

PhD Scholarship

Frog ecology and disease dynamics

School/Centre	School of Life and Environmental Sciences
Faculty/Institute/Division	Faculty of Science Engineering & Built Environment
Classification	PhD
Responsible to	Professor of Terrestrial Ecology
Hours of Duty	Full-time
Location of Work	Melbourne Burwood Campus
Vacancy closes	15 January, 2015
More information	Professor Don Driscoll, d.driscoll@deakin.edu.au

POSITION PURPOSE

The PhD scholar will initiate and conduct research in the area of amphibian conservation. Chytridiomycosis, caused by the chytrid fungus, is the worst wildlife disease globally, responsible for the decline or extinction of more than 200 amphibian species. In Victoria, the Baw Baw frog has been in steady decline over recent decades due to chytridiomycosis, and is at risk of extinction without urgent action. However, beyond captive breeding, which is under way at the Melbourne Zoo, inadequate knowledge of disease dynamics in the wild prevents informed reintroduction. This project will aim to define the disease risk across the current and former range of Baw Baw frogs using newly emerging environmental DNA techniques alongside traditional field ecology methods. The project aims to identify sites with low chytrid risk, supporting the Zoo's long-term ambition to reintroduce this species to the wild.

This three-year scholarship is funded by the *Faculty of Science Engineering and Built Environment, School of Life and Environmental Sciences (LES)*.

SELECTION CRITERIA – ESSENTIAL

Qualifications

1. A first class honours degree in ecology or related disciplines.

Experience, Knowledge and Skills

2. Experience in collecting field data and capacity to undertake independent field work in remote areas.
3. Capacity to implement research in collaboration with a range of stake-holders (government agencies, private landholders, conservation groups etc.).
4. Strong written communication skills including the capacity to write research results into scientific papers.

SELECTION CRITERIA – DESIRABLE

Strengths in some or all of the following fields would be an advantage:

5. Peer reviewed scientific publications
6. Familiarity with the statistical program R or evidence of a capacity to learn.
7. Analysis of spatial data
8. Python programming and electronic engineering
9. Genetic lab work and analysis
10. Engagement with the media

SPECIAL REQUIREMENTS

- Drivers licence
- Include in your application a brief cover letter and a CV.
- Address selection criteria 1-10 in no more than two pages.
- Write up to half an additional page (up to 300 words) describing your ideas for exploring the problem of chytrid fungus impacts on Baw Baw frogs. (any citations may be included in addition to the half page).

How To Apply

Email your application to d.driscoll@deakin.edu.au before 15 January 2016 following the format described in special requirements above.

LIFE AT DEAKIN

Deakin University is proud to be recognised as an organisation that offers a friendly and supportive working environment. Our staff are committed to genuinely making a difference to thousands of people's lives by contributing to excellence in their education. We acknowledge the importance of providing a dynamic and diverse working environment and strive to offer variety in day-to-day roles as well as various career and professional development opportunities to assist staff to grow and progress their careers. Deakin University staff have the opportunity to interact with colleagues from a diverse range of cultures and professional backgrounds, all who share a common interest in lifelong learning. Furthermore, our staff enjoy the physical location and natural surrounds of our working environments, which they report as enhancing their job satisfaction.

Alongside our international and Australian partners, Deakin University operates on four main campuses; Melbourne Burwood Campus, Geelong Waurin Ponds Campus, Geelong Waterfront Campus, and the Warrnambool Campus. We also have a location in the Melbourne and Warrnambool CBDs as well as learning centres across regional Victoria.

The University may require staff to work at other locations outside their primary place of work.

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[School of Life and Environmental Sciences](#)

[Faculty of Science Engineering & Built Environment](#)

[Benefits of working at Deakin](#)

[LIVE the Future – Deakin University Strategic Plan](#)



ORGANISATIONAL CONTEXT

The appointee will work with support and direction from the supervisor and Research Fellow in terrestrial ecology.

ORGANISATIONAL RELATIONSHIPS

The PhD reports to the Head of School through the Research Supervisor.

PRINCIPAL ACCOUNTABILITIES

The PhD is expected to contribute towards the research effort of the University and conduct research independently and / or team research for the project. It is important that the PhD will contribute to the profile and research reputation of LES and CIE, by means that may include public lectures, seminars, contributing to public debate and policy formation on key research issues.

The PhD will carry out activities to develop their research expertise relevant to the particular field of research.

- Initiate and conduct research under limited supervision either as a member of a team, or independently (where appropriate), to achieve the objectives of the University, Faculty, School and the CIE.
- Personally and through active participation in teams, prepare and develop grant applications relating to the project(s), and contribute to the preparation, or where appropriate, individual preparation of research proposal submissions to external funding bodies.
- Conduct research and engage in scholarly publication, personally and in research teams and prepare findings/results for oral and written communication, producing or contributing to the production of conference and seminar papers and publications from that research.
- Promote the activities of the University, particularly those relating to research within academic and professional communities in Australia and internationally where appropriate.

DUTIES

- Undertake experimental design and operation of advanced laboratory/technical/analytical research procedures.
- Remain up to date with current literature and methods relevant to the area of responsibilities.
- Be involved in professional activities, including (subject to availability of funds) attendance at conferences and seminars in the field of expertise.
- Undertake administrative functions related to grant preparation and the area of research.
- Attend meetings associated with the research project(s) and attend other meetings as appropriate.
- Complete PhD in 3 years.

LEVEL OF SUPERVISION AND INDEPENDENCE

Research is conducted independently in the context of frequent consultation with other team members and with the responsible research investigators.

PROBLEM SOLVING AND JUDGEMENT

The Research Fellow is expected to exercise judgement on work methods and task sequences within standard practices and procedures and to seek expert advice for work methods that fall outside the standard practices.

Capacity to work independently, to use initiative and to work well within a team setting is expected.

OCCUPATIONAL HEALTH AND SAFETY

The Research Fellow will be responsible for:

- Following safe work procedures and instructions.
- Taking reasonable care for the safety of self and others.
- Seeking guidance for all new or modified work procedures.
- Ensuring that any hazardous conditions, near misses and injuries are reported immediately to a supervisor.
- Participating in meetings, training and other health and safety activities.
- Using equipment in compliance with relevant guidelines, without wilful interference or misuse.
- Must cooperate with the University in relation to actions taken by the University in order to comply with the Occupational Health and Safety and Environmental legislation.

In addition, research only academic staff are responsible for ensuring that an equivalent standard of environment, health and safety is afforded to their students as is afforded to University staff generally. Research only academic staff are deemed to have principal supervisory duty for undergraduate and postgraduate research student activities.