



CCDM Scholarship – understanding agrochemical behaviour inside plants

Status: **Open**

Applications open: 14/07/2021

Applications close: 12/12/2021

About this scholarship

Description/Applicant information

There are two scholarships on offer with the new Deputy Director of the Centre for Crop and Disease Management (CCDM). Co-supported by Curtin University and the Grains Research and Development Corporation, the CCDM does research that helps provide solutions to Australian farmers to protect crops from fungal pathogens, especially in wheat, barley, canola and pulses.

The research topic for students receiving these scholarships will be to better understand fungicide behaviour inside plants. Focusing on important field-used fungicides, using a model plant system, genetic mutants and mass spectrometry we will ask about their behaviour in plants. Do plants deactivate them? Does it affect their movement inside the plant? What chemical structures do they turn fungicides into? How quickly does it happen for each? Can its chemical structure protect a fungicide from biotransformation in plants? How does environment affect these processes? What enzymes are responsible for it?

The projects will have a strong mass spectrometry component. Students will have access to WA's first OrbiTrap Exploris 120 (a highly sensitive mass spectrometer) and trained and supported in its use by a full-time technical mass spectrometry expert.

A suitable candidate can start immediately or by January 2022.

Although open until 12 December 2021, once candidates of suitable merit are found, the call will be closed. E-mail josh.mylne@curtin.edu.au if you are in any doubt whether these two scholarships are still available.

Student type

- Current Students
- Future Students

Faculty

- Faculty of Science & Engineering
 - Science courses

Course type

- Higher Degree by Research

Citizenship

- Australian Citizen
- Australian Permanent Resident

Scholarship base

- Merit Based

Value

\$28,597 p.a. pro rata indexed, based on full-time studies, for a maximum of 3 years (with possibility of 6 month extension if deemed necessary).

Total value up to \$100,090

Scholarship Details

Maximum number awarded

2

Eligible courses

Any HDR student wishing to study the fields of plant metabolism, molecular biology and chemical biology



Eligibility criteria

Eligibility criteria –

- Australian citizen or Australian Permanent Resident
- Full-time enrolment
- Successful recipients must also not be in receipt of any other scholarship

The successful candidate will have:

- A Masters degree in a relevant discipline requiring the completion of a publicly available thesis or research project to an acceptable standard; OR
- A Bachelors degree with first class honours; OR
- Graduated with a Bachelors degree (with first class or upper second honours) and completed a postgraduate diploma or its equivalent, or completed a Masters degree by coursework with, in both cases, a course-weighted average of not less than 70 per cent within the University, and demonstrated the capacity to undertake significant research

At least one degree will be in biochemistry, chemistry, molecular biology or a related course.

Additionally, the applicant should:

- Preferably have experience in research and/or the use of statistical packages; and
- Preferably have experience of publishing peer-reviewed research.

Enrolment requirements

Recipients must complete their milestone 1 within 6 month of enrolment and remain enrolled on a full-time basis for the duration of the scholarship

How to apply

Application process

Please email Prof. Josh Mylne (CCDMAdmin@curtin.edu.au) an expression of interest with:

- Curriculum vitae
- Academic transcripts
- A brief covering letter (no more than 2 sides A4) that addresses the **eligibility criteria**. The letter should explain why you are interested in the project and how your skills, attributes and experience make you a good candidate for the award.

Need more information?

Enquiries

Contact Person: Professor Josh Mylne

Email: CCDMAdmin@curtin.edu.au