields of knowledge to create bold new possibilities: for their careers, intellectual endeavours, enterprises and the common good.

At Macquarie, people become skilled at switching between specialist and generalist mindsets; mastering complexity, thinking holistically and helping to create a better future.

WHERE COLLABORATION MEETS INNOVATION

Uniquely located in the heart of Australia’s largest high-tech precinct, Macquarie brings together more than 40,000 students and 3000 staff in one thriving hub of discovery.

Our campus spans 126 hectares, with open green space that gives our community the freedom to think and grow.

More than AUS$1 billion has been invested in our facilities and infrastructure so our students and staff can thrive on a campus that is dynamic, sustainable and built for collaboration.

With more than 300 leading companies located on or around the Macquarie campus, our students are able to tap into industry connections that give them an edge in their future careers, while our staff have access to outstanding research and innovation opportunities with some of the world’s leading organisations.

A PROUD TRADITION OF DISCOVERY

Macquarie enjoys an enviable reputation for research excellence – 100 per cent of our research is ranked at world standard or above and more than 30 of our researchers are ranked in the top one per cent of researchers in the world.

Our research framework – World-leading research with world-changing impact – is brought to life by renowned researchers, whose audacious solutions to issues of global significance benefit the world we live in.

Looking to the future, we have developed five research priorities – healthy people, resilient societies, prosperous economies, secure planet and innovative technologies – that provide a focal point for the cross-disciplinary research approach that is at the heart of our ethos.

PURSING EXCELLENCE

Macquarie is ranked among the top two per cent of universities in the world, and with a 5-star QS rating, we are recognised for producing graduates who are among the most sought after professionals in the world.

Testament to our spirit of innovation and exploration, 10 of our subjects are ranked among the top 100 in the world, and five are ranked among the top 150.
Macquarie at a glance

- **5 QS Stars** in teaching, employability, research, internationalisation, facilities, innovation, inclusiveness and specialist criteria

- **More than 30,000** students have benefited from work placements or community experiences through PACE (Professional and Community Engagement)

- **More than 200** companies on campus or in the adjacent high-tech precinct, providing access to internship and job opportunities

- **Ranked in the top 2 per cent** of universities in the world

- **Almost 10,000** degrees awarded annually

- **Only university in Australia** with a hospital on campus

- **More than 181,000** alumni in over 140 countries

- **More than 40,000** students from more than 120 countries

- **100 per cent** of research activity rated at world standard or above at the two-digit level

- **$1 billion** invested in infrastructure and facilities in recent years

- **More than 150** partner universities for student exchange in over 40 countries

- **15 kilometres** from the Sydney CBD
To be considered for this position, you must demonstrate the following selection criteria in a Curriculum Vitae and supporting document (of no more than four pages), providing examples of relevant experience and achievements.

Selection criteria

**ESSENTIAL**

- Hold a PhD in a suitable discipline, with significant contributions to scholarship and research in Proteomics and their post translational modifications, which have resulted in a research impact in your field and peer recognition at a national or international level.
- Demonstrated academic leadership or capacity for academic leadership in the international proteomic community including involvement in prominent advisory boards or steering committees.
- A sustained track record in winning nationally competitive and/or industry research funding.
- Evidence of demonstrated commitment to cross-disciplinary collaboration and/or enabling multidisciplinary collaborations within a department, faculty, university and/or the wider community.
- Demonstrated track record of building trust, nurturing, supporting, mentoring and ensuring the professional development of staff and students.

**ADDITIONAL ESSENTIAL FOR A RESEARCH AND TEACHING ACADEMIC**

- Demonstrated commitment to promoting and advancing the principles of equity, inclusion and diversity in STEMM workplaces.
- Effective delivery of research-led university learning and teaching and a strong track record of effective communication with students and researchers.

**ADDITIONAL ESSENTIAL FOR A TECHNICAL OR INDUSTRY ACADEMIC**

- Recognised leadership in, and a sustained track record, of adding value to an institution (or university) arising from sustained and durable industry, government or community engagement activities or partnerships.
How you can apply

FOR A CONFIDENTIAL DISCUSSION ABOUT THIS ROLE, CONTACT:

Professor Alison Rodger
Head of Department of Molecular Sciences
e: alison.rodger@mq.edu.au
t: +61 426627077

Closing date for applications: Sunday, 31 March 2019

Interviews
Will take place in April 2019

TO APPLY FOR THIS POSITION, SUBMIT THE FOLLOWING INFORMATION WITH YOUR APPLICATION VIA THE ONLINE RECRUITMENT SYSTEM AT JOBS.MQ.EDU.AU:

Curriculum Vitae
Candidates are asked to include in their curriculum vitae their career appointments; academic qualifications (including any grades); publications summary; recognitions and awards; service to their local, national and international academic community; recent invited lectures; funding; industry links; research student supervision; publication list.

Selection Criteria
In no more than four pages, respond to the essential and desirable selection criteria providing examples of relevant experience and achievements.

Renumeration
Level D from AUD$149,391 to AUD$164,321 or Level E from AUD$183,147 to AUD$191,804 per annum + 17% superannuation and annual leave loading.

Referees
Provide the names, contact details and present positions of four referees. Indicate whether referees may be contacted prior to interview.

Date of Commencement
Indicate your availability to commence at Macquarie.

Photos: Chris Stacey, Matt Chang