

Australia

| | University name | Departments | Specialization | Subjects |
|-----------|--|--|--|--|
| Australia | Australian National University https://www.anu.edu.au/ | The Research School of Biology: Division of Biomedical Science and Biochemistry, Division of Ecology and Evolution | Fiddler crab, reptile, frog, bird, bee, <i>C. elegans</i> | <p>Topics such as exercise physiology and stick insect ecology, including plant and animal ecology, parasitology, drug-resistant and infectious diseases, evolution, biotechnology, genetics, and photosynthesis. Adamska Group - research is aimed at uncovering the genetic and genomic basis of morphological complexity in animals, from both developmental and evolutionary perspectives. The Altin group on tumour immunology and liposome targeting. Backwell study the behaviour of fiddler crabs in their natural environment (tropical mangrove forests) in Darwin. Ball (Eldon) Group uses molecular tools to investigate many aspects of coral biology including comparative genomics, development, stress responses and calcification. Behm Group uses powerful biological resources provided by <i>C. elegans</i> to study aspects of nematode biochemistry, molecular biology and behaviour, and control methods. Borevitz Group studies the population genetics process of adaptation in natural plant populations, using state of the art techniques in a handful of model organisms. Broer group studies the role of amino acid transport in the onset of insulin resistance and the regulation of carbohydrate metabolism. Bromham Group uses phylogenetic comparative methods to investigate the characteristics of lineages that influence the pattern and rate of genome evolution. Callaghan Group research focuses on understanding the contributions of membrane transport processes to disease and overcoming their impact in treating disease. Cooper Group research topics include insect physiology, salt and water regulation; locust and grapevine scale biology, and environmental physiology. Langmore Group studies many aspects of evolutionary and behavioural ecology in birds, mainly by using field experiments and observations to test evolutionary theory. Maleszka Group is investigating diverse epigenetic mechanisms in the context of behaviour and developmental plasticity, mainly using the honey bee model.</p> |
| | Charles Sturt University https://www.csu.edu.au/ | Faculty of Science, The School of Animal & Veterinary Sciences | Small animal | Physiology and pharmacology, farm animal production and reproduction, animal health and disease, public health and many other areas of animal and veterinary science. Research has both national and international aspects and they work with a wide range of species including farm animals, horses plus terrestrial and aquatic wildlife. |
| | James Cook University https://www.jcu.edu.au/ | College of Public Health, Medical and Veterinary Sciences | Worm, reef fish | Research in areas such as marine sciences, biodiversity, tropical ecology and environments, global warming, tourism, and tropical medicine and public health care in under-served populations. Secretomes of parasitic helminths, and the subsequent use of worm secreted proteins as therapeutics and diagnostic tools. |
| | Monash University https://www.monash.edu/ | School of Biological Sciences Centre for Geometric Biology | Marine invertebrates, investigations span a range of organisms, from unicellular algae and bacteria to plants, invertebrates and vertebrates including humans. | Genomics, emerging infectious diseases, ecology and conservation biology. |
| | Murdoch University https://www.murdoch.edu.au/ | School of Veterinary and Life Sciences Centre for Production Animal Research | Domestic, small animals | <p>Agricultural biotechnology, veterinary science, animal production, zoology, genetics, economically efficient, sustainable and ethical production of quality food and fiber. Producing livestock products in an environmentally and socially responsible way is the ultimate goal of their research. Behaviour, Health and Welfare: Pain management Nutrition for intensive and extensive production animal management in export environments, development of animal welfare assessment tools, improved pathogen detection, vaccine development, antimicrobial resistance.</p> <p>Production Animal Systems: Reproductive and maternal efficiency Metabolic diseases in production animals, sustainable sheep parasite management. Meat, milk and fiber production: Meat quality Developing products to meet consumer preferences Nutrition and disease interactions. Advanced molecular technologies- proteomics, metabolomics, next generation sequencing Discovery of biochemical and physiological mechanisms that underpin industry issues Field based research and population monitoring.</p> |
| | University of Tasmania https://www.utas.edu.au/ | College of Science and Engineering, School of Natural Sciences | Lizards as a model system, but also marsupials, birds, frogs and insects. the famous Tasmanian devil (largest marsupial carnivore) and the giant freshwater crayfish, <i>Astacopsis gouldi</i> . | Genetics, zoology. Erik Wapstra: Sex allocation, sex determination telomere biology, developmental plasticity, life history evolution. Geoff While: Social evolution, developmental plasticity, hybridization. Elissa Cameron: Ecological physiology, reproductive biology. Chris Burridge: Population, evolutionary and conservation genetics. Menna Jones: Wildlife and habitat management. Rodrigo Hamede: Disease ecology and epidemiology. Ashley Edwards: Comparative endocrinology |