2020 Scholarships

The **Graduate Research School, Faculty of Science, Agriculture, Business and Law** at **The University of New England** has a range of scholarship opportunities available.

About Us

The University of New England in Armidale, Australia boasts an excellent national and international reputation being a leader in research, teaching and academic innovation that has industry impact. We aim to foster a constructive and engaged culture where creative ideas and innovation thrive.

The **Graduate Research School** coordinates all aspects of Higher Degree Research within the **Faculty of Science, Agriculture, Business and Law**.

What we offer

The **Graduate Research School** is offering a range of domestic and international scholarships. Scholarships include:

- Research Training Program scholarship (RTP) - A stipend of approximately $28,092 per annum for up to three years for PhD candidates or, up to two years for Masters by Research candidates;
- Destination Australia Program (DAP) - A stipend of $15,000 per annum. This can be added as a 'top-up' to the RTP scholarship or used as a separate scholarship; and
- Accommodation scholarship for accommodation costs for one year at one of UNE's residential colleges.

Applicants are encouraged to apply for one or more of the above scholarships.

Successful candidates will receive a grant to support their operational research costs of between $1,500 and $3,500 per annum depending on degree and discipline area. Typically these funds are used for fieldwork costs, conference attendance, and to purchase research items.

These scholarship opportunities are open to high quality applicants, but consideration will be given to applicants applying for our key strategic areas outlined below.

Research Projects

Each school and centre has outlined areas of research that will be given preference, but we encourage applicants from all areas to apply. For more information on our strategic research areas, please follow the links.

- Law
- Business
- Environmental & Rural Science
- Science & Technology
- Cooperative Research Centres

How to apply

For full details on how to apply, please visit the Graduate Research School website.

Graduate Research School website

The School of Environmental and Rural Science is a research-intensive School, with approximately 100 continuing and fixed-term academic staff, as well as many adjunct academic staff supervising about 200 higher degree research students. Profiles of our academic staff are provided in our Science, Environment and Agriculture Research Prospectus for intending higher degree research students.

Animal Science and Systems

Fields and strengths – Environmental and Rural Science has research strengths in Animal Science and Systems, including animal genetics and breeding, animal health and welfare, animal nutrition, animal physiology, animal production, companion animals, international agricultural development, meat science, beef production, sheep & wool science, poultry science, and modelling animal systems.

Life Earth and Environment

Fields and strengths – Environmental and Rural Science has research strengths in Life Earth and Environment, including aquatic ecology, botany, conservation biology, ecology and evolution, entomology, parasite ecology and evolution, plant systematics and genetics, plant–pollinator systems, vegetation ecology and management, fire ecology, vertebrate and invertebrate comparative ecology and physiology, wildlife ecology and management, zoology, earth sciences, geology, palaeontology, spatial information science, ecological restoration, ecosystem services, social–ecological systems, cultural burning, and natural resources management and governance.

Plant Soil and Environment Systems

Field & strengths – Environmental and Rural Science has research strengths in Plant Soil and Environment Systems, including, agronomy, agricultural extension, crop nutrition, crop protection and weed science, cotton production, horticulture, organic food and fibre production, plant production and breeding, pollution science, root zone processes, soil science, sustainable farming, environmental sensing and modelling, and terrestrial carbon processes and assessment.

Cross-Cutting Research Themes

Higher degree research students are also welcome to apply for scholarships in the following cross-cutting themes: biosecurity, global agri-environmental futures, and vertebrate pest management and trophic cascades.

Graduate Research School website

The **School of Science and Technology** offers a unique combination of pure and applied sciences, encompassing chemistry, biomedical sciences, mathematics, computer science, physics, statistics and exercise & sport science.

CHEMISTRY FOCUSING ON MACROMOLECULAR AND MATERIALS CHEMISTRY

We have an extensive Chemistry department with a strength in Macromolecular and Materials Chemistry. Our researchers have considerable expertise in both synthetic and natural macromolecules with a focus on systems of relevance to industry and regional Australia. Active areas of research also include the development of polymeric scale inhibitors for processes such as desalination and sugar milling, extraction of and value-adding to lignin from biomass, fundamental studies to increase the versatility of controlled free-radical polymerisation, development of advanced soft materials through supramolecular self-assembly, and improving the physical properties of cereal foods.

Contact supervisors: Brendan Wilkinson, Chris Fellows, Trevor Brown, Ben Greatrex, Peter Lye, Michelle Taylor, Siew Chong, or Erica Smith.

BIOMEDICAL SCIENCE FOCUSING ON NEUROSCIENCE

Biomedical Science is a continually changing, dynamic profession that includes a range of areas such as biochemistry, infection and immunity, genetics, molecular biology, neuroscience and physiology. Neuroscience has been described as the fastest growing discipline in biomedical research, with our focus at UNE in our Brain-Behaviour Research Group incorporating pre-clinical and clinical aspects of stress, pain, anxiety, depression, autism and the gut-brain axis. All of our neuroscience research projects have the common theme of understanding neural processes and linking them with behaviour to describe clinical phenomena.

Contact supervisors: Chris Sharpley, Vicki Bitsika, Christian Cook, Adam Hamlin, Mary McMillan, or Phillip Fourie.

PURE AND APPLIED MATHEMATICS

UNE's Mathematical Analysis and Modelling Research Group has a broad range of interests that span pure and applied mathematics. Our researchers study a number of problems due to their intrinsic mathematical interest and their applications in various areas of science, technology and industry. Our focus in research includes differential equations, real and complex differential geometry, topology, CR-geometry, mathematical biology, combinatorics and operations research. The research undertaken is applicable to multiple branches of science including biology, chemistry, physics, rural sciences, exercise and sport science, economics and data science, as well as with business and industry.

Contact supervisors: Yihong Du, Adam Harris, Thomas Kalinowski, Timothy Schaerf, Gerd Schmalz, Jelena Schmalz, Beatrice Bleile, David Robertson, or Jock McOrist.

APPLIED AGRICULTURAL REMOTE SENSING CENTRE - REMOTE SENSING AND CLIMATE MODELLING

A PhD with UNE's Applied Agricultural Remote Sensing Centre will see the successful PhD applicant develop yield and quality models for a variety of tree crop systems by integrating remote sensing, climate modelling, national tree map and targeted IOT networks. Completing your PhD with AARSC is a unique opportunity which would see you working on your studies whilst being supported by an extensive collaborative group, including industry partners of current projects. The team at AARSC have both strong agronomic and remote sensing research backgrounds, they are effective in generating technical outcomes, and interpreting results ensuring the relevance, application and adoptability of research outcomes on farm. Remote sensing, climate modelling, GIS, agricultural experience is desirable.

Contact supervisors: Andrew Robson, Angelica Suarez, Moshiur Rahman, James Brinkhoff, or Azeem Khan

Further disciplines are available in Science and Technology, including: Computational Science, Exercise and Sports Science, Physics and Statistics. You can view our full list of supervisors in our Science, Environment and Agriculture Postgraduate Prospectus if you are interested in these areas.

Graduate Research School website

The **UNE Business School** is inviting applicants to apply for research topics in their key strategic areas as outlined below. Although, not mandatory, it is desired that applicants have skills in statistical analytical packages; experience using NVIVO and Leximancer; and quantitative and qualitative data analyses techniques, dependent upon their topic. Full supervisor details can be viewed in the Business and Law Postgraduate Prospectus.

Agriculture and Environment

The Agriculture and Environment cluster conducts applied agricultural research to finding solutions to economic policy questions in public and private sectors and solve complex problems in rural and regional areas working in close collaboration with industry, academia and government. Specialising in local and regional issues pertaining to gender and agriculture, farm succession, efficiency and productivity, impact evaluation, ecosystem services valuation, climate change, energy, waste and biosecurity - the cluster has generated excellent research outputs in high-profile premium journals such as *Energy*, *Ecological Economics*, *Energy Economics*, *Energy Policy*, *Environmental and Resource Economics* and *Journal of Agricultural Economics.* Staff in the UNE Business School associated with this cluster also attracted significant national and international competitive grant funding, such as Australian Research Council (ARC) Linkage, Australian Centre for International Agricultural Research (ACIAR) and Food and Agriculture Organization (FAO) of the United Nations.

Supervisors in the cluster include: Lucie Newsome, Alison Sheridan, Rene Villano, Theresa Smith-Ruig, Sujana Adapa, Subba Reddy Yarram, Masood Azeem, Donella Piper, David Hadley, Euan Fleming, George Battese, Mahinda Siriwardana, Derek Baker, Oscar Cacho, Manu Saunders, Jonathan Moss, George Chen, Phil Simmons, Stuart Mounter, Gary Griffith, Emilio Morales and Susie Hester.

Development, Markets and Growth

The Development, Markets and Growth cluster focuses on research on topical issues that are of interest to various internal and external stakeholders in areas such as sustainable development, inclusive growth, international trade, consumer behaviour, corporate finance, financial markets and services marketing. The emphasis on the use of novel qualitative and quantitative analytical techniques to explore the transmission mechanisms in those areas has attracted quality research students to work in this cluster. The cluster has generated high-impact publications such as *Economic Modelling*, *Regional Studies*, *China Economic Reviews*, *Economics of Transition*, *Journal of Development Studies*, *Asia Pacific Journal of Management*, and *Journal of Retailing and Consumer Services*.

Supervisors in the cluster include: Michelle Goyen, Nam Hoang, Subba Reddy Yarram, Shawn Leu, Mahinda Siriwardana, George Chen, Masood Azeem, Sujana Adapa, Jonathan Moss, Rene Villano and Omar Al Farooque.

Governance, Sustainability and Ethics

The Governance, Sustainability and Ethics research cluster specialises in sustainability, governance, ethics, leadership, values performance, well-being, public policy diversity and small and medium enterprises generating high quality research outputs (e.g. *Human Relations*, *Journal of Business Ethics, Journal of Cleaner Production, Gender Work and Organization*, *International Small Business Journal* and *Critical Perspectives on Accounting)*. Members of the group have engaged in extensive team-based inter-disciplinary collaboration with researchers from Australia and around the world and have obtained project funding through industry partners including NSW Trade and Investment, the Institute of Public Accountants (IPA), Cotton Research Development Corporation (CRDC), CRC Remote Economic Participation and the Australian Chamber of Commerce and Industry

Supervisors in the cluster include: Ashfaq Khan, Omar Al Farooque, Valerie Dalton, Simon Burgess, Peter McClenaghan, Bernice Kotey, Leopold Bayerlein, Josie Fisher, Alison Sheridan, Lucie Newsome, Rene Villano and Subba Reddy Yarram.

Graduate Research School website

The **School of Law** is inviting applicants to apply for research topics in their key areas as outlined below. Skills in qualitative or quantitative social science methods (e.g. interviews and surveys), and skills in the analysis of legal and policy document (e.g. reports, cases and statutes) are desirable but not essential as long as candidates commit to learning these on the job. High-level skills in reading complex documents and writing in English are essential. Full supervisor details can be viewed in the Business and Law Postgraduate Prospectus.

RURAL SOCIO-LEGAL AND GOVERNANCE ISSUES

Droughts and bushfires across Australia have re-focused attention on the rural sphere. Citizens in some remote rural communities are amongst the most disadvantaged people in Australia and around the world. Rural areas comprise the vast bulk of the world's inhabitable land but increasing urbanization concentrates power, personnel, and finance in metropolitan centres. That means a lot of land to be cared for, and a lot of food, fibre and energy products to be produced by a shrinking rural population, with proportionally fewer resources to do it. And yet, the opportunities from the demand for high quality rural products with credible environmental, animal welfare, and social credentials are set to explode.

Available supervisors – Michael Adams, Paul Martin, Mark Perry, Guy Charlton, Ottavio Quirico, Skye Saunders, Andrew Lawson, Tanya Howard, and Patrick Graham.

CORPORATE GOVERNANCE AND RESPONSIBILITY

Field & strengths - The nexus of governance and responsibility strategies of the corporations are evolving. In the aftermath of some corporate scandals, and with the rise of civil society campaigns against the negative impact of corporate operations particularly on the environment, business corporations are under pressure to effectively perform in socio-environmental responsibility issues. The corporate law researchers in the School of Law are known for their research on the devolution in the traditional corporate governance practice and the legal strategies for raising corporate social responsibility performance. The School is well-connected with the leading national and international corporate societies, corporate law practitioners and the guilds active for ensuring ethics and responsibilities in corporate operations. It is ideally situated to research in corporate governance and sustainability regulation, with particular focus on (a) the regulation of hybrid corporations, (b) regulation of technologies for corporate decision making, (c) meta-regulation approach for raising corporate accountability and (c) the legal regulation of corporate social responsibility.

Available supervisors – Michael Adams, Ottavio Quirico, Mia Rahim, Kip Werren, Sharl Marimuthu, Ying Chen and Same Varayudej are well-known and highly experienced corporate law research supervisors in the School, and available for supervising higher degree research projects.

NATURAL RESOURCE AND SUSTAINABILITY REGULATION

Fields and strengths – 'Be the change you want to see in the world' by researching with UNE's Law School on the most profound challenge of our age – the preservation and sustainable use of the finite and delicate natural resources of the world. Climate change, species loss, land and marine degradation, combined with overuse, over-consumption and over-extraction are all problems of natural resource governance and regulation. The burden of environmental trade-offs and compromises can fall heavily on the most disadvantaged members of the community. Thus, legal research has an expansive agenda – not merely to understand and govern these issues, but to do so effectively in ways consistent with principles of fairness, justice, transparency and accountability.

Available supervisors – Paul Martin, Mark Perry, Cameron Moore, Ottavio Quirico, Sharl Marimuthu, Andrew Lawson, Tanya Howard, and Mark Shepheard.

Graduate Research School website

Food Agility Cooperative Research Centre

Food Agility CRC's Higher Degree by Research (HDR) Program is training the next generation of agrifood scientists, technologists, and industry innovators. Our Scholarships are available to both research and professional Doctorate and Masters Students, with full and top-up scholarships available for both domestic and international students. Food Agility's higher degree support program offers a range of mentoring and personal development activities, industry experience and engagement and incorporates tailored training and professional development opportunities, including in entrepreneurship and communication, to equip students for a rapidly changing agrifood sector.

Scholarships are open to UNE postgraduate students working in *1. Digital agrifood technologies*, *2. Agrifood informatics and analytics* and *3. Sustainable food systems*. This also includes business transformation/innovations. As Food Agility's focus is on digital-enabled transformation, projects with a strong digital component will be considered.

This Scholarship program is available to all UNE academic staff (all faculties) as potential supervisors. We also have access to co-supervisors at our other university partners, state departments and industry partners (https://www.foodagility.com/partners). For information or guidance to potential supervisor's and project areas, contact Prof David Lamb (UNE dlamb@une.edu.au /Food Agility dave.lamb@foodagility.com)

Further information of Food Agility CRC and its HDR Scholarship program can be found at www.foodagility.com and https://www.foodagility.com/researchers-apply, or by contacting Prof David Lamb

Future Food Systems Cooperative Research Centre

The Future Food Systems Cooperative Research Centre research and capability programs will support participants in optimising the productivity of regional and peri-urban food systems, taking new products from prototype to market and implementing rapid, provenance-protected supply chains from farm to consumer. The Future Food Systems CRC is committed to offering scholarships potential and existing PhD and Masters Students to help deliver a substantially strengthened and interconnected research capability across Australia focused on future food systems. There will be two types of scholarship offered by the CRC, a supplementary or 'top up' scholarship for those with existing scholarships, and a full scholarship.

Program 1. Regional food hubs research will involve areas such as statutory planning, spatial analysis and mapping, supply-chain logistics, provenance protection, circular economy and trade solutions.

Program 2. High-tech protected cropping is focussed on horticulture, plant genetics, pest and disease management, greenhouses and growth rooms, robotics/mechatronics/automation, and light, water and energy optimisation.

Program 3. Value-adding involves food analysis and formulation, safety, hygiene, personalised medicine/precision nutrition, population studies, clinical trials, standards and policy, factory design, automation, food manufacturing technology and industry 4.0 solutions.

UNE has potential supervisors across each of the three research program areas. Contact the Prof Brian Sindel, Director of Education and Training for the Future Food Systems CRC for potential supervisor contact and application details. Phone 61 2 6773 3747 or Email bsindel@une.edu.au. https://www.futurefoodsystems.com.au/about/