



Ph.D. Studies in Biodiversity and Host-Specificity of Gut Methanogenic Archaea

Cat-1 PhD Scholarship with the University of Queensland's Diamantina Institute and Australian Centre for Ecogenomics

The Project: You will be part of an Australian Research Council Discovery Project between the University of Queensland's Diamantina Institute (**Professor Mark Morrison**) and Australian Centre for Ecogenomics (**Dr Rochelle Soo and Dr Paul Evans**). The person will help provide a deep functional understanding of recently discovered microbes from the Domain Archaea that inhabit the digestive tracts of native Australian herbivores, humans, and other animals.

The Research: In consultation with the supervisory team, you will develop a research plan that brings novel Archaeal taxa to life via metagenomics. You will also use our globally unique collection of bioresources and innovations in molecular microbiology research, to help define the roles of Archaea in the low methane carbon economy of native Australian herbivores. Very little is known about the microbes that co-evolved with these animals to support their nutrition and health.

The Outcomes: You will help address the knowledge gaps and support the development of new strategies relevant to the health, population dispersal, and conservation of these iconic animal species. The knowledge gains from this project are also expected to provide new opportunities relevant to agriculture and medicine. As such, the project's national benefits are both timely and broad, and should be attractive to person with career interests in natural sciences, medicine, or agriculture.

The Process: *Applications will be judged on a competitive basis, taking into account their academic record, preferably in the field(s) of microbiology, genomics, or molecular biology. A working background or knowledge of microbial physiology (including cultivation methods), statistics, or computational biology is highly desirable. **You must be able to commence studies no later than Research Quarter 1 (January), 2022.***

How to apply: Please email with the heading "Cat-1 PhD scholarship" to Professor Mark Morrison m.morrison1@uq.edu.au to express your interest, and visit the University of Queensland Graduate School website at <https://graduate-school.uq.edu.au/phd-scholarships-science> for more details.

Diamantina Institute is part of The University of Queensland, one of the top Australasian universities, and internationally is ranked in the top 100 universities in all major independent rankings. The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University's Diversity and Inclusion webpage for further information and points of contact if you require additional support.