



Position Title	Research Fellow
Classification	Level B
School/Division	School of Molecular Sciences
Centre/Section	ARC Centre of Excellence in Plant Energy Biology
Supervisor Title	Professor
Supervisor Position Number	304829
Position Number	321212

## Your work area

The Millar Laboratory in the School of Molecular Sciences is researching protein dynamics in plant systems to make discoveries about transcriptional, translational and post-translational regulation that underpin protein abundance, protein function and protein degradation and how they relate to the energetic cost of protein dynamics in cellular function and use of cell resources.

The laboratory operates in a broader context of molecular life sciences of plants at The University of Western Australia and collaborates with international researchers in aligned areas and industry with interests in natural and recombinant protein production and abundance in model plants and crops. The laboratory has expertise and equipment to fuel cutting-edge research in genomics and proteomics.

## **Reporting structure**

Reports to: Professor

#### Your role

As the appointee you will, under broad direction, undertake innovative approaches involving the development of genetic constructs and strategies to express specific recombinant proteins in plant and other model systems and purify them to study their biological role and synthesis and degradation characteristics. Your work will contribute to wider projects in determining key determinants of steady state protein abundance in plants for both fundamental understanding of mechanisms and applied goals in plant protein production. You will co-supervise several PhD students conducting a range of aligned research projects.

You will be supervised by Professor Harvey Millar, collaborate closely with the other staff and students of his laboratory, build relationships and collaborations with research groups in Australia and overseas and play key roles in biological discovery, technology development and student supervision at UWA.

#### Your key responsibilities

Design, develop, execute and analyse research on novel approaches to understand regulation of recombinant protein expression and stability

Write research articles for publication in leading international journals

Set up reliable and reproducible experimental systems and develop collaborations in alignment of such experiments

Keep records and follow procedures required by the rules of funding agencies

Teach new researchers and students the use and development of molecular biology and protein purification methods, application and computational analysis Travel for research meetings and for research collaboration visits as required Other duties as directed

# Your specific work capabilities (selection criteria)

PhD in molecular biology, genetics or a related discipline

Demonstrate experience in molecular biology techniques required for cloning and gene construct design and development for protein expression

Demonstrated experience in plant, yeast and/or E. coli transformation and analysis

Demonstrated experience in plant biology and undertaking plant-based experiments

Demonstrated experience in project management

Well-developed interpersonal skills and written and verbal communication skills

Ability to work independently, show initiative, problem solve and work productively as part of a team

Strong computing and data management skills

Demonstrated evidence of a strong track record in high quality scientific publication and experience in preparing manuscripts for publication

Demonstrated evidence of good supervision of post graduate students

## Special requirements (selection criteria)

Occasional travel within the state and interstate may be required Some after-hours work may be required

## Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct hr.uwa.edu.au/policies/policies/conduct/code/conduct

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing safety.uwa.edu.au/