

PhD Scholarships in Climate Science

The Climate Change Research Centre at the University of New South Wales has several fully funded scholarships available for outstanding Australian students to undertake PhDs in various aspects of climate science. Scholarship holders must demonstrate high academic achievement and be driven to answer questions concerning the physics and impacts of climate change.

Specific opportunities exist for students interested in studying the impact of climate change on the water resources of the Murray-Darling basin. Possible topics include studying the land-atmosphere interactions within the basin including precipitation recycling, vegetation feedbacks on climate during drought, streamflow responses to changes in climate and changes in land-use, improving land cover classifications using satellite data. However, outstanding applicants should want to define their own research focus and this is strongly encouraged. International travel to research laboratories, workshops and conferences is expected and opportunities for fieldwork may exist. The resulting Ph.D. will position you for a career in hydrology and climate science: the key national research priority in Australia. A quantitative background in Earth or atmospheric sciences, physics or maths is preferred. Experience with a programming language, atmospheric or hydrology models, and/or GIS and remote sensing software would be advantageous.

Another opportunity exists for students to explore the ocean's role in regulating atmospheric CO₂ concentrations and / or investigate the biogeochemical impacts associated with climate change such as ocean acidification. Excellent candidates have the opportunity to define their own project within this broad but critically important area in climate science. Depending on the students interests, the project could involve the collection and analysis of ocean CO₂ samples in regions such as the Southern Ocean with the possibility of travel to Antarctica, or for research that focuses on the Great Barrier Reef. The project may involve travel and collaboration with researchers from the CSIRO – Marine Laboratory in Hobart for analysis and use of the latest climate change models. The resulting PhD will position you for a career in oceanography and climate science and will involve extensive overseas travel to conferences and workshops. A background in Earth / atmospheric / ocean sciences is preferred. Experience with a programming language (Fortran), or data-analysis package (MATLAB, S-Plus, R etc) software would be advantageous.

These scholarships are valued at \$25,000 p.a. The applicant is expected to apply for an Australian Postgraduate Award, if successful these scholarships will be converted to a \$5,000 p.a. top up, taking the total annual income above \$25,000.

For further information please contact Dr. Jason Evans at jason.evans@unsw.edu.au (phone (02) 9385 7066) or Dr Ben McNeil at b.mcneil@unsw.edu.au (phone (02) 9385 7068).

Applications for a scholarship, including CV and academic transcript should be sent to: Dr Jason Evans, Climate Change Research Centre, Red Centre Building, University of New South Wales, Sydney NSW 2052, Australia.