



## Position Description

<b>College/Division:</b>	ANU College of Physical and Mathematical Sciences
<b>Faculty/School/Centre:</b>	Research School of Chemistry
<b>Department/Unit:</b>	Biological Chemistry
<b>Position Title:</b>	<b>Postdoctoral Fellow</b>
<b>Classification:</b>	<b>Academic Level A</b>
<b>Position No:</b>	
<b>Responsible to:</b>	ARC Laureate Fellow

### PURPOSE STATEMENT:

A Postdoctoral Fellow will contribute towards the ARC Laureate Fellowship project led by Professor Gottfried Otting, Research School of Chemistry. The Postdoctoral Fellow will assist the 'Proteins in motion – new tools for biotechnology' project, in particular the design, conduct of laboratory experiments and data collection. The Postdoctoral Fellow is expected to provide innovative approaches to the research objectives.

### KEY ACCOUNTABILITY AREAS:

#### Position Dimension & Relationships:

The position reports and works independently under the broad supervision of Professor Otting. The Postdoctoral Fellow also receives assistance from Professor Thomas Huber in Biological Chemistry and may provide supervision and training to students and other laboratory staff. The Postdoctoral Fellow is to work closely and collaboratively with staff and students of the Biological Chemistry Group and the wider School academic and professional community.

#### Role Statement:

Specific duties required of a **Level A Academic** may include:

1. Conduct of research associated with Professor Gottfried Otting's ARC Laureate project, including the development of methods, and the design and execution of experiments to tag proteins with genetically encoded unnatural amino acids and measure their effects by NMR spectroscopy;
2. Operate advanced laboratory and technical equipment or conduct advanced research procedures to purify isotope-labelled proteins and proteins with unnatural amino acids by in vivo and in vitro experiments;
3. Develop new experimental strategies for the selection of novel engineered aminoacyl-tRNA synthetases;
4. Collate data from the grant project in preparation for the production of conference papers, seminars and publications arising from the research;
5. Attend weekly laboratory meetings and present research results to other members of the laboratory, on a rotational basis;
6. Guide, supervise and support undergraduate and postgraduate students as well as other research support staff within the area of his/her expertise;
7. Perform some administrative functions primarily connected with the area of research of the academic;
8. Develop some research-related material for teaching or research purposes with appropriate guidance from other staff;
9. Attend at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/or faculty meetings and/or membership of a limited number of committees;
10. Comply with all ANU policies and procedures relating to work health and safety; and
11. Undertake other duties as allocated by the supervisor or the Vice-Chancellor consistent with the classification of the position.

A **Level A 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 Academic** will normally have completed four years of tertiary study in the relevant discipline and/or have equivalent qualifications and/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 that give evidence of research potential.

**SELECTION CRITERIA:**

1. A PhD in Chemistry or a closely related field with a track record of independent research in the field of protein NMR spectroscopy and/or protein structural biology as evidenced by publications in peer-reviewed journals and conferences.
2. Demonstrated research and laboratory skills and experience in:
  - High-field NMR spectroscopy of proteins in solution or in solids;
  - cell-free protein synthesis from natural and unnatural amino acids in mg quantities;
  - bacterial protein production in vivo;
  - protein purification; and
  - engineering of DNA for new protein expression and selection systems.
3. Proven ability to work as part of a team and to meet project deadlines. Commitment to contribute to bids for competitive external funding to support individual and collaborative research activities
4. An ability to assist in the supervision of students working and laboratory user training.
5. Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
6. A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

<b>Supervisor Signature:</b>		<b>Date:</b>	08/04/2018
Printed Name:	Gottfried Otting	<b>Uni ID:</b>	u4046684

**References:**

[Academic Minimum Standards](#)