

2023 International postgraduate research prospectus





A world-class university in the heart of one of the world's most liveable cities*

* Economist Intelligence Unit Global Liveability Index, 2019



make history.

From our Vice-Chancellor / 2 One of Australia's top research universities / 4 Research institutes and centres / 6 Adelaide Graduate Research School (AGRS) / 8 Research programs / 10 English language proficiency requirements / 14 PEP for HDR programs / 16 Scholarships for international students / 18 Managing your money / 20 Our campuses / 22 We'll support you on your journey / 26 Be part of our community / 27 A place to call home / 28 Adelaide - the perfect city for students / 32 Faculty of Arts, Business, Law and Economics / 38 Faculty of Health and Medical Sciences / 58 Faculty of Sciences, Engineering and Technology / 74

International research student fees / 104





From our Vice-Chancellor

A member of Australia's prestigious Group of Eight research-intensive universities and ranked in the top 1% of universities worldwide, the University of Adelaide is recognised globally for its research excellence and dedicated staff that are international leaders in their field.

Our postgraduate research degrees are worldclass, driven by cutting edge research and technology that encourages critical thinking, problem solving, teamwork and communication. The University's Industry Engagement Priorities ensures close alignment with the needs of industry while our broader research mission is committed to tackling the grand challenges of our time. The University is focused on preparing students for their careers through industry placement and internship opportunities.

While the Covid-19 pandemic continues to create some uncertainties, which may impact travel to and within Australia, we are very much looking forward to warmly welcoming our diverse student body, from over 90 countries, to the University and, when possible, back to our campuses, including our beautiful North Terrace campus located at the heart of our city. Our international orientation activities will assist students, wherever they may be in the world, with making a successful transition and learning more about the South Australian culture.

A postgraduate research degree at the University allows for study at the forefront of discovery, with access to state-of-the-art research facilities, cross-disciplinary programs, and a connection to a globally integrated and culturally diverse community. The academic environment of the University pursues excellence, creativity of thinking, and innovation. With five Nobel Laureates and more than 100 Rhodes Scholars we provide graduates with the support and opportunity to make a major contribution to the world.

Vice-Chancellor and President Professor Peter Høj AC

One of Australia's top research universities

Excellence in Research for Australia (ERA) is an initiative of the Australian Government, which aims to assess research quality in higher education institutions.

It uses a combination of metrics focused on researchers, research outputs, research income, esteem and applied measures.

The most recent ERA results, released in March 2019, confirmed many of the University of Adelaide's fundamental research strengths. This included in areas such as geology, ecology, oncology, nutrition, civil engineering, astronomical sciences, macromolecular chemistry, soil sciences and philosophy.

Excellence in Research for Australia (ERA)

adelaide.edu.au/research/about-us/era

The University of Adelaide is a world leader in fields that underpin innovation across industries critical to our State's and our community's future, and in areas that translate to benefits for society.

The high quality of our research across a vast array of fields was recognised in the 2018 Excellence in Research Australia (ERA) evaluation, conducted by the Australian Research Council (ARC). The ERA results released in March 2019 provide a comprehensive assessment of the University's research outputs for the period 2014-2018 and demonstrate that the University is a clear world leader in research.

More than 22,500 individual research outputs by academic staff and affiliates of the University were assessed, including published papers, authored and edited books, book chapters, conference papers, and creative works.

Ranked in top 1%

(Times Higher Education and QS ranking)



Associated with 5 Nobel laureates



Over 100 countries represented in student population





Member of the Group of Eight

A coalition of Australia's leading researchintensive universities The University now has 67 research sub-fields (100%) that are assessed to be world-class or above, including research in engineering, mathematics, science, medical and health sciences, agricultural sciences, artificial intelligence, and the arts.

Highlights

- 100% of the University's research sub-fields were assessed as being "at or above world standard".
- Across all sub-disciplines of research assessed, the latest ERA has found that the University of Adelaide has:
- 41 research fields rated 5 (well above world standard)—the maximum rating
- 16 research fields rated 4 (above world standard)
- 10 research fields rated 3 (at world standard).

One of Australia's top research universities

Established in 1874, the University of Adelaide has developed a reputation for research excellence and is one of the top research universities in Australia. The University's research initiatives are aimed at delivering real results that contribute to both Australian and international social, economic, cultural and environmental wellbeing.

Our Research Strategic Plan for 2016-18, Adelaide Research for Impact, recognises that the world's finest institutions: excel in fundamental research; engage strongly with business and industry; work across discipline boundaries; and pursue grand challenges with a global outlook.

- * Times Higher Education and QS ranking
- ^ A coalition of Australia's leading research intensive universities

Research strength and expertise

adelaide.edu.au/research

Adelaide's researchers are conducting world-class research across a broad range of fields. This includes such diverse areas as astronomical sciences, food and nutrition, computer vision, performing arts, and infectious diseases.

Our research strengths are encompassed by the following overarching fields, all of which contain a number of sub-fields:

- engineering and environmental sciences
- biological and agricultural sciences

- humanities, law and creative arts
- mathematical, information and computing sciences
- physical, chemical and earth sciences
- social and behavioural sciences
- medical and health sciences.

A global alumni network

adelaide.edu.au/alumni

University of Adelaide graduates become part of a distinguished worldwide alumni community. Internationally, Adelaide alumni occupy positions of influence in business, government, academia and the arts.

Adelaide has 20 alumni chapters and networks, including groups based in Hong Kong, Malaysia (Kuala Lumpur and Sarawak), Singapore, Thailand, the United Kingdom and the United States of America.

The chapters and networks offer graduates and friends of the University the opportunity to continue their connection through a variety of events and activities—from reunions and social events, to professional development and mentoring programs.



Research institutes and centres

The University of Adelaide has seven major research institutes. Each brings together world-leading researchers, supported by modern infrastructure and an innovative culture, to tackle national and international research priorities.

Robinson Research Institute

adelaide.edu.au/rri

The Robinson Research Institute focuses on the early stages of life to improve the health and wellbeing of children and families over the life course and across generations. It seeks to enable a healthy start through: fertility choices and mindful conception; nurturing the baby during pregnancy and birth; strengthening the brain and body in early life; and advancing child and adolescent health to treat and prevent disease.

The Environment Institute

adelaide.edu.au/environment

The Environment Institute develops and implements solutions to improve environmental health and community wellbeing, and sustain our economy. Its key areas of focus include: uncovering how life has evolved on the Australian landmass; confronting environmental issues around the sourcing and supply of clean water; and working to ensure the environment can thrive amidst the pressures of society.

Sustainability, Energy and Resources

adelaide.edu.au/iser

ISER focuses on large-scale, interdisciplinary opportunities and challenges in deep resources and mining, complex processing, unconventional energy resources, and reliable low-cost and low emission energy technologies. Its researchers address the complex challenges faced by the mineral and energy resources sectors, and aim to establish South Australia as a world leader in the provision of research and education for these industries.



Highlights of our 2018 ERA results



100% of our University's research sub-fields were assessed as being 'at or above world standard'

86%

86% of the University's 67 assessed research subfields were rated as being above or well above world standard (rating 4 or 5)



>61% of these 67 sub-fields were rated at the highest 'well above world standard' level—the second highest proportion in the Group of Eight.

Five of our seven major research institutes have been associated with multiple top ratings of 5 in at least one research area.

The Institute for Photonics and Advanced Sensing (IPAS)

adelaide.edu.au/ipas

IPAS brings together physicists, chemists and biologists to pursue a transdisciplinary approach to science. Its researchers develop novel photonic, sensing and measurement technologies, with a focus on: optical materials and structures; lasers and nonlinear optics; remote sensing; chemical and radiation sensing; surface and synthetic chemistry; medical diagnostics; and biological sensing.

The Waite Research Institute

adelaide.edu.au/wri

The Waite Research Institute brings together researchers in the areas of plant and crop sciences, soil science, viticulture and oenology, food and nutrition, and food chain economics. It aims to enhance the University of Adelaide's position as Australia's foremost agricultural research institution, and addresses key issues such as global food security and agricultural sustainability.

Australian Institute for Machine Learning (AIML)

adelaide.edu.au/aiml

The Australian Institute for Machine Learning (AIML) places South Australia on the global map of world's best centres of excellence in machine learning. The AIML will continue to build upon a strong track record of hightech development for local and international companies by allowing businesses to access world-leading expertise and technology in image detection and worldclass capabilities in machine learning.

The South Australian Immunogenomics Cancer Institute (SAIGENCI)

adelaide.edu.au/saigenci

SAIGENCI is the State's world-class cancer research institute, jointly resourced by the Federal Department of Health, CALHN and the University of Adelaide. SAIGENCI will allow for coordinated collaboration in the fight to control cancer and explore a cure. The institute will also collaborate externally, with likeminded centres of excellence across the globe, delivering world-class and life-changing treatments and outcomes for cancer patients.

The University also has over 50 research centres across its full spectrum of research strengths. For more information, visit: <u>adelaide.edu.au/research/</u> <u>about-us/institutes-centres</u>

Adelaide Graduate Research School (AGRS)

adelaide.edu.au/graduate-research

The Adelaide Graduate Research School is dedicated entirely to supporting research students. Led by Professor Carolin Plewa—Pro-Vice Chancellor Researcher Education and Development, and Dean of Graduate Studies—the Graduate Research School is a one-stop shop for students enrolled in a higher degree by research. It delivers essential information and services throughout students' degrees from admission to examination.

One if the school's core functions is to facilitate exciting opportunities for students to broaden their research careers and gain a truly international experience. These opportunities are highly sought-after, and provide a significant employment advantage.

The Graduate Centre also delivers Career and Research Skills Training (CaRST), a specialised training and development program for higherdegree-by-research students. The CaRST program equips students with the skills needed to become effective, well-rounded researchers, prepared for careers both within and outside academia. Its holistic approach incorporates a high degree of flexibility, enabling students to tailor activities to suit their needs.

For more information

Industry opportunities

adelaide.edu.au/graduate-research/ career-development/industry-opportunities

Career development adelaide.edu.au/graduate-research/ career-development

Our Nobel Laureates

The Nobel Prize is an international award given yearly since 1901 for achievements in physics, chemistry, medicine, literature and peace. The University of Adelaide is associated with five Nobel Laureates, and has a long history of ground-breaking research and scholarship of international significance.

1915

Sir William Henry Bragg and William Lawrence Bragg: Physics

For their services in the analysis of crystal structure by means of X-rays.

1945

Sir Howard Walter Florey: Physiology or Medicine

For the discovery of penicillin and its curative effect in various infectious diseases.

2003 ^{Ja}

John M Coetzee: Literature

For his contribution to literature.

2005 Dr J Robin Warren: Physiology or Medicine (joint)

For his discovery of the bacterium *Helicobacter pylori*, and its role in gastritis and peptic ulcer disease.



Research programs

Research programs

Course duration 2-4 years full-time Availability All faculties

The Doctor of Philosophy (PhD) is the fundamental qualification for a research career or academic position, and is a stepping stone to a range of career opportunities. The PhD typically involves three to four years of full-time research candidature. However, students are permitted to submit their thesis after just two years if their research is complete.

Doctorates at the University of Adelaide require compulsory participation in the:

• Career and Research Skills Training (CaRST) program where students must complete 120 hours of CaRST activities prior to thesis submission. In the course of completing the degree under appropriate supervision, candidates develop the capacity to conduct research independently at a high level of originality and quality, and make a significant original contribution to knowledge in their chosen discipline.

After completion of the program of study and research under supervision, the student presents a thesis embodying the results of original investigation.

This may be prepared in one of the following formats:

- 1. Conventional written narrative.
- Publication. This may include manuscript-style papers that have been published; and/or accepted and/ or submitted for publication; and/or unpublished and unsubmitted.
- 3. A combination of conventional and publication formats.
- 4. A major (creative, musical or visual) work (Volume 1) and exegesis (Volume 2).

Irrespective of the form of thesis presented, examiners will expect a candidate to:

- produce a clearly, accurately and cogently written thesis that is suitably illustrated and documented
- demonstrate deep knowledge of the research topic
- relate the research topic to the broader framework of the discipline within which it falls

- demonstrate independence of thought and approach
- make a significant and original contribution to knowledge by the discovery of new facts, the formulation of theories, or the innovative reinterpretation of known data and established ideas.

Master of Philosophy

Course duration 1-2 years full-time Availability All faculties Stream 1. Mixed research and coursework

2. 100% research

The Master of Philosophy is offered in every University of Adelaide Faculty as the primary research master degree available to prospective research students. Master of Philosophy students are trained in research methodology and techniques, and engaged at an advanced level in the critical evaluation of literature and results in the substantive area of the thesis. Participation in the Career and Research Skills Training (CaRST) program is compulsory, and requires completion of 60 hours of activities prior to thesis submission.

Where a student is approved to undertake a Master of Philosophy by mixed research and coursework, one-third of the degree (15 credit points) will be completed by coursework and the remaining two-thirds of the degree by research, culminating in the production of a thesis.

Examiners of a Master of Philosophy thesis will be seeking evidence that the candidate has:

- a thorough understanding of the relevant techniques and methodologies in the field, as demonstrated by a thorough critical review of the literature
- demonstrated competence in the chosen field, through judicious selection and application of appropriate methodology to yield meaningful results
- demonstrated the capacity to critically evaluate these results
- presented a clear, well-written thesis.

Professional Doctorate

Course duration 2-4 years full-time **Availability** Nursing

The Professional Doctorates combines research, project activity and advanced coursework in a single program of study, and is specifically aimed at experienced practitioners in the field.

To qualify for a professional doctorate, a candidate is required to pass each component of the program individually and complete any coursework or project requirements, before submitting their thesis for examination.



Master of Clinical Science

Course duration 1-2 years full-time **Availability** Faculty of Health and Medical Sciences

Streams Available in mixed coursework and research, or 100% research streams.

The Master of Clinical Science provides an introduction to clinically based research for candidates presenting with clinical qualifications and experience.

As with the Master of Philosophy, where a student is approved to undertake a Master of Clinical Science by mixed research and coursework, one-third of the degree (15 credit points) will be completed by coursework and the remaining two-thirds of the degree by research, culminating in the production of a thesis.

The Master of Clinical Science is designed to:

- train candidates in literature analysis, research methodology and techniques
- develop critical evaluation skills appropriate to the chosen research topic
- train candidates in the application of research methods during the conduct of an independent, supervised research project, mutually agreed by the student, their supervisors and head of school
- facilitate the candidate's ability to translate research into improved clinical outcomes.

Students can choose to specialise in one of the following research areas:

- Nursing
- Medicine
- Dentistry
- Public Health
- Counselling and Psychotherapy.

Jointly awarded PhD programs with international collaborators (including Cotutelle opportunities)

University of Adelaide international research students are also able to apply for PhD programs jointly awarded with an international collaborator.

Adelaide works closely with a number of key international partners in this way, including those listed in the table below.

This list of partner universities and associated research fields is not exclusive, but does reflect an emphasis Adelaide is keen to support. Joint awards may also be negotiated on an individual basis with any highly ranked international university that we already collaborate with or have sound strategic reasons to strengthen our links with. Such individual agreement is known as a 'Cotutelle'.

It's very important that students carefully read and understand the conditions specified in the proposed joint agreement before committing to the program. This is because some joint agreements have special conditions attached in addition to the standard University of Adelaide requirements. The conditions of the joint agreement will be forwarded to students with their Offer of Admission to the program.

The key benefits of enrolling in an international jointly awarded PhD program are that it provides a means to:

- enhance two-way international research collaboration
- gain international study and experience at two high quality institutions
- work in two countries, experience different cultures and access specialist research facilities
- Partner university
 Fields of research

 University of Nottingham (United Kingdom)
 All faculties/schools

 University of Copenhagen (Denmark)
 All faculties/schools

 Shanghai Jiao Tong University (China)
 Life science and biotechnology

 University of Nagoya (Japan)
 Medicine, medical sciences and biomedical engineering

- potentially access new funding sources
- develop professional networks.

International students wishing to apply for a jointly awarded PhD with the University of Adelaide as their partner institution must demonstrate, prior to application, that:

- they have been accepted into a PhD at an approved university
- they can satisfy the normal admission requirements (including all language proficiency requirements) at the University of Adelaide
- arrangements exist for an approximately equal sharing of candidature between institutions.



Enquiries concerning participation in cotutelle or other jointly awarded doctorates should be directed to <u>research_degrees@</u> <u>adelaide.edu.au</u> in the first instance.

Industry opportunities

The University of Adelaide also provides industry engagement opportunities for enrolled higher degree by research students. Our unique industry engagement programs allow you to apply and further develop professional skills in your specific field and chosen career. Students can solve real world problems, while gaining a significant employment advantage. Eligible three-month research internships are supported with a living stipend.

More information can be found here: adelaide.edu.au/graduate-research/ career-development/industry-opportunities

> Adelaide Health and Medical Sciences building





English language proficiency requirements

The University will not require English evidence for any applicant who is a citizen and holds a passport from one of the following countries: Canada (English speaking provinces only), New Zealand, the Republic of Ireland, the United Kingdom and the United States.

The University will not require English evidence for any applicant who has satisfactorily completed study at a Bachelor degree level or above from one of the following countries: Australia, Canada (English speaking provinces only), New Zealand, the Republic of Ireland, South Africa, the United Kingdom or the United States for:

- 1) at least one of the last two years preceding the date of commencement, or
- 2) at least two of the last five years preceding the date of commencement.

All other English evidence will only be considered for eligibility upon the assessment of a submitted application and on a case-by-case basis.

If English is not your first language, you will be required to demonstrate English language proficiency in the form of an English test that has been taken within the two years preceding the date of commencement.

The University accepts the following test types:

- IELTS (International English Language Testing System) Academic
- TOEFL (Test of English as a Foreign Language) Internet Based Test
- PTE (Pearson Test of English) Academic
- C1 Advanced (formerly CAE Cambridge English: Advanced)

Applicants wishing to enrol in the Pre-enrolment English Program (PEP) are required to meet the English requirements for Higher Degree by Research outlined at <u>adelaide.edu.au/elc/our-courses/</u> <u>pre-enrolment-english-program-pep/how-many-</u> <u>weeks-of-pep-do-i-need</u>

Applicants wishing to apply for a University of Adelaide scholarship must provide evidence that they meet the University's English language requirements for direct entry to the degree program before the scholarship closing date. Those intending to sit an appropriate English language test must ensure their official test results are provided prior to the scholarship closing date. Applicants who wish to be considered for a scholarship are not permitted to undertake the PEP as a way to meet the English language requirements.



Minimum English language requirements - Academic entry criteria*

6.5 minimum English language proficiency requirement

General with specified band requirements - applicable to all postgraduate research programs in the following academic areas:

- Australian School of Petroleum and Energy Resources
- Centre for Automotive Safety Research
- School of Architecture and Built Environment
- (Construction Management stream only)
- School of Chemical Engineering and Advanced Materials
- School of Civil, Environmental and Mining Engineering
 School of Computer Science
- School of Electrical and Electronic Engineering
- School of Mathematical Sciences
- School of Mechanical Engineering

IELTS (Academic)	TOEFL (Internet based test)	Pearson Test of English (Academic)	C1 Advanced
Overall score: 6.5 All other bands: 6.0	Total score: 79 Writing: 21 Speaking: 18 Listening and reading: 13	Overall score: 58 All other bands: 50	Overall score: 176 All other bands: 169

6.5 minimum English language proficiency requirement

General requirements - applicable to all postgraduate research programs in the following academic areas:

- Adelaide Dental School
- Adelaide Medical School
- School of Biomedicine
- School of Public Health (Joanna Briggs Institute ONLY)
- School of Allied Health Sciences and Practice

- School of Agriculture. Food and Wine
- School of Animal and Veterinary Science
- School of Biological Sciences
- School of Physical Sciences
- School of Economics and Public Policy

IELTS (Academic)	TOEFL (Internet based test)	Pearson Test of English (Academic)	C1 Advanced
Overall score: 6.5 Writing and speaking: 6.5 Listening and reading: 6.0	Total score: 79 Writing: 24 Speaking: 22 Listening and reading: 13	Overall score: 58 Writing and speaking: 58 Listening and reading: 50	Overall score: 176 Writing and speaking: 176 Listening and reading: 169

7.0 minimum English language proficiency requirement

Higher requirements - applicable to all postgraduate research programs in the following academic areas:

- School of Architecture and Built Environment
- (excluding the Construction Management stream)
- School of Education
- Elder Conservatorium of Music
- School of Humanities
- School of Social Sciences

- Adelaide Business School
- Adelaide Law School
- Adelaide Nursing School
- School of Psychology
- School of Public Health (excluding the Joanna Briggs Institute)

IELTS (Academic)	TOEFL (Internet based test)	Pearson Test of English (Academic)	C1 Advanced
Overall score: 7.0 Writing and speaking: 7.0 Listening and reading: 6.5	Total score: 94 Writing: 27 Speaking: 23 Listening and reading: 20	Overall score: 65 Writing and speaking: 65 Listening and reading: 58	Overall score: 185 Writing and speaking: 185 Listening and reading: 176

* Applicable to applications submitted from 14 January 2020 onwards.



PEP for HDR programs

(Higher Degree by Research)

The Pre-Enrolment English Program (PEP) is a direct entry pathway into further studies at the University of Adelaide for students that have not met the minimum English language entry requirements of their award program.

Entry into the University of Adelaide is dependent upon successful completion of the course components. If you successfully complete the Pre-enrolment English Program (PEP), you will not be required to complete another English test prior to entry into your chosen University program.

The length of your program depends on your English proficiency test score and the entry requirements of your intended program. The University of Adelaide accepts IELTS, TOEFL iBT, Pearson and C1 Advanced (formerly CAE: Cambridge English). For English Language Requirements for your intended program, please refer to the Degree Finder.

For entry to a Higher Degree by Research, the PEP is offered in lengths of 10 and 15 weeks. For more information please refer to <u>adelaide.edu.au/elc/our-courses/</u> <u>pre-enrolment-english-program-pep/howmany-weeks-of-pep-do-i-need</u>

English Language Centre (ELC) The University of Adelaide SA 5005 Australia

T: +61 8 8313 4777 E: elc@adelaide.edu.au W: adelaide.edu.au/elc

PEP program (minimum length)	Overall score of 6.5 with all band scores at 6.0	Overall score of 6.5 with Writing and Speaking at 6.5 and Reading and Listening at 6.0	Overall score of 7.0 with Writing and Speaking at 7.0 and Reading and Listening at 6.5
15 weeks	Overall band score of 6.0 and no band less than 5.0	Overall band score of 6.0 Writing and Speaking at 6.0 Reading and Listening at 5.0	Overall band score of 6.5 Writing and Speaking at 6.5 Reading and Listening at 5.5
15 weeks	Overall band score of 6.0 Writing at 5.5	Overall band score of 6.5 Writing and Speaking at 5.5 Reading and Listening at 5.0	Overall band score of 7.0 Writing and Speaking at 6.0 Reading and Listening at 5.5
10 weeks	Overall band score of 6.0 and no band less than 5.5	Overall band score of 6.0 Writing and Speaking at 6.5 Reading and Listening at 5.5	Overall band score of 6.5 Writing and Speaking at 7.0 Reading and Listening at 6.0
10 weeks	Overall band score of 6.0 and no band less than 5.5	Overall band score of 6.5 Writing and Speaking at 6.0 Reading and Listening at 5.5	Overall band score of 7.0 Writing and Speaking at 6.5 Reading and Listening at 6.0

Entry requirements of your chosen program

Scholarships for international students

The University of Adelaide offers several scholarship schemes for international students commencing postgraduate research in 2021.

For information on scholarship opportunities and how to apply, visit scholarships.adelaide.edu.au

Select 'International Students' and 'Postgraduate Research' to identify relevant funding opportunities. Each scholarship opportunity has its own requirements and deadlines.

Internal scholarship opportunities

Applicants submitting application during a scholarship round will be considered for for all available scholarships subject to meeting their eligibility criteria. This is the most effective way to maximise the chances of winning a scholarship.

Selection for scholarships is extremely competitive. Recent successful applicants for research scholarships have usually achieved all of the following:

- a research master degree, or coursework master degree with a substantial research component
- outstanding academic performance at an internationally recognised university
- publications in internationally refereed journals
- relevant work or research experience.

The few applicants who win a scholarship directly out of undergraduate studies have exceptional academic results, high-quality international publications and outstanding references.

Australian Government Research Training Program Scholarships - International (RTP)

dese.gov.au/research-block-grants/ research-training-program

RTP international scholarships are funded by the Australian Government through the Department of Education, Skills and Employment. They are available to outstanding international applicants from any country. Awards are allocated in the first scholarship round, according to the terms and conditions specified in the University's Scholarship Policy.

University of Adelaide Research Scholarships (UARS)

UARS are available to outstanding international applicants from any country to support their study towards a higher degree by research in any field of study. These scholarships are offered in the competitive round and are awarded on academic merit and research potential.

Master of Philosophy (No Honours) International Scholarships

(for University of Adelaide graduates only)

At the end of each semester, the University offers a number of Master of Philosophy (No Honours) International Scholarships exclusively to its recent international bachelor degree graduates, enabling them to continue their education via a master degree by research.

China Scholarship Council: University of Adelaide Joint Postgraduate Scholarships program

The China Scholarship Council (CSC) and the University of Adelaide jointly offer postgraduate research scholarships to students from the People's Republic of China to undertake a postgraduate research degree at Adelaide. The University waives full tuition fees for selected students, and the CSC considers their applications for: a living allowance, as prescribed from time to time by the Chinese Government; return airfare to Australia, by the most economical route; and visa application fees. Scholarships under this program are for up to four years' study, subject to satisfactory academic progress.

Note: this information is correct at the time of publishing, but the University reserves the right to make changes as necessary at any time. The number of scholarships awarded will depend on candidate quality.

External scholarship opportunities

Australia Awards Scholarships (AAS) dfat.gov.au/people-to-people/australia-

awards/australia-awards-scholarships

The University of Adelaide has contracted with the Department of Foreign Affairs and Trade (DFAT) to provide education services to AAS holders. AAS's purpose is to provide educational, research and professional development opportunities to support growth in partner countries, and build enduring links at the individual, institutional and country levels.



0.

Candidates should apply directly to the AAS office in their home country.

Scholarships from home governments or universities

A number of overseas governments or universities sponsor their citizens to undertake research degrees at Australian universities. Sometimes this is under an agreement with the University of Adelaide, with the sponsor paying the tuition fees and a student living allowance.

Students are encouraged to investigate whether there are such scholarship opportunities in their country.



Managing your money

As part of planning, applicants need to consider the financial requirements before applying at the University, and are advised to set a realistic budget.



Planning a budget

Adelaide is more affordable than other Australian cities, such as Sydney, Melbourne, Perth and Brisbane*. Accommodation is the largest variable expense. It can cost anywhere from around AUD \$135 per week for shared private accommodation outside the city centre, to AUD \$259 for Universitymanaged accommodation within the city centre or AUD \$400 for private sole-occupancy accommodation.

There can be large costs associated with setting up private accommodation, as most private rental houses and apartments are rented unfurnished.

Tuition fees

International students are required to pay tuition fees. These are dependent on the program of enrolment and cover the cost of teaching, as well as many student support services. The quoted fee is a base fee that may be subject to a discretionary annual increase for each subsequent year of the degree. Each student will be advised of their appropriate fee schedule in their Offer of Admission to the University.

When accepting an Offer of Admission, new international students are required to pay a specified tuition fee deposit, which will be credited towards tuition fees in the first enrolment period. After enrolment, students or sponsors will receive an invoice for the balance of the fees due for that period.

Study-related costs

All students should allow at least AUD \$500 per year for textbooks and basic study materials. Depending on the degree, other costs may include specialist equipment (e.g. laboratory coats, microscopes, stethoscopes), optional supplementary reading and academic program materials, field trips, and expenses such as thesis preparation, printing and binding.

Refund policy

All applicants must read the University's policy on refunds and adjustments before accepting an offer of admission. The

policy complies with all requirements for tuition fee refunds stipulated in the Education Services for Overseas Students Act 2000 (ESOS), associated Australian Government regulations, and the ESOS National Code of Practice (2018).

For information about refund administration and refund amounts, visit: adelaide.edu.au/student/finance/refunds

Health and medical

Student visa holders and their dependants are required to have health insurance for the duration of their student visa through the Overseas Student Health Cover (OSHC) scheme. The University's preferred OSHC provider is Allianz Global Assistance. Visit: allianzcare.com.au/en.html

For additional information, please refer to: international.adelaide.edu.au/ life-on-campus/support-services

Students with families

International students who bring their families to Australia will need to take into account the additional costs



associated with health cover, housing, food, transport, childcare and education. For information and advice about schooling, visit: internationalstudents.sa.edu.au/ en/students/dependants

Part-time work

Many international students and their dependants hope to obtain part-time work to supplement funds for living costs. While this may be possible, we recommend that students do not rely on it for essential expenses.

Obtaining a job is not guaranteed and can take time. Students should also be aware that the workload for many degrees is intense, so they may not have time to undertake employment.

International students who do find part-time work should be aware that they have the same workplace rights as all other workers in Australia. For more information on working while studying, visit: <u>homeaffairs.gov.au/trav/stud</u>

Additional information and advice about your workplace rights and obligations is available at: fairwork.gov.au

* Source: Study Adelaide studyadelaide.com

Study-related costs

This should be viewed as a guide only, as costs can vary significantly from one student to another. These are basic living costs at the time of publication and do not include program tuition fees, costs for textbooks, other study-related needs, running a car, medical expenses or any luxuries.

Before arrival

Expense	Cost (AUD)
Tuition fee deposit (as specified in offer of admission)	up to \$14,000
Overseas Student Health Cover**	\$609-\$4,591
Economy air travel to Adelaide	\$1,200-\$2,000
Visa application charge^	\$550
Medical examination for visa application#	\$300
Refundable deposit for University-managed rental accommodation (if applicable)	\$500

After arrival	
Expense	Cost (AUD)
All students:	
Rent in advance	2 weeks' rent
Household set-up (linen, groceries, etc.)	\$500
Remainder of tuition fee	Refer to offer letter
Private accommodation options only:	
Refundable accommodation bond	4-6 weeks' rent
Electricity and gas connection	\$38-\$72
Landline telephone/internet connection	\$59-\$299
Furniture and household goods	\$1,500+

Average weekly living expenses*		
Expense	Cost (AUD)	
Accommodation	\$135-\$400	
Groceries	\$90-\$135	
Gas/electricity/water	\$40-\$55	
Transport (student concession rates)	\$20-\$35	
Telephone/postage/internet	\$20-\$40	
Other costs (e.g. clothing, entertainment)	\$50+	
Total weekly expenses	\$355-\$705	

* Source: Study Adelaide

** The Department of Home Affairs requires all students to have health insurance for the duration of their visa. Visa length varies and is slightly longer than the length of a student's degree. The fee quoted here is for 12 months' cover.

Approximate cost for standard examination only. Additional costs may be incurred if more comprehensive medical exams are required.

^ Surcharge may apply to some subsequent student visa applications.

Our campuses

The University of Adelaide has three campuses in South Australia—North Terrace, Roseworthy and Waite—and a new campus in Melbourne, Victoria.



North Terrace campus

The University's main campus on North Terrace is renowned for its historic architecture and lively atmosphere. Located in the heart of Adelaide's central business and shopping district, the campus is adjacent to the State Library, Festival Theatre, South Australian Museum, Art Gallery of South Australia, Adelaide Zoo, and Botanic Gardens. The University's Adelaide Health and Medical Sciences building is also within walking distance, in the Adelaide BioMed City precinct.

Virtual tours

Explore our virtual video tours to discover your place among the iconic heritage-listed



architecture and state-of-theart facilities on our beautiful, historic main campus; experience our innovative Adelaide Health and Medical Sciences building in the heart of the Adelaide BioMed City precinct; or uncover the picturesque settings and advanced technology available at our satellite campuses, Waite and Roseworthy.

Visit: adelaide.edu.au/tours

Waite campus

The Waite campus is home to the internationally renowned Waite Research Institute—the largest agricultural research institute in the southern hemisphere and third largest in the world. A number of research partners are also co-located there. Staff and students work closely with these organisations, providing a unique opportunity for collaboration on national and international research projects. Research areas include wine, plant biotechnology, plant breeding, sustainable agriculture and food science.

The campus is located eight kilometres south of the city centre and is easily accessible by public transport and a Waite-North Terrace campus shuttle bus service. Campus services include a childcare centre, library, cafe, gym and sporting facilities.

> Roseworthy has an AUD\$37 million veterinary clinic, where students can gain clinical experience.

Roseworthy campus

Roseworthy campus is an internationally renowned centre for excellence in dryland agriculture, natural resource management and animal production. Set on over 1,600 hectares of land, it is home to South Australia's only veterinary school. It features an AUD\$37 million veterinary clinic, where students can gain clinical experience while studying.

The campus is located 55 kilometres north of Adelaide and 10 kilometres from the town of Gawler (population 24,000). Access is available by a North Terrace-Roseworthy campus shuttle bus. Campus services include student accommodation, a swimming pool, library, cafe and fitness centre.



Roseworthy campus



We'll support you on your journey

The University offers a range of support services to help international students succeed.

Friendly staff are available to help students manage their studies, assist with queries related to student visa conditions, help with health or disability needs, support students as they fit into their new life in Adelaide, and help solve personal problems. In addition, doctors at our North Terrace campus Health Practice can provide students with year round health support.

International Student Support

ua.edu.au/iss

One-on-one support from international student advisors for help with personal or financial issues, orientation and social programs to encourage engagement with other students and the broader community. Assistance with Confirmation of Enrolment (CoE) and student visarelated queries.

Careers Services

adelaide.edu.au/student/careers

Individual advice and employability workshops to help students develop career management skills, an extensive database of employment opportunities and resources known as CareerHub, and annual career-related events including the Careers Expo and employer-oncampus sessions. The service offers expertise in locating graduate vacancies based offshore and within Australia.

Writing Centre

adelaide.edu.au/writingcentre

Support with writing academic English through one-on-one advice from writing mentors, workshops and comprehensive support resources.

Maths Learning Centre

adelaide.edu.au/mathslearning

Help for all students to develop mathematics skills at every level, with drop-in sessions, lectures, games and resources.

Peer Assisted Study Sessions (PASS)

adelaide.edu.au/pass

Regular extracurricular sessions led by student mentors to help students improve their grades in specific courses.

Childcare

adelaide.edu.au/childcare

Full-time and part-time care for children of students and staff, located on the North Terrace and Waite campuses.

Counselling Support

adelaide.edu.au/counselling

Support is free, confidential and available to onshore enrolled students seeking to address issues that may affect their study or life.

Disability Support

adelaide.edu.au/disability

The Disability Support team provide personalised advice and assistance to students who have a diagnosed disability or an ongoing medical condition, to help them identify relevant reasonable adjustments to help with their studies.

Elite Athlete Support

adelaide.edu.au/eliteathletes

Support to help elite student athletes balance their academic and sporting commitments, by providing a flexible and responsive approach to study.

Student Health and Wellbeing

adelaide.edu.au/student/wellbeing

An online resource to provide information and support to students on a range of health and wellbeing topics, campaigns and events.

Health Practice

adelaideunicare.com.au

Comprehensive health care for all students and staff, with male and female doctors (GPs), offering health checks, immunisations and mental health support.

Library

adelaide.edu.au/library

One of the state's most extensive research collections, quiet study spaces, and support from specialist research librarians.

Be part of our community

The University of Adelaide offers a stimulating environment where students are encouraged to take part in a wide range of extracurricular activities.

Social programs

international.adelaide.edu.au/life-oncampus/social-programs-clubs-and-sports

The University offers a variety of social programs to help international students adjust to their studies and make new friends. These include ongoing English conversation practice (Talking with Aussies), regular culturally-themed social nights (Language and Cultural Engagement program), a chance to improve intercultural and employability skills (Global IQ Connect) and opportunities to develop leadership and employability skills (Peer Mentor program).

StudyAdelaide

studyadelaide.com

StudyAdelaide provides information and support to students both before they arrive in Adelaide and after they settle into life in their new home. It conducts a busy schedule of events and activities each year. These include everything from a welcome ceremony with the Lord Mayor, international student awards, career advancement workshops, wine education functions, regional trips and social events, such as sports days.

Facebook: facebook.com/studyadelaide Twitter: @studyadelaide Instagram: @studyadelaide

Life on campus

Adelaide University Union
 auu.org.au

Student services

- Student Care auu.org.au/services/student-care
- Employment auu.org.au/services/employment
- Volunteering auu.org.au/get-involved/volunteer
- Special-interest and social clubs auu.org.au/get-involved/clubs
- Student media On Dit auu.org.au/get-involved/ondit

Sporting clubs and facilities

- Adelaide University Sport
 adelaide.edu.au/sports
- The Fitness Hub adelaide.edu.au/sports/the-fitness-hub





A place to call home



Accommodation plays an important part in building a solid foundation for academic success.

Students benefit from the advantages that come from choosing to study in a city where accommodation of all types, including our University-managed accommodation, is not only accessible but affordable.

The University recommends students adopt the RECAS approach to identifying an accommodation option to suit their individual needs and support a positive educational experience.

- Research all available accommodation options
- Establish a realistic budget
- Consider the value of managed student accommodation
- Avoid extended temporary accommodation
- Seek assistance from the University Accommodation Service

Students unfamiliar with Adelaide are encouraged to consider living in managed student accommodation during their first year of university.

Managed student accommodation provides new students with the opportunity to become better acquainted with the city, settle into their academic program and make new friends, without having to worry about the challenges of the private rental market.



Long-term student accommodation

adelaide.edu.au/accommodation

The University assists international students to obtain suitable longer-term housing. Students may choose any of the following options.

The University of Adelaide Village

The University of Adelaide Village is the largest of our accommodation properties. The Village is home to over 400 students, who experience the safety and security of having access to University staff on-site, 24 hours a day, seven days a week.

Students need only bring their personal belongings, as furniture, kitchen appliances, utilities (including electricity), phone and internet are all included in the accommodation fees. The only additional costs are for groceries (students must cook and clean for themselves) and the on-site, coin-operated laundry facilities.

Roseworthy Residential College

This accommodation is operated by the University and is only available to students of the University's Roseworthy campus, offering them the opportunity to enjoy the benefits of on-campus residential living.

Independent residential colleges

There are five independent residential colleges situated in North Adelaide that offer accommodation to students. These independent residential colleges are privately owned and operated.

Students can contact the residential colleges directly to better understand what's available. These residential colleges include: Aquinas, Lincoln, St Ann's, St Mark's and Kathleen Lumley (postgraduate only).

Commercial student accommodation

Commercial student accommodation refers to purpose-built off-campus student accommodation facilities, run by private management companies.

These facilities offer fully-furnished, self-contained apartments that give students flexibility to live alone or share with others. There are also rooms for couples. In addition to rent, students may need to budget for additional expenses, including:

- gas
- electricity
- telephone connection (optional)
- internet connection (optional).

Places in commercial student accommodation facilities are offered on a 6 or 12-month fixed-term lease. It's important to note that these facilities are not directly affiliated with the University of Adelaide and students are advised to inspect them before committing.

Private rental and share accommodation

Affordable share accommodation can also be found in the private rental market. Students wishing to find share or rental accommodation when they arrive in Adelaide are encouraged to book temporary accommodation in the first instance.

The University offers a rental database for our students' exclusive use. Visit: adelaide.edu.au/accommodation

Our enrolled students can access the database from our Accommodation Service, Level 3, Hub Central, North



Terrace campus, with a username and password. The database is only promoted among the University community, and most accommodation listings are offered by people affiliated with us who would like to share their room/property with a University of Adelaide student.

Once in Adelaide, students should visit the University's Accommodation Service for information on all available options and support in identifying and securing quality long-term living arrangements. Students are discouraged from sending money from offshore to secure share or rental accommodation prior to inspecting it.

Accommodation for families

Students accompanied by family members will find private rental accommodation in houses or apartments the most suitable accommodation option.

It's easier for an individual student to initially travel to Adelaide on their own to arrange suitable permanent family accommodation. Spouses and children who arrive later can then move straight in.

Long-term student accommodation options

This table matches long-term student accommodation options to individual needs.

Туре	Options	Student profile
University residential environments	University- managed student accommodation	New students to the University, without a local support network, looking to establish a solid foundation for ongoing academic success, with direct access to University learning and student support services within their residential environment.
Commercial student accommodation	Scape	Students looking for the convenience and comfort of packaged accommodation in a student residential environment.
Independent residential environment	Independent residential colleges	Students looking for an environment that provides a residential lifestyle with other peers who are living away from home.
Independent living	Share/rental accommodation	Students with the skills and experience to enter into tenancy arrangements and pursue an independent lifestyle.

Arrival reception and temporary accommodation

Temporary accommodation and arrival reception services are available to commencing international students. Eligible students can book an arrival reception service and be met by a University representative at Adelaide Airport, via a domestic or international flight. Students will then be transported to their accommodation.

Eligible students who choose not to secure long-term managed student accommodation for their arrival in Adelaide may also be eligible for seven nights of temporary accommodation booked through the University. It is important to note that temporary accommodation options arranged through the University are unlikely to be extended beyond seven nights due to high demand for short-term accommodation during the traditional student intake periods.

For more information on eligibility criteria, arrival reception and temporary accommodation, contact our Accommodation Service (see below). For more information, visit: <u>adelaide.edu.au/accommodation</u>

Accommodation Service

Opening hours: 9am to 5pm, Mon to Fri

The University of Adelaide Level 3, Hub Central, SA 5005 Australia Telephone: +61 8 8313 5220 Fax: +61 8 8313 3338

Email: accommodation@adelaide.edu.au Skype: uoaaccommodation



Adelaide the perfect city for students

Adelaide has a bustling, energetic city centre and is renowned for its festivals, cultural life and sporting events. With great shopping, beaches, a cafe culture, affordable student accommodation and friendly residents, Adelaide offers a relaxed lifestyle with all the convenience of city living.





A truly liveable city

Safe and relaxed, Adelaide is ranked as one of the world's top 3 most liveable cities*.



Australia's most affordable mainland city

Adelaide is one of the most affordable mainland Australian cities, with a cost of living up to 14% lower than Sydney and Melbourne[^].

Building



Culturally diverse

South Australians hail from over 120 different countries, creating a wonderful mix of cultures and influences. One in five South Australians were born overseas!

* Economist Intelligence Unit Global Liveability Index, 2021

Hit the beach

Adelaide is a coastal city, with pristine white sandy beaches that attract thousands for relaxation and recreation in the summer. It takes just 20 minutes on the tram to get from the city centre to the beach.

Live centrally

Student accommodation is more affordable in Adelaide than in many other Australian cities, and much of it is in the heart of the CBD. Many students can simply walk to their lectures.

State stats	
Area	983,482 km ²
Capital	Adelaide
Coastline	5,059 km
Population	Adelaide: 1.3m South Australia: 1.7m
Currency	Australian dollar (AUD)
Official language	English
Major industries	Includes bioscience, defence, minerals and energy, and wine










Café culture

Adelaide is one of Australia's most cosmopolitan cities, with an array of cafés, restaurants and shops reflecting the diversity of its ethnic communities. Adelaide is reputed to have more cafés and restaurants per head of population than any other city in Australia.

Shopping

Adelaide boasts a range of shopping experiences comparable to anywhere in Australia. Within the CBD, Rundle Mall has the biggest concentration of department and chain stores, while within walking distance are trendy boutiques, bars and cafés.

Climate

Warm, dry summers and short, mild winters. Over 300 days of sunshine per year.

Season	Months	Conditions	Temp
Summer	Dec – Feb	Mainly hot/dry	25 - 35°C
Autumn	Mar – May	Mainly dry	20 – 25°C
Winter	Jun – Aug	Cool and wet	10 – 15°C
Spring	Sept – Nov	Some rain	20 – 25°C



London 22 hours Delhi Doha Guangzhou 9.5 hours 13.5 hours hours Dubai Hong Kong Ho Chi Minh 10 hours Singapore 6.5 hours Jakarta 9.5 hours Johannesburg 14.5 hours Buenos Aires 19 hours Adelaide Auckland nours

Flight hours to Adelaide







Easy to get around

Adelaide is a vibrant city that's easy to navigate. Broad, spacious boulevards accommodate an efficient network of public buses, trains and trams, with international students receiving the same discounts as locals.

Festival fever

South Australia is known as the festival state of Australia because of the large number of national and international cultural and sporting festivals it hosts per year.



Faculty of Arts, Business, Law and Economics

The Faculty of Arts, Business, Law and Economics (ABLE) has a reputation for outstanding research in a diverse range of stimulating fields-from entrepreneurship, digital technologies, and the creative arts, to housing, education, law and music.

Our focus on excellence produces research graduates with the skills and knowledge to make a difference in society.

Postgraduate ABLE students work closely with leading, internationally renowned researchers who have excellent track records in postgraduate supervision. We regularly host seminars, workshops and public lectures with leading international scholars and creative practitioners, all of whom foster our vibrant, innovative and creative research culture. We offer an incredibily wide range of specialisations.

We are excited to invite international candidates to enrol in a postgraduate research program with us, to share their skills and play an instrumental role in the world.

Research areas

Our research has been ranked by the most recent Excellence in Research for Australia initiative* as above, or well above, world standard in law, finance, marketing, economics, historical studies, performing arts, music, creative writing, and philosophy.

Other areas of strength include: financial and managerial accounting, entrepreneurship, corporate finance and asset pricing, project management, strategic management, customer engagement, wine business, work and migration, corporations and tax law, military law, ethics, economic modelling, international trade, human geography, housing research, politics and international relations, cybersecurity, health-related studies and policy, public and social



policy, environmental studies, gender studies, anthropology and development studies, sociology, criminology, classics, literary studies, media, European and Asian languages, musicology, ethnomusicology, creative arts, digital humanities, food security, Indigenous music, digital technologies, education, Australian studies, linguistics and endangered languages. * 2018

Research centres and institutes

The Faculty's commitment to fostering ground-breaking research and research training is evident in its 14 high-performing research centres:

- Centre for Global Food and Resources
- Confucius Institute

- Entrepreneurship, Commercialisation and Innovation Centre
- Future of Employment and Skills Research Centre
- Hugo Centre for Population and Migration Studies
- Institute for International Trade
- International Centre for Financial Services
- Sia Furler Institute of Contemporary Music and Media
- South Australian Centre for Economic Studies
- South Australia Law Reform Institute
- The Australian Centre for Housing Research
- The Fay Gale Centre for Research on Gender

- The J.M. Coetzee Centre for Creative Practice
- The Stretton Institute.

Faculty staff and students are also involved in other University-wide research institutes, including the Environment Institute, Australian Centre for Machine Learning, and Institute for Sustainability, Energy and Resources.

We provide a dynamic and intellectually stimulating environment in which you and your research can thrive.

Executive Dean Professor John Williams AM

Deputy Dean Research Professor Jodie Conduit

Business



Research initiatives that have real-life and commercial impact



Strong research alliances with business and industry partners

Research with an AACSB institution* Research in our school, institutes and centres is, by its very nature, set in the global context. We recognise the part our international students play in contributing to the creation and dissemination of knowledge in their field, and welcome their input into the life of our faculty.

With an Excellence in Research for Australia rating of four^ the Finance and Marketing disciplines are above world standard.

- * Association to Advance Collegiate
- Schools of Business ^ ERA Outcomes 2018

Accounting

Adelaide Business School's modern accounting research:

- examines governance mechanisms and accountability structures within and outside organisations, collecting and analysing information to improve their performance
- impacts policy and practice in accounting, with close links to the accounting profession.

Entrepreneurship and Innovation

Our Entrepreneurship, Commercialisation and Innovation Centre delivers valuable research that examines:

- how entrepreneurs and ventures originate, develop and grow
- how innovation improves the performance of public and private organisations
- how entrepreneurial behaviour supports and sustains socioeconomic development and growth
- how policies, infrastructure and support can foster better entrepreneurship and innovation outcomes
- how family businesses respond to intergenerational and familydynamic challenges.

Finance and Banking

Adelaide Business School and the International Centre for Financial Services generate research that impacts on how policymakers and financial institutions operate. We collaborate with colleagues from a wide range of overseas universities and business schools and our research areas include:

Supervisor spotlight

Associate Professor Graciela Corral de Zubielqui

Associate Head of Engagement

Fields of research

- Expert in innovation management
- industry-university SMEs collaboration
- digital technologies impact on firm performance

Awards

 Executive Dean Award for Excellence in Learning and Teaching, for the whole MBA Online Program Design

Why research innovation management at Adelaide?

Innovation management is imperative for SMEs' survival. Governments worldwide are interested in supporting innovation ecosystems research as it is recognised as important for economic development. Our expertise and research environment will support your PhD studies.

Projects students may be interested in

Undertake research in firm innovation management, knowledge transfer, digital tools, and SME/start-ups performance as part of a PhD program at the University



It was a pleasure to pursue my doctoral studies at the University of Adelaide's Business School. The research environment is friendly. I was exposed to teaching experiences and collaborations that stimulated my intellectual abilities, bestowing me with opportunities to learn from my peers and academics from cross-disciplinary areas of research."

Dr Ankit Agarwal

Doctor of Philosophy in Business and Management

- banking
- funds management
- mergers and acquisitions
- risk management
- payout policies
- corporate financing and investment policies.

Management

Adelaide Business School and its Entrepreneurship, Commercialisation and Innovation Centre promote research focused on people and project management. Examples of broad topics of our research in this area include:

- organisational change
- the human aspects of technology
- models of complex projects and the boundaries between complicated, complex and chaotic.

Marketing

The marketing disciplines engage with industry associations, government departments, not-for-profit organisations, corporate entities, and small/family businesses to address complex marketing and business challenges using the latest methodologies and academic theories. This includes research in areas as diverse as:

- customer engagement
- branding
- digital media
- innovation adoption
- consumer financial decision-making
- service employee behaviours.

Further information or advice

- T: +61 8 8313 4755
- E: professions@ask.adelaide.edu.au

of Adelaide. Specifically, study and research under Assoc Prof Graciela Corral de Zubielqui is investigating innovation key drivers of firm performance and regional development associated with firm innovation. More, Assoc Prof Corral de Zubielqui is seeking to explore further the circumstances under which a firm becomes more efficient and achieves better innovation performance.

Recent publications

Guckenbiehl, P., & Corral de Zubielqui, G. (2022). Start-ups' business model changes during the COVID-19 pandemic: Counteracting adversities and pursuing opportunities. International Small Business Journal: Researching Entrepreneurship, 40(2), 150-177.

Guckenbiehl, P., Corral de Zubielqui, G., & Lindsay, N. (2021). Knowledge and innovation in start-up ventures: A systematic literature review and research agenda. Technological Forecasting and Social Change, 172, 22 pages.

Corral de Zubielqui, G., & Jones, J. (2020). How and when social media affects innovation in startups. A moderated mediation model. Industrial Marketing Management, 85, 209-220.

Zarghami, S. A., Gunawan, I., Corral de Zubielqui, G. B., & Baroudi, B. (2020). Incorporation of Resource Reliability into Critical Chain Project Management Buffer Sizing. International Journal of Production Research, 58(20), 15 pages. Statsenko, L., & Corral de Zubielqui, G. (2020). Customer collaboration, service firms' diversification and innovation performance. Industrial Marketing Management, <u>85, 180-196.</u>

Corral de Zubielqui, G. B., Lindsay, N., Lindsay, W., & Jones, J. (2019). Knowledge quality, innovation and firm performance: A study of knowledge transfer in SMEs. Small Business Economics, 53(1), 145-164.

Economics



Rigorous and structured coursework training in preparation for research



Collegial and supportive atmosphere, with students, research staff and visitors from across the world

 \hat{c}

Low ratio of postgraduate research students to academic staff across a variety of economic discipline The School of Economics provides a highquality research environment, with extensive opportunity for student-staff interaction.

We have a strong research base across a diverse range of disciplines, including: business cycle and labour macroeconomics; behavioural and experimental analysis; public economics; applied economics in development, trade, health and resources; and applied econometrics.

The school has an exclusive research space for postgraduate students, with a comfortable lounge to promote interaction.

Many of our graduates have gone on to distinguished careers in central banking, the financial sector, higher education, government, and non-profit organisations, such as the IMF and World Bank.

Industry and research partnerships

The School of Economics has partnerships with international researchers in Europe, the United Kingdom, China, India and North America.

Global Food and Resources

Our Centre for Global Food and Resources delivers innovative

interdisciplinary research that addresses economic, policy, agribusiness and social issues affecting global food systems. Research areas include:

- food, water and environmental policy
- behavioural economics
- food security
- food value chain analysis
- the role of agriculture in growth and development.

International Trade

Our Institute for International Trade advances research to support those working in today's global economy, whether they are in business, government or academia. For example, our projects:

- study specific implications of trade agreements and reforms for developing countries
- examine how governments and businesses manage the challenges participating in a complex international trading environment
- discover how modern approaches to customs matters and border controls can accelerate international trade flows.



Firmin Doko Tchatoka

Professor

Fields of research

- Econometrics
- Statistics
- Financial Econometrics

Awards

- Executive Dean's Award for Excellence in Research (2019, 2020)
- Best PhD Supervision Award, School of Economics (2019)

Why should students study with the University of Adelaide?

We are recognised as one of Australia's most respected research-intensive universities. Studying with us, we will challenge and inspire you. You will receive the best academic preparation to achieve in your chosen discipline and equip you with knowledge and skills to make a real difference.

Why research economics at Adelaide?

Economics is a place that will help you develop life-long decision-making skills and strategic reasoning. Our quality teachers come from diverse international

Research institute

• Institute for International Trade iit.adelaide.edu.au

Research centres

- Centre for Global Food Resources
 <u>adelaide.edu.au/global-food</u>
- Future of Employment and Skills Research Centre <u>adelaide.edu.au/future-</u> <u>employment-skills</u>
- South Australian Centre for Economic Studies <u>adelaide.edu.au/saces</u>

Research areas

The School of Economics is committed to research excellence, and has cultivated a strong and diverse research program. Our main areas of focus are:

Macroeconomics

- Monetary policy
- News shocks
- Monetary theory
- Macro labour markets
- Great depressions



After completing her PhD in Economics, Dr Lakmini Fernando has joined the General Treasury and then, the Institute of policy Studies of Sri Lanka as a Research Economist. Lakmini uses her expertise in applied research in public finance and climate change, to improve the evidence-based decision-making culture in Sri Lanka. Lakmini was supervised by Professor Firmin Doko Tchatoka and Dr. Stephanie McWhinnie."

Lakmini Fernando PhD in Economics

Applied econometrics

- Econometric theory
- Financial econometrics
- Panel data
- Time-series econometrics
- Quantile regression

Microeconomics

- Political economy
- Public economics
- Health economics
- Environmental and resource economics
- Industrial organisation
- Design of contracts
- Market design
- Networks
- Behavioural economics and experiments

- Evolutionary dynamics
- Innovation and knowledge economics

Trade and development

- Agricultural and food policy
- Natural resources and development
- Political economy of trade-related policies
- Trade and climate change
- Trade, income inequality and poverty
- Trade theory
- Preferential trade and investment arrangements

Further information or advice

T: +61 8 8313 5540 E: economics@adelaide.edu.au W: economics.adelaide.edu.au

backgrounds, and pursue their research interests in many different areas of economics, including behavioural and experimental analysis; applied econometrics and policy evaluation; business cycle and labour macroeconomics; public economics; applied economics in development, trade, health and resources; agricultural and environmental economics.

Projects students may be interested in

- Smarter information use for causal inference
- Model selection and statistical inference at the age of bid data

- Monetary policy and exchange rate nexus
- Policy evaluation

Recent publications

Exogeneity tests, incomplete models, weak identification and non-Gaussian distributions: Invariance and finite-sample distributional theory (2020). Journal of Econometrics

On Bootstrap Inconsistency and Bonferroni-Based Size-Correction for the Subset Anderson-Rubin Test (2018). Journal of Econometrics

Neighbourhood, school zoning and the housing market: Evidence from New South Wales (2021). Journal of Housing Economics Oil Extraction and Spillover effects into Local Labour Market: Evidence from Ghana (2022). Energy Economics

Empowering the powerless: Financial inclusion in developing Africa and Asia (2021). In `Financial Inclusion in Asia and Beyond: Measurement, Development Gaps, and Economic Consequences,' Routledge

Linkages between oil price shocks and stock returns revisited (2018). Energy Economics

Education



Strong nexus between research, learning and teaching



Research engagement based on national priorities and international trends



Dedication to research that values knowledge generation, critical thinking The School of Education offers a wide range of research expertise building on existing understandings of learning, building community, and providing contemporary evidence-based approaches to new methodologies, technologies and pedagogies which enhance education outcomes.

Industry and research partnerships

Our award-winning team has strong local and international partnerships with the Department for Education (DfE), the International Positive Psychology Association, Globalex lexicographical association, Apple, the Australian Council for Educational Leaders, the Australian College of Educators, the Higher Education Research Group of Adelaide, the South Australian Science Teachers Association and the OECD. We have over 100 students undertaking research at Masters or PhD level addressing some of the most challenging educational issues of our time.

Research groups

There are two research groups in the School of Education:

- Wellbeing and Culture
- Learning Technology and Assessment

Research areas

School staff have a wide range of interests and are able to supervise postgraduate students in these areas:

- teacher education
- wellbeing education
- education and technologies
- virtual and augmented reality

Supervisor spotlight



Dr I Gusti Ngura

Darmawan Senior Lecturer

Fields of research

- ICT, Science and Mathematics Education
- Assessment and the measurement of student achievement, progress, and attitude
- Advanced quantitative methods and their applications

Awards

- PVCI Excellence Award (2019)
- Dean of Education Excellence Award for Excellence in Building International Research (2014)

Why should students study with the University of Adelaide?

The University of Adelaide is a member of the prestigious Go8 research-intensive universities and is ranked in the top 1% of universities worldwide. Within the School of Education are two research groups that each offer high quality, supportive, and stimulating research environments: the Wellbeing and Culture Research Group and the Learning, Technology and Assessment Research Group. These groups have strong collaborations with government bodies and industry partners at the local, national, and international levels.

Why research measurement, assessment and evaluation at Adelaide?

Measurement, assessment, and evaluation are fundamental to understanding educational outcomes. Learning and human development can not be examined effectively unless human characteristics can be measured

- transcultural and global education
- educational leadership
- science and mathematics education
 large-scale assessment, measurement and evaluation
- curriculum, learning and teaching
- higher education scholarship.

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>able.adelaide.edu.au/</u><u>education/research</u>

Further information or advice

School of Education Level 8, Nexus 10 building, 10 Pulteney St The University of Adelaide SA 5005 Australia

T: +61 8 8313 0694 E: education@adelaide.edu.au W: education.adelaide.edu.au



The biggest value of my study is opening my eyes to draw theory into practice, identify the complex problems in my field, and provide the appropriate solutions. My study program has prepared me to face real-life challenges in my future as a teacher and researcher."

Abu Nawas PhD in Education

accurately across a scale. At the University of Adelaide, we investigate the role of different approaches of assessment to learning outcomes using robust measurement and statistical approaches.

Projects students may be interested in

- Science, Technology, and Mathematics Education
- Refugee education
- COVID-19 impact on students' wellbeing and performance
- Computer Adaptive Testing

Current research projects include:

 2022 Australian Federal Government Emerging Priorities Program, Preparing for Parenting in a Post-Pandemic world
 School seminars to skill parents and teachers to support the wellbeing, behaviour and self-regulation of students.

- 2020 Department for Education, Analysing Brightpath Writing Improvement program effect on NAPLAN student writing achievement.
- 2019 New Colombo Plan: Professional Experience Teaching Placement – Bandung Indonesia.
- 2017 Australian Awards Indonesia Educational Assessment: National Assessment and Computer-Based Testing.

Recent publications

Maadad, N., & Darmawan, I. G. N. (2022). The Education of Arabic Speaking Refugee Children and Young Adults Education, Employment and Social Inclusion. London and New York: Routledge. doi:10.4324/9781003110637

Keeves, J. P., & Darmawan, I. G. N. (2021). Philosophical and Pedagogical Underpinnings of Globalisation and Education. In Third International Handbook of Globalisation, Education and Policy Research (pp. 819-840). Springer International Publishing. doi:10.1007/978-3-030-66003-1_47 Vosniadou, S., Darmawan, I.G.N, Lawson, M. J., Van Deur, P., Jeffries, D., & Wyra, M. (2021). Beliefs about the self-regulation of learning predict cognitive and metacognitive strategies and academic performance in pre-service teachers. Metacognition and Learning, 16(3), 1-32. doi:10.1007/s11409-020-09258-0

Darmawan, I. G. N. (2020). The changes in attitudes of 15-year-old Australian students towards reading, mathematics and science and their impact on student performance. Australian Journal of Education, 64(3), 304-327. doi:10.1177/0004944120947873

Darmawan, I. G. N. (2020). Quality and equity of student performance in mathematics in Indonesia, Malaysia, Singapore, Thailand and Vietnam. In M. A. White, & F. McCallum (Eds.), Critical Perspectives on Teaching, Learning and Leadership Enhancing Educational Outcomes (pp. 123-144). Singapore: Springer. doi:10.1007/978-981-15-6667-7_7

Darmawan, I. G. N., Vosniadou, S., Lawson, M. J., Van Deur, P., & Wyra, M. (2020). The development of an instrument to test pre-service teachers' beliefs consistent and inconsistent with selfregulation theory. Br J Educ Psychol, 90(4), 1039-1061. doi:10.1111/bjep.12345

Humanities



Supervision by enthusiastic, high-profile and awardwinning researchers



Undertake cutting-edge research that enriches human life



Be part of a stimulating intellectual community with like-minded peers The School of Humanities has specialised researchers and supervisors in the departments of: art history, classics including archaeology and ancient history; English and creative writing; history; philosophy, linguistics, media; French studies; German studies and Spanish studies. Supervision across departments may be possible depending on the topic of interest.

Research centre

J.M. Coetzee Centre for Creative Practice (jointly with Elder Conservatorium of Music) adelaide.edu.au/jmcoetzeecentre

The JM Coetzee Centre is an interdisciplinary home for research that combines forms of creative practice with rigorous critical thinking. Our members provide supervision across the arts (esp. music and sound, creative writing, literary nonfiction and performance.) We are especially interested in supervising projects that integrate disciplinary knowledges with creative making and an innovative use of creative form.

Research areas

Art History

The department is led by a research-active art historian with research expertise and teaching specialisation in early modern European art (1400-1800), including:

- Renaissance art, especially of northern Europe
- portraiture
- representations of gender, bodies, and fashioning cultural identities
- art and war
- materials and materiality
- curatorship and museology.

T: +61 8 8313 4249 E: humanitiesoffice@adelaide.edu.au W: arts.adelaide.edu.au/art_history

To find a supervisor, submit a r esearch proposal or learn more about this area of research, visit: <u>able.adelaide.edu.au/our-research</u>

Supervisor spotlight

Katie Barclay Associate Professor

Fields of research

- History of emotions
- History of the family
- Gender studies
- British history, especially Scotland and Ireland
- Subjectivity and selfhood

Awards

- 2018 Royal Historical Society David Berry Prize
- EURIAS Marie Curie Fellowship, Aarhus Institute for Advanced Studies, Denmark (co-funded by Marie SklodowskaCurie Actions, under the European Union's Seventh Framework Programme), 2017

- University of Adelaide Research Fellowship, 2017
- Vice-Chancellor's Women's Research Excellence Award, University of Adelaide, 2015
- Discovery Early Career Research Fellowship (funded by the Australian Research Council), 2014

Why should students study with the University of Adelaide?

The University of Adelaide combines top researchers in History with a large cohort of postgraduate students, creating a lively environment in which to conduct research and explore new ideas.

Classics, Archaeology and Ancient History

Staff in the Department of Classics, Archaeology and Ancient History have research and teaching expertise in:

- the history of scientific and medical thought in Greece and Rome
- Greek and Roman philosophy up to AD 600
- emotion and pain narratives in Greek and Latin literature
- aspects of late Roman social and cultural history up to AD 600.

In addition, we can supervise research into aspects of:

- Roman imperial history
- Roman historiography
- Greek and Roman myth.

T: +61 8 8313 4249

E: humanitiesoffice@adelaide.edu.au W: arts.adelaide.edu.au/classics

English

- Australian Literature; Drama, Theatre and Performance
- Australian Cultural History and Contemporary Culture
- Humour Studies

- Early Modern English Tragedy
- The Critical History of Catharsis
- Early Modern Uses of Virgil's Aeneid
- Contemporary Popular Culture including sport
- Contemporary women's writing and feminist theory
- Psychiatry and 'anti-psychiatry' in fiction
- Literary debates and the state of the humanities
- American Literature and Film
- Gothic and related speculative genres

Creative writing

- Novel, short story and creative nonfiction
- Creative-critical theory intersections
- Young Adult fiction
- Contemporary Poetry and Poetics
- Ecopoetics
- Visual and Sound Arts in Writing Practice
- Digital Writing
- Fictocriticism
- Life Writing
- Experimental writing
- T: +61 8 8313 4249
- E: humanitiesoffice@adelaide.edu.au

French Studies

The Department of French Studies welcomes applications for higher degrees by research, and encourages interdisciplinary explorations that cut across multiple languages. The department's postgraduate students frequently collaborate with others across Australia, and are active in attending and presenting at major conferences.

Research areas include:

- French and Francophone literature and history from the 18th to the 21st centuries
- French and Francophone cinema
- women's writing
- autobiography
- crime fiction
- exploration in the Pacific
- literary theory
- translation studies.
 Joint supervision may be provided.

T: +61 8 8313 4249

E: humanitiesoffice@adelaide.edu.au W: able.adelaide.edu.au/french

We have regular seminars, workshops, and similar events throughout the year. Students have the opportunity to hone their skills not just through research, but also public speaking, writing for diverse audiences, and participating in career skills training.

All our staff are research-active, and bring cutting-edge ideas and knowledge to their engagement with students, ensuring a rigorous and innovative education.

Why research history at Adelaide?

Our Department of History provides a supportive environment, with concentrated expertise in gender, the history of emotions, memory studies, British history and many other areas. It's supported by a world-class library, with the largest collection for British Studies in Australia. Students can explore questions about how emotions have changed over time and space; interrogate families' role in the production of the self and nation; or get involved in work on poverty and the implications for selfhood and wellbeing.

Projects students may be interested in

- The history of the 'quantified self'
- History of poverty and 'precarious' work
- Family, identity and memory
- Loneliness in historical perspective
- Law and emotion

Recent publications

Barclay, K 2019, 'Love, care and the illegitimate child in eighteenth-century Scotland', Transactions of the Royal Historical Society, vol. 29, pp. 105–25.

Barclay, K 2018, Men on Trial: Performing Emotion, Embodiment and Identity in Ireland, 1800-1845. Manchester: Manchester University Press.

Barclay, K 2018, 'Falling in love with the dead', Rethinking History, vol. 22(4), pp. 459–73.

Barclay, K & Carr, R 2018, 'Women, Love and Power in Enlightenment Scotland', Women's History Review, vol. 27(2), pp. 176–98.

Barclay, K 2017, 'New Materialism and The New History of the Emotions', Emotions: History, Culture, Society, vol. 1(1), pp. 161–83.

German Studies

Staff in the Department of German Studies conduct and supervise research in a number of different periods and areas of German language and culture. These include:

- literary and aesthetic theory and history
- intercultural literary studies
- cultural constructions of German identity
- German and continental philosophy
- theatre studies
- emotions and moods in literature, and the history of science
- space and time configurations in literature
- musical discourses in 19th and 20th century Austria and Germany
- Austrian studies
- German film
- holistic discourses (including Gestalt theory) in 20th century German thought.

T: +61 8 8313 4249 E: humanitiesoffice@adelaide.edu.au

History

Staff in the Department of History supervise research across a wide range of periods, regions and themes, such as:

- the history of emotions
- European history
- British history—legal history, politics and society, gender, and medieval Britain
- Australian history, especially the history of migration, Australian Indigenous history, and comparative Indigenous history
- American history, and the history of capitalism
- the history of science, technology and medicine, and health/science policy
- 20th century history—international terrorism, nationalism, genocide, and World War I and II
- the history of family and gender.
- T: +61 8 8313 4249
- E: humanitiesoffice@adelaide.edu.au

My experience as a PhD candidate has been the most transformative of my life. Our philosophy department and post graduate cohort have guided and enabled my capacity to delve into mystery and develop my own thinking, enhancing my clarity of thought, reflexivity, and understanding.

World class philosophical training at the University of Adelaide has afforded me the opportunity to travel, contribute and collaborate with philosophers across the planet. In this, my confidence and competence dealing with complexity and critical thinking has been nurtured and shaped by the profound wisdom of our department, which I carry with me always. In a word: Empowering."

Dook Shepherd Philosophy

Linguistics

Research in the Department of Linguistics covers descriptive and analytic approaches and methodologies. Areas of focus include:

- Aboriginal linguistics, including Kaurna language and West Coast South Australian languages
- Hebrew, Jewish, Semitic and Afro-Asiatic linguistics
- Pacific linguistics, including Norfolk Island language
- revival linguistics—reclamation, revitalisation, re-introduction
- language preservation and language change language contact—pidgin and creole linguistics
- mission linguistics.
- T: +61 8 8313 4249

E: humanitiesoffice@adelaide.edu.au

Media

Staff in the Department of Media actively research, publish and supervise across a broad range of scholarly and creative areas. Among them are:

- digital media and innovation
- media industries
- food and media
- multimodal design and theory
- 'extreme' media and cultures
- film theory and practice

- online games and social media practices
- media and social and political theory
- journalistic practices, censorship and emerging media
- media and politics
- typography, augmented texts and dyslexia
- human-centred design
- immersive technology design/development
- persona studies
- online identity
- social media platforms
- animation
- digital 2D and 3D representation.
- T: +61 8 8313 4249
- E: humanitiesoffice@adelaide.edu.au

Philosophy

Postgraduate research students in the Department of Philosophy have an opportunity to develop original philosophical ideas, working alongside world-leading scholars with extensive professional experience. The department's researchers contribute to many areas of philosophy, with particular strengths in:

- aesthetics and philosophy of art
- cognitive science, philosophy of mind, and philosophy of psychiatry
- epistemology
- philosophy of logic and language
- philosophy of science, biology, and physics



- metaphysics
- moral and political philosophy.

T: +61 8 8313 4249 E: humanitiesoffice@adelaide.edu.au

Spanish Studies

Staff in the Department of Spanish Studies can supervise in a variety of areas. These include:

- contemporary Latin American literature and culture
- Latin American poetry
- poetry and popular music/culture in Latin America
- politics in Latin American literature

- Latin American film
- decolonial processes and interculturalism in Latin America
- indigenous cultures of Latin America
- literary theory
- the Spanish civil war
- Spanish literature of the 19th and 20th centuries.

T: +61 8 8313 4249 E: humanitiesoffice@adelaide.edu.au

To find a supervisor, submit a research proposal or learn more about these areas of research, visit: able.adelaide.edu.au/our-research





Consistently recognised as above world standard for research excellence in law and legal studies*



South Australia's highest ranked law school, awarded a five-star rating for exceptional performance and quality standards^



Future-focused and committed to preparing students for careers of tomorrow, equipped to manage the challenges of a changing world

* ERA Outcomes 2018

^ QS World University Rankings by Subject 2020 The Adelaide Law School was founded in 1883 and is the second oldest law school in Australia.

As part of the University's tradition of excellence, the school takes pride in its reputation as an international leader in legal research. For over 125 years, Adelaide Law School has been home to the leading Australian legal researchers of the day.

The modern Adelaide Law School continues this fine tradition, with leading international and national scholars engaged in legal theory, public and private law, and cutting-edge interdisciplinary research.

The school achieved an Excellence in Research for Australia rating of 4 (performance above world standard) in the Australian Research Council's 2018 research quality and assessment, and was rated as high in research impact and engagement.

Research groups

Our research strengths are demonstrated by the following research centres:

- Research Unit for the Study of Society, Ethics and the Law <u>law.adelaide.edu.au/russel</u>
- Litigation Law Unit
 <u>law.adelaide.edu.au/llu</u>

66

Manuel's PhD thesis examines the merits and limits of the language of human needs compared to the language of human rights in the context of the challenge to enhancing universal access to modern energy services. His research garnered several prestigious awards, including the IUCN Academy of Environmental Law 's Best Graduate Student Paper Award and the University Doctoral Research Medal.

Manuel Solis PhD in Laws

- Public Law and Policy Research Unit <u>law.adelaide.edu.au/plpru</u>
- Regulation of Corporations, Insolvency and Taxation <u>law.adelaide.edu.au/rocit</u>
- Research Unit on Military Law and Ethics <u>law.adelaide.edu.au/military-law-ethics</u>
- South Australian Law Reform Institute <u>law.adelaide.edu.au/salri</u>
- Environmental and Natural Resources Law Research Unit <u>law.adelaide.edu.au/enrel</u>
- Work, Employment and Regulation Research Unit <u>law.adelaide.edu.au/wer</u>

Research areas

We are a diverse selection of researchers crossing international, disciplinary and thematic borders. We encourage collaborative, innovative research and provide a supportive and collegial environment for all our researchers. Our research can be divided into six broad themes:

Commerce, innovation and technology

Commercial courts and arbitration centres are amongst the busiest judicatures, handing down determinations that affect business daily. Some examples of legal notabilia our research covers include:

- intellectual property law
- corporate social responsibility
- technology law and regulation.

International affairs

With legal practice becoming increasingly global, our research projects are extending as far as the use of outer space. Areas of particular strength here include:

- public international law
- comparative law
- private international law (also known as 'conflict of laws')
- space law.



Government and citizenship

The identity of the Australian community, operation of government and functioning of its legal system is constantly evolving. Examples of broad topics of our research in this area include:

- local government law
- migration and refugee issues
- the freedom of information.

Society and ethics

Across Adelaide Law School our researchers consider the ethical dimensions of law. Our research in the area is both theoretical and applied, and its span is considerable. It includes:

- the study of fair and compassionate dispute resolution
- ethical ownership
- a principled criminal law
- the nature of Australian legal identity.

Work, health and environment

Our research here responds to the myriad of significant and pressing legal questions arising from the changing nature of work, health and environment. Examples include the:

- increasing global movement of workers through temporary labour migration
- adequacy of laws and regulation for environmental protection in the mining and petroleum industries
- regulatory challenges associated with health law and the increasing influx of disruptive medical technology.

History, theory and education

The Adelaide Law School has a distinguished heritage of research in legal history, theory and education. Continuing this tradition, our leading research projects include collaboration on:

- the Smart Casual project, to produce a suite of professional development modules for sessional teachers of law
- the Partnership for Better Health project, to develop inclusive, sensitive policy and practice for advance care planning
- the Reflective Learning on Workplace Experience project, to investigate millennials' attitudes to privacy and peer disclosure in assessable online reflective journaling.

Further information or advice

To learn more about our areas of research, visit: <u>law.adelaide.edu.au/research</u>

T: +61 8 8313 5063 E: lawenquiry@adelaide.edu.au W: law.adelaide.edu.au

Music



Elder Conservatorium of Music recognised internationally as a specialist music institution, with the longest history of any music school in Australia



Offers PhD and master degrees in all specialisations, including Composition, Musicology, Ethnomusicology, Performance, Sonic Arts and Music Education



Research quality rated above world standard As one of Australia's oldest and most distinguished tertiary music schools, the Elder Conservatorium of Music plays a leading role in Australia's musical landscape. Through its research programs, it encourages the development of new parameters of artistic and scholarly endeavour that contribute to the advancement of knowledge and practice in the art of music.

The Conservatorium offers international postgraduate students access to outstanding resources, including one of the largest music libraries in the Southern Hemisphere.

It maintains a wide range of professional links with music schools, conservatories and music organisations within South Australia and across the nation; and it sustains strong connections with important institutions in the UK, USA, Canada, Asia and Europe.

Research centres and institutes

- The J.M. Coetzee Centre for Creative Practice (jointly with the School of Humanities) <u>adelaide.edu.au/jmcoetzeecentre</u>
- Sia Furler Institute for Contemporary Music and Media <u>able.adelaide.edu.au/music/</u> <u>sia-furler-institute</u>
- National Centre for Aboriginal Language and Music Studies <u>able.adelaide.edu.au/ncalms</u>

Research areas

Staff at the Elder Conservatorium are active researchers and supervisors in a variety of areas, including:

- Australian Indigenous music
- contemporary Polish music
- music and society
- music analysis

spotlight

Supervisor

Stephen Whittington

Associate Director -International

Fields of research

- Composition
- Transcultural Music
- Contemporary Music
 Performance
- Sonic Arts

Why should students study with the University of Adelaide?

During its long history the Elder Conservatorium has been a pioneer in many areas of music research. While it continues to offer expert supervision for research in traditional fields such as musicology, composition and performance, the Conservatorium also engages with the contemporary musical world through research in new fields such as music and sound design for computer games, film, virtual reality (VR) and artificial intelligence (AI).

- music and health
- music composition (including concert music, music for film and television, electro acoustic music, and jazz composition)
- music performance (classical, pop and jazz)
- traditional and contemporary music in Asia
- Chinese traditional music
- digital technologies and sound design.

To find a supervisor, submit a research proposal or learn more about research at the Elder Conservatorium of Music, visit: <u>music.adelaide.edu.au/research</u>

Further information or advice

T: +61 8 8313 5995 E: music@adelaide.edu.au W: music.adelaide.edu.au



I've been able to learn from some of the best mentors in my field. The university has given me support to grow and expand my skills in a new area and engage with other fields, and I have developed new interests since coming to this university that have changed my perspective on research. I have had the opportunity to work closely with my supervisor, and tackle interdisciplinary research in music."

Iran Sanadezah PhD in Musicology/Sonic Arts

Postgraduate students at the

Conservatorium work in a supportive research environment with supervisors who are internationally recognised leaders in their fields. Students from Australasia, Asia, Europe and the Americas and a lively and diverse on-campus musical life create a rich and stimulating cultural environment for students to work in.

Why research music at Adelaide?

The importance of music in the lives of individuals and societies is widely recognised. Music research deepens our knowledge of ourselves and our cultures, contributes to the cross-cultural understanding, and creates new pathways for creative expression. With a global view of music that encourages students to research, perform and create music in Western and non-Western traditions - or to combine them - and to engage with the constantly evolving world of music today, the research possibilities at the Conservatorium are wide-ranging and exciting.

Recent publications

Journey to the Surface of the Earth, (2 pianos) 4-CD album, Experimental Art Foundation, Adelaide, 2011. Music For Airport Furniture (String Quartet) CD album, Cold Blue, Los Angeles, 2013

Digging in John Cage's Garden: Cage and Ryoānji, Malaysian Journal of Music, 2013

Windmill (String Quartet) CD album, Cold Blue, Los Angeles, 2017.

From a thatched hut - Exploring Transcultural Composition, in Transcultural Encounters in Knowledge Production and Consumption, ed. Xianling Song and Youzhong Sun, Springer 2018.

Final Fragments (solo piano). Vinyl album. De la Catessen, 2021.

Social Sciences



In-depth engagement with industry, government and NGOs



Leadership in research mentoring in a supportive research environment

Access to many high-achieving research centres The School of Social Sciences is a world leader in applied social research, with a focus on: migration; coastal management; cities; housing; sociology; youth; health; and international development.

The school houses leading world scholars in:

- housing markets
- public policy
- foreign policy
- political theory
- environment
- anthropology and development studies
- gender
- health
- Indo-Pacific politics and governance
- deviance and social control.

The school offers diversity and depth in the disciplines of: anthropology and development studies; sociology, criminology and gender studies; geography, environment and population; and politics and international relations. Its world-class scholars provide hands-on supervisory support and mentorship to the school's high-achieving postgraduate students, many of whom go on to obtain academic posts and become leaders in industry and government.

School staff frequently collaborate with industry and government bodies. This includes the United Nations, UNICEF, Australian Red Cross, National Roads and Motorists' Association, numerous local governments, and the Australian Government departments of:

- Foreign Affairs and Trade
- Health (incorporating ageing services)
- Environment and Energy
- Social Services (incorporating housing and community services)
- Home Affairs (incorporating immigration)
- Attorney-General's Department (incorporating native title).

Research centres

- Australian Centre for Housing Research able.adelaide.edu.au/housing-research
- Hugo Centre for Population and Housing adelaide.edu.au/hugo-centre



Dr Susan Hemer Senior Lecturer

Fields of research

- Medical Anthropology;
- Psychological Anthropology;
- Social history of Medicine.

Awards

- Stephen Cole the Elder Award for Excellence in HDR supervisory practices.
- Commendation for the Enhancement and Innovation of Student Learning (Supervision). University of Adelaide.
- Faculty of Arts Prize for Excellence in Teaching (Supervision).

Why should students study with the University of Adelaide?

The Faculty of Arts, Business, Law and Economics boasts some of the best supervisors for HDR students in the University as borne out through recent supervisory awards. Our supervisors publish in International Journals on exemplary supervisory practices, meaning that we lead in the field of practice. We reflect carefully on how best to support students to become excellent researchers in their fields.

on; se ng c

⁻aculty of Arts, Business, Law and Economics

- China: governance; rural studies; contemporary politics; education; intellectual and cultural change; language education; language acquisition; translation/interpreting studies; Chinese linguistics; dialectology; critical thinking
 - translation/interpreting studies; Chinese linguistics; dialectology; critical thinking on contemporary China; Chinese migration to Australia; western media reportage of China; western academic and media construction of China; and discourse analysis of China

of regional institutions, energy policy

higher education

and power transition; and research into

 Japan: contemporary political issues; environmental issues; foreign policy; defence and security; education, youth and culture; issues of governance; intercultural language teaching and learning; language education; spirituality; and social theory

T: +61 8 8313 5654

E: socialsciences@adelaide.edu.au

- The Fay Gale Centre for Research on Gender <u>adelaide.edu.au/gender</u>
- Stretton Policy Institute
 <u>adelaide.edu.au/stretton</u>

Research areas

Anthropology and Development Studies

- Anthropological perspectives on various locales: Aboriginal Australia, Australia, Europe, Melanesia and Oceania, South Asia (Nepal, India, Sri Lanka, Pakistan), Southeast Asia (Thailand, Laos, Indonesia, Timor-Leste), and East Asia (China)
- Ethnography in anthropology: theory and methods of anthropology; feminist perspectives of ethnography; postmodern ethnography; and material culture
- Art and aesthetics in cultural processes: belief systems and ritual symbolism; cosmology and myth; cultural constitution of identity ethnicity; multiculturalism, nationalism and regionalism; and domestic organisation
- Applied anthropology

- Environmental anthropology
- Colonialism, the state, and Third and Fourth World peoples
- Critical studies in social development, especially in the Asia-Pacific region: peasant society; rural society and the contemporary state; small communities in contemporary complex society; social and political organisation; social mobility; systems of hierarchy and inequality; and systems of land tenure
- Gender relations; mass/popular consumption; media; medical anthropology; and visual anthropology
- T: +61 8 8313 5654
- E: socialsciences@adelaide.edu.au

Asian Studies

- Chinese linguistics: dialectology; L2 acquisition of Chinese and Japanese; and translation studies
- Asia: social change, politics and history; regional development; social and political reform; work and leisure; cultural influences; soft power; spirituality; Asian world influence; Australia-Asia relations in the context

Why research Medical

Anthropology at Adelaide?

The university of Adelaide hosts a range of highly qualified researchers interested in Medical Anthropology working across a range of societies including Australia, other OECD nations and the Asia Pacific. We carry out research on social, cultural and historical aspects of infectious diseases, non-communicable diseases, mental health and illness, and death and dying and access to health care systems.

Projects students may be interested in

• Anthropology of death, dying & grief

- Social and anthropological aspects of disability
- Socio-cultural and historical shaping of health care

Recent publications

Culture and grief: ethnographic perspectives on ritual, relationships and remembering. (with G. Silverman & A. Baroiller) Death Studies 45(1): 1-7. DOI: 10.1080/07481187.2020.1851885.

Shock, anger and bad deaths in Lihir: a reanalysis of grieving in Papua New Guinea. Death Studies 45(1): 40-50. DOI: 10.1080/07481187.2020.1851884.

Global Health, Tuberculosis and Local Health Campaigns: Reinforcing and Reshaping Gender and Health Inequalities in Lihir, Papua New Guinea. In Unequal Lives: Gender, Race and Class in the Western Pacific Edited by N. Bainton, D. McDougall, J. Cox, & K. Alexeyeff (eds). Canberra: ANU Press.

"It's an emotional roller coaster" the spatial and temporal structuring of affect in diagnosing childhood hearing loss. (with Claire Harris & Anna Chur-Hansen) Emotion, Space & Society. DOI: 10.1016/j.emospa.2020.100729.

Emotion as Motivator: parents, professionals and diagnosing childhood deafness. (with Claire Harris & Anna Chur-Hansen) Medical Anthropology. DOI: 10.1080/01459740.2020.1796659.

Broadcasting your death through livestreaming: Understanding cybersuicide through concepts of performance. (with Annamaria Fratini) Culture, Medicine & Psychiatry. DOI: 10.1007/s11013-020-09671-9.





My PhD studies were great fun and deeply rewarding. I benefited from excellent supervision, developing skills that have positioned me well for my current role as Research Fellow with the Centre for Social Impact Flinders. This opportunity arose from a collaborative project I was asked to join during my studies."

Veronica Coram PhD in Political Science

Geography, Environment and Population

- Australian demography
- Climate change
- Coastal management
- Environmental change: Australia, Southeast Asia and the Pacific
- Environmental planning and governance
- Biodiversity conservation and food security
- Human impact on lakes and wetlands
- Indigenous peoples and the environment
- Migration and development
- Migration policy
- Non-market valuation
- Permaculture
- International global migration
- Housing and urban planning
- Regional development
- Small-scale forestry
- Transport and mobilities
- Urban futures
- Urban management
- Water security
- T: +61 8 8313 5643

E: socialsciences@adelaide.edu.au

Politics and International Relations

- Australian politics and public policy: political institutions, parties and voting rights; Australian political history; and key social, technological and economic issues
- International relations
- Human rights and justice: political rights; economic inequality; migration; ethnicity; gender; and sexuality
- The history of political thought
- International comparative politics: Northeast and Southeast Asia; the Middle East; Eastern and Western Europe; Britain; the South Pacific; and Latin America
- Foreign policy: Australia, China, India and Russia
- Changing geopolitics and international political economy
- Security studies
- Citizenship studies
- Environmental politics
- T: +61 8 8313 5654
- E: socialsciences@adelaide.edu.au

Sociology, Criminology and Gender Studies

- Sociology
- Criminology and criminal justice processes
- Risk and surveillance

- Australia: cultural studies; gender and cultural difference; popular culture and media representations; and race relations
- Gender bodies and health
- Obesity
- Health policy
- Human rights
- Medical anthropology
- Post-colonial histories; research methodology; theory
- Sexuality
- Social policy and citizenship
- Families
- Youth
- Urban living
- T: +61 8 8313 5654

E: socialsciences@adelaide.edu.au

Further information or advice

School of Social Sciences, Napier building, Ground Floor, North Terrace campus, University of Adelaide, SA 5005 Australia

T: +61 8 8313 5654 E: socialsciences@adelaide.edu.au W: able.adelaide.edu.au/ socialsciences/research

To find a supervisor, submit a research proposal or learn more about this area of research, visit: able.adelaide.edu.au/our-research

Faculty of Health and Medical Sciences

The Faculty of Health and Medical Sciences is a world leader in health education and impactful research. Our researchers conduct cuttingedge, transformative research that provides new insights into human biology and delivers real health outcomes to our community. We seek to improve both national and international health care.

The faculty conducts worldclass fundamental, biomedical, translational, and population health research across the full course from conception to ageing. This work has vastly improved quality of life in our community and contributed to greater wellbeing throughout



society. Our innovative technologies and novel scientific discoveries have led to new treatments, new ways of thinking, and the development of life-enhancing new health policy.

Consequently, we're ranked #1 in South Australia for Health and Medical Science research. Our output is universally rated 'world standard' or above in the most recent Excellence in Research for Australia assessment*, with research in 11 distinct areas considered 'well above' world standard. Our reputation for outstanding teaching, and producing careerready graduates, is equally strong. Study with us and you will be guided by outstanding educators and researchers who are national and international leaders in their fields. You will learn in stunning, state-ofthe-art facilities that are among not just Australia's best, but the world's.

We offer degrees in medicine and surgery, dentistry and oral health, nursing, health and medical sciences, public health, psychology, counselling and psychotherapy, and addition studies. All develop highly skilled and compassionate professionals who aspire to the highest standards of integrity and ethical behaviour. All will immerse you in a vibrant student and campus culture, complete with every possible support to help you succeed.

* 2018 Excellence in Research for Australia

Allied Health



Outstanding researchers in clinical, translational, and interprofessional fields



A robust collaborative network, including public and private health care organisations, industry, and community partnerships



Part of South Australia's most comprehensive and unrivalled health research environment The School of Allied Health Science and Practice brings together multiple healthcare disciplines creating an interprofessional and collaborative research environment. The school's academic staff have broad experience in the delivery of high-quality and innovative clinical and translational research. You will have the opportunity to undertake research in cutting-edge, custom-built facilities under the expert guidance of supervisors with industry recognised experience.

Research areas

Researchers in the School of Allied Health Science and Practice can provide you with access to a comprehensive array of interdisciplinary research opportunities. Our researchers seek novel approaches and contributions to providing industrybest client outcomes. The school's research spans a broad range of fields, including:

- Physiotherapy
- Occupational therapy
- Speech pathology
- Chronic pain
- Public health
- Neuroscience
- Cultural and linguistic diversity
- Social communication skills
- Policy, health equity, and justice
- Cancer treatment.

Industry and research partnerships

The School of Allied Health Science and Practice's academic staff have strong relationships with numerous research centres, health care providers, government agencies, and industry organisations.

Supervisor spotlight

Associate Professor Stacie Attrill

Associate Professor in Speech Pathology; Head of Speech Pathology program

Fields of research

- Health service access, use and outcomes for culturally and linguistically diverse communities.
- Health professional diversity: participation and outcomes for health professionals and students who are from minority or diverse communities.
- Eating and swallowing outcomes for people with neurodegenerative conditions who have dysphagia.

Awards

- NDIS Quality and Safeguards Commission grant with a multi-state research team for 'Developing behaviour support decision-making tools and resources for participants and practitioners'.
- Grants from Department of Industry and Skills; and Department of State development with a multi-institutional research team for "Enabling the allied health workforce providing NDIS funded services to develop business strategies"; and 'Building allied health workforce for NDIS funded service delivery'
- Speech Pathology Australia grant for 'Being a culturally and linguistically diverse speech pathologist in Australia: exploring practice experiences and perspectives'.

Why should students study with the University of Adelaide?

University of Adelaide has a vibrant community of students completing research in allied health. With close connections with local, national and international allied health stakeholders, and with a focus on multidisciplinary, interprofessional opportunities, our research is at the cutting edge of allied health science and practice.

University of Adelaide provides specific discipline expertise in Occupational Therapy, Physiotherapy and Speech Pathology. However, with high quality supervision and research programs that reflect broad allied health theory and practice, we welcome higher-degree research students from a broad range of health professional backgrounds.

Allied Health postgraduate coordinator

Dr Rutger de Zoete Email: rutger.dezoete@adelaide.edu.au

Further information or advice

School of Allied Health Sciences and Practice, Faculty of Health and Medical Sciences, The University of Adelaide SA 5005 Australia

E: research_degrees@adelaide.edu.au W: health.adelaide.edu.au/our-research

66

Starting my PhD at University of Adelaide has given me the opportunity to be supervised by some of the top researchers in the field of pain. Through my research, I hope to improve the understanding of chronic neck pain and influence the exercise prescription and decision making of health care professionals. I hope I will be able to provide new insights to the mechanistic effect of exercise on central sensitisation in individuals with chronic neck pain, and the neurophysiological understanding of chronic pain."

Kexun Kenneth Chen

PhD in Exercise Therapy and Chronic Neck Pain



Why research allied health at Adelaide?

The broad umbrella of allied health science and practice provides diverse opportunities for research students to explore discipline specific or interprofessional practice. Research students have access to world class and allied-health specific teaching and laboratory facilities and work in collaboration with industry partners to produce exciting research that reflect real-world practice that improves the lives of clients and communities.

Projects students may be interested in

Our world renowned allied health research teams explore discipline specific problems, such as physiotherapy interventions for pain, and culturally responsive speech pathology for people with complex communication or swallowing needs; and broader allied health research including health workforce development; or health and care systems that respond to intersectional community needs.

Current research projects include:

- Use of brain stimulation technology to treat aphasia
- Pain interventions in physiotherapy
- Occupational management of extreme temperature workplaces
- Access and outcomes for people with disability who participate in the NDIS
- Culturally responsive supports for people with swallowing disorders or complex communication needs

Recent publications

Attrill, S., White, S., Murray, J., Hammond, S., & Doeltgen, S. (2018). Impact of oropharyngeal dysphagia on healthcare cost and length of stay in hospital: a systematic review. BMC health services research, 18(1), 1-18. Attrill, S., Lincoln, M., & McAllister, S. (2020). International students in professional placements: supervision strategies for positive learning experiences. International Journal of Language & Communication Disorders, 55(2), 243-254.

Foley, K., Attrill, S., McAllister, S., & Brebner, C. (2021). Impact of transition to an individualised funding model on allied health support of participation opportunities. Disability and Rehabilitation, 43(21), 3021-3030.

Francis, R., Attrill, S., & Doeltgen, S. (2021). The impact of cognitive decline in amyotrophic lateral sclerosis on swallowing. A scoping review. International Journal of Speech-Language Pathology, 23(6), 604-613.

Attrill, S., Davenport, R., & Brebner, C. (2021). Professional socialisation and professional fit: Theoretical approaches to address student learning and teaching in speech-language pathology. International Journal of Speech-Language Pathology, 1-12.

Foley, K., Attrill, S., & Brebner, C. (2021). Co-designing a methodology for workforce development during the personalisation of allied health service funding for people with disability in Australia. BMC health services research, 21(1), 1-15.

Dentistry



State-of-the-art teaching facilities that harness the most advanced teaching methods, simulators, and the latest technology



Accredited and clinically focused programs in dentistry and oral health that define the benchmark for training and research in clinical practice



A supportive and collegial learning environment focused on ensuring positive student learning experiences and outcomes The Adelaide Dental School is one of Australia's peak centres of excellence in oral health, delivering internationally recognised education, research, and service.

The school offers a comprehensive range of accredited, clinically-focused undergraduate and postgraduate dentistry and oral health degrees, including the Bachelor of Dental Surgery, Graduate Certificate of Oral Health Science, and the Doctor of Clinical Dentistry.

The Adelaide Dental School and the Adelaide Dental Hospital are located in the University's state-of-the-art Adelaide Health and Medical Sciences (AHMS) building. These new clinical facilities complement the existing high-tech facilities in the Dental Simulation Clinic.

Research centre

 Australian Research Centre for Population Oral Health <u>adelaide.edu.au/arcpoh</u>

Research units

- Craniofacial Biology
- Dental Education
- Endodontics and Pulp Biology
- Forensic Odontology
- Oral and Maxillofacial Surgery
- Oral Microbiology and Immunology
- Oral Pathology
- Orthodontics
- Paediatric Dentistry
- Periodontics

Research areas

Oral health is an essential component of a healthy life. Oral health is not only concerned with teeth, but the health of oral and related tissues that enables an individual to eat, speak and socialise without active disease, discomfort, or embarrassment, all of which contribute to general wellbeing.

Our research spans a broad range of fields including dental education, endodontics



Associate Professor Peter Zilm Adelaide Dental School

Fields of research

- Oral Microbiology
- Bacterial biofilms
- Nanomaterials

Why should students study with the University of Adelaide?

The University of Adelaide provides excellence in both teaching and research and therefore combines student learning with the latest developments in their chosen topic.

Why research dentistry at Adelaide?

The Adelaide Dental School (ADS) has a long tradition of excellence in research and is currently the top ranked university in Australia for Oral and Dental Health. Our and pulp biology (stem cell research), periodontics, orthodontics, craniofacial biology, oral and maxillofacial surgery, forensic odontology, population oral health, and cancer treatment spanning many of the faculty's 17 key research areas.

Our research activity also includes epidemiological studies focusing on the efficacy of population oral health interventions, oral health services and oral health policy analysis in relation to oral disease prevention and provision of optimal dental health services.

Researchers across the faculty are focused on:

- assessing intergenerational change in oral health in Australia
- monitoring of Indigenous oral health and the use of dental services
- performing population-based studies focusing on socioeconomic and psychosocial factors related to the use of dental services
- investigating patient-reported outcomes of dental care, such as oral health impact, health utility and quality of life.



My PhD experience has taught me to be creative and look for new approaches to answer the old, complex questions. I was really fortunate to have some fantastic mentors and supervisors to guide me through the process. Now, I am more courageous, resilient, and capable of solving problems."

Mehrsa Zakershahrak PhD of Dentistry

Dentistry postgraduate coordinator

Professor Toby Hughes E: toby.hughes@adelaide.edu.au

To find a supervisor or learn more about this area of research, visit: <u>health.adelaide.edu.au/dentistry/research</u>

Industry and research partnerships

The Adelaide Dental School fosters collaborative relationships with a broad range of researchers from academic institutions both locally and internationally. Striving to make a difference to the lives of others, oral health researchers promote collaborative industry partnerships, including a long-standing relationship with Colgate Oral Care.

Further information or advice

Adelaide Dental School Faculty of Health and Medical Sciences The University of Adelaide SA 5005 Australia

E: research_degrees@ask.adelaide.edu.au W: health.adelaide.edu.au/our-research

philosophy in research is to engage with top researchers in different fields so that research projects are multidisciplinary, innovative and world class.

Projects students may be interested in

- The development of oral microbiome transplantation in Australia
- Is the dysbiosis of the gut microbiome and subsequent inflammation caused by changes in the gut metabolome following periodontitis?
- The development of "intelligent" particles to improve treatment of dental caries in children and the elderly
- Disruption of multi-species biofilms using novel biofilm inhibitors

Recent publications

Hayles, A. Hasan, J. Bright, R. Wood, J. Palms, D. Zilm, P. Barker, D. Vasilev, K. Spiked Titanium Nanostructures Inhibit Anaerobic Dental Pathogens. ACS Applied Nano Materials. Accepted Jan 2022.

Andrew Hayles, Richard Bright, Jonathan Wood, Dennis Palms, Peter Zilm, Toby Brown, Dan Barker and Krasimir Vasilev. Spiked Nanostructures Disrupt Fungal Biofilm and Impart Increased Sensitivity to Antifungal Treatment. Advanced Materials Interfaces 2022DOI: 10.1002/admi.202102353

Sonia Nath, Peter Zilm, Lisa Jamieson, Kostas Kapellas, Nirmal Goswami, Kevin Ketagoda, Laura S. Weyrich. Development and characterization of an oral microbiome transplant among Australians for the treatment of dental caries and periodontal disease: A study protocol. Plos One. PLoS ONE 16(11): e0260433: https://doi.org/10.1371/journal. pone.0260433 Neethu Ninan, Blessy Joseph, Rahul Madathiparambil Visalakshan, Richard Bright, Clement Denoual, Peter Zilm, Yogesh Bharat Dalvi, P. V. Priya, Aji Mathew, Yves Grohens, Nandakumar Kalarikkal, Krasimir Vasilev and Sabu Thomas. Plasma assisted design of biocompatible 3D printed PCL/silver nanoparticle scaffolds: in vitro and in vivo analyses. 2021. Materials Advances. DOI: 10.1039/d1ma00444a

Kumarasinghe LS. Ninan, N. Lakshika Dabare, PR. Cavallaro, A. Dogramaci, E. Rossi-Fedele, G. Dreyer, C. Vasilev, K. Zilm, P. Bioactive plasma coatings on orthodontic brackets: metal ion re-lease and cytotoxicity. Coatings 2021, 11, 857. https://doi.org/10.3390/coatings11070857. IF 2.881

Khider, D. Rossi-Fedele, G. Fitzsimmons, T. Vasilev, K. Zilm, P. Disruption of Enterococcus Faecalis biofilms using individual and plasma polymer encapsulated D-amino Acids. Clinical Oral Investigations. 2020. DOI 10.1007/s00784-020-03663-0.

Medicine & Biomedicine



Vibrant research community involved in discovery, innovation, and cutting-edge research



A philosophy centred on preparing students with skills for life, opening many career pathways including research and industry



⁻aculty of Health and Medical Sciences

A strong focus on addressing global challenges and access to state-of-the-art facilities, for student interested in changing the world Established in 1885, Adelaide Medical School provides a world-class, innovative, collaborative learning environment for students studying translational medicine and research. In 2021, the University created a new School of Biomedicine to sit alongside the existing medical school. The new school enhances biomedical teaching and research capability across the University in the key discipline areas of addiction and medical health, medical sciences, and reproduction and development.

Building on a well-established international reputation for expanding knowledge, our schools offer a diverse range of biomedical and health care research programs across many disciplines and nurture the next generation of biomedical scientists and clinical researchers.

The Adelaide Medical School and the School of Biomedicine provide a stimulating research environment, with access to state-of-the-art facilities including the Adelaide Health and Medical Sciences building and multifunctional Ray Last Laboratories. Students can expand their knowledge and capabilities under the expert guidance of research supervisors who are internationally recognised, and who collaborate widely with numerous major research institutes.

Industry and research partnerships

At the Adelaide Medical School and School of Biomedicine, we work with a broad range of industry partners, from small start-ups to large multinational pharmaceutical and medical device companies, as well as state and federal government departments.

We successfully identify and develop technologies to address unmet medical needs in the community and translate these to market in collaboration with



Professor Leonie Heilbronn Group Leader,

Group Leader, Obesity and Metabolism lab

Fields of research

- Obesity
- Nutrition
- Metabolism

Awards

- 2020 Exercise and Sport Sciences Reviews Paper of the Year
- Top 10 paper award from the Journal Obesity 2019/20
- Top 20 paper award from the Journal Obesity 2018/19

Why should students study with the University of Adelaide?

One advantage in studying at the University of Adelaide is that our third year students



Gaining admission to the University of Adelaide graduate program has granted me the opportunity to realise my dream of contributing to the fight against cancer. My research focuses on identifying optimal drug combinations for the management of advanced prostate cancer with the end goal of improving survival in these patients."

Josephine Hinneh

PhD in Medical Science

industry partners. Technologies developed across a range of disciplines have been commercialised, both domestically and internationally. Our researchers have strong partnerships with major research institutes both in Australia and internationally.

These include the South Australian Health and Medical Research Institute (SAHMRI), the Royal Adelaide Hospital, the Queen Elizabeth Hospital, Lyell McEwin Hospital, and regional hospitals.

In addition, there are exciting international partnerships with universities in Nagoya (Japan) and Nottingham (UK).

Research institutes

- The Basil Hetzel Institute for Translational Health Research <u>basilhetzelinstitute.com.au</u>
- The Robinson Research Institute
 <u>adelaide.edu.au/rri</u>
- The South Australian Institute
 of Ophthalmology
 <u>health.adelaide.edu.au/ophthalmology</u>
- South Australian Immunogenomics Cancer Institute (SAIGENCI) adelaide.edu.au/saigenci

Research centres

- Centre for Orthopaedic and Trauma Research <u>adelaide.edu.au/ortho-trauma</u>
- Centre for Heart Rhythm Disorders adelaide.edu.au/chrd
- Centre for Nanoscale BioPhotonics <u>cnbp.org.au</u>
- Dame Roma Mitchell Cancer Research Laboratories <u>health.adelaide.edu.au/dame-roma-</u> <u>mitchell-cancer-research-laboratories</u>

have the opportunity to take part in a scientific placement program with our researchers. With this, they can see first-hand how to be a researcher. They will be involved in from forming the hypothesis, conducting the experiments, to analysing, interpreting, and presenting the data. This process is invaluable, and an integral step in learning to design, manage and complete any project.

Why research obesity and metabolism at Adelaide?

Good nutrition underpins lifelong health and small changes in diet can have very large metabolic health benefit. The University has a strong and long history of excellence in nutritional research and has an ERA ranking of 5, well above world standard in this field.

Projects students may be interested in

- Role of meal timing in health and disease
- Role of ultra-processed foods in driving the obesity epidemic
- Role of protein in aging and longevity

Recent publications

Zhao L, Hutchison A, Liu B, Teong XT, Campbell CT, Nguyen L, Au J, Grant C, Manoogian E, Williams A, Wittert GA, Banks S, Panda S, HEILBRONN LK. Time restricted eating improves glycaemia and dampens energy consuming pathways in adipose tissue in men with obesity. Nutrition, 2022

Liu B, Hutchison A, Thompson C, Lange K, Wittert G, HEILBRONN LK. Effects of Intermittent Fasting or Calorie Restriction on Markers of Lipid Metabolism in Human Skeletal Muscle. J Clin Endo Metab, 106(3):e1389-99, 2021 Regmi P*, Chaudhary R*, Hutchison A, Page A, Liu B, HEILBRONN LK. Delaying initiation of time restricted feeding protects mice against the metabolic consequences of obesity, despite delaying hepatic clocks. J Endocrinol 248(1):75-86 01, 2021

Parr E, HEILBRONN LK, Hawley JA. A time to eat and a time to exercise. Exerc Sport Sci Rev, 2020 Jan;48(1):4-10.

Hutchison AT et al. Time-Restricted Feeding Improves Glucose Tolerance in Men at Risk for Type 2 Diabetes: A Randomized Crossover Trial. Obesity, 27:724-32, 2019.

Hutchison AT, Liu B, Wood RE, Vincent AD, Thompson CH, O'Callaghan NJ, Wittert GA, HEILBRONN LK. Effects of Intermittent Versus Continuous Energy Intakes on Insulin Sensitivity and Metabolic Risk in Women with Overweight. Obesity, 27(1):50-58, 2019.



- Adelaide Geriatrics Training and Research with Aged Care (G-TRAC) Centre <u>health.adelaide.edu.au/medicine/g-trac</u>
 Centre for Research Excellence
- Centre for Research Excellence in Translating Nutritional Science to Good Health <u>adelaide.edu.au/cre-nutrition</u>
- Freemasons Foundation Centre for Men's Health
- Vascular Research Centre
 <u>sahmriresearch.org/our-research/</u>
 <u>themes/heart-health/groups/</u>
 <u>vascularresearch-centre</u>
- Pain and Anaesthesia Research Clinic adelaide.edu.au/painresearch

Research areas

Our medical researchers are internationally recognised for their research aimed at improving health and wellbeing across the life span, from conception to ageing. Research in the School of Biomedicine is focused on the key areas of addiction and mental health, medical sciences, and reproduction and development.

Areas of research strength include:

- cancer biology and clinical oncology
- cardiac, respiratory, and vascular health
- fertility and conception
- pregnancy and birth
- early origins of health
- child and adolescent health
- neuroscience, behaviour, and brain health
- surgical health systems and innovation
- Indigenous health and health equity
- nutrition and metabolic health
- oral health
- musculoskeletal health
- immunology and infection
- translational health outcomes
- innovative therapeutics
- aging, frailty and mobility
- men's health

When you undertake medical research at the University of Adelaide, you become part of a vibrant, high impact research community. At any one time there are over 500 students enrolled in our honours, masters, and PhD programs, all striving to transform lives by improving human health.

Medicine postgraduate coordinator

Dr Tiffany Gill E: tiffany.gill@adelaide.edu.au

Biomedicine postgraduate coordinator

Associate Professor Tania Crotti E: tania.crotti@adelaide.edu.au

Further information or advice

To read about our research opportunities visit: <u>health.adelaide.edu.au/our-research/</u><u>honours-and-higher-degrees-by-research</u>

Adelaide Medical School Faculty of Health and Medical Sciences The University of Adelaide SA 5005 Australia

School of Biomedicine Faculty of Health and Medical Sciences The University of Adelaide SA 5005 Australia

E: research_degrees@ask.adelaide.edu.au W: health.adelaide.edu.au/our-research



Nursing



Nursing clinicians and academics dedicated to furthering nursing as a practice and discipline, with a program of research specifically aimed at improving patient care



Internationally recognised leaders renowned for their ground-breaking work in knowledge translation research



Strong collaborations with hospitals, industry partners, and other practitioners

The Adelaide Nursing School promotes world-class nursing research, scholarship, and clinical practice and actively supports the community through student-centred degrees and research. Our school brings together an energetic, enthusiastic group of nursing clinicians and academics interested in furthering nursing as a practice and discipline.

Our academic staff are highly experienced clinicians and our teaching is informed by active, ongoing research that focuses on the experiences of health and illness, the practice of nursing and the effects of nursing on health outcomes.

Industry and research partnerships

The Adelaide Nursing School focuses on service innovation and new models of care, quality improvement, and implementation of evidence-based practice through active partnerships with health care providers including Northern Adelaide Local Health Network, the Queen Elizabeth Hospital, and the Royal Adelaide Hospital. The school also helps to shape SA Health policy, transitioning care between acute and community settings.

Research areas

The Adelaide Nursing School is committed to developing transformative health care practice and knowledge, providing an excellent environment for interdisciplinary research and/or postgraduate degrees. Adelaide Nursing School provides opportunities for students to participate in research across the faculty's areas of inquiry, including:

- Surgical and health systems innovation
- Indigenous health and health equity
- Translational health outcomes
- Ageing, frailty and mobility

Our research programs are organised into three key areas:

- 1. Safe, effective, quality practice
- 2. Improving Aboriginal health care
- 3. Innovations in learning and teaching

Nursing HDR coordinator

Associate Professor Lynette Cusack E: lynette.cusack@adelaide.edu.au

To find a supervisor or learn more about this area of research, visit: health.adelaide.edu.au/nursing

Further information or advice

Adelaide Nursing School Faculty of Health and Medical Sciences The University of Adelaide SA 5005 Australia

E: research_degrees@ask.adelaide.edu.au W: health.adelaide.edu.au/our-research

The University of Adelaide has wonderful research resources and facilities. In 2017, I received a fully funded PhD scholarship from the University of Adelaide. My PhD research examined cardiovascular disease risk behaviours and related health literacy in patients with cardiovascular conditions."

Lemma Negesa Bulto

PhD in Cardiovascular disease



Psychology



Expand your knowledge and career options in multiple areas of psychological enquiry



Research strengths spanning health, disability and lifespan development, cognition and brain sciences, and organisational psychology



Specialised research groups and access to a range of dynamic, applied and basic research and teaching opportunities The School of Psychology has a proud history at the University of Adelaide with a vibrant PhD student body. The school has over 70 higher degree by research students studying various research areas and at various stages of their candidature.

Industry and research partnerships

The School of Psychology has established collaborative links across the public and private health sectors, as well as local, national and international universities.

In addition to conducting basic research into psychological processes, the school has a strong interest in conducting multidisciplinary research with industry partners, including Defence Science and Technology Group and the Commonwealth Scientific and Industrial Research Organisation.

Research areas

School of Psychology researchers contribute to many of the 17 Faculty of Health and Medical Sciences' research specialities including (but not limited to): neuroscience, behaviour, ageing, frailty and mobility, child and adolescent health.

The school has particular strengths in the areas of child development, clinical, health and forensic psychology, cognition and brain sciences, disability, social psychology, organisational psychology and human factors.

Studying at the school will give you the opportunity to work within one of our many research groups using qualitative and quantitative approaches with different focuses, including:

- Cognitive Neural Sciences Lab
- Active Vision Lab
- Applied Cognition and Experimental Psychology Lab
- Expert Cognition Lab
- Health, Disability, Lifespan and Developmental Research Group

Supervisor spotlight



Dr Diana Dorstyn Senior Lecturer

Fields of research

- Neurological disorders and disabilities
- Multi-disciplinary rehabilitation
- Digital technologies in health care

Awards

- Elite Reviewer for Elsevier Publishing, 2020
- Vice Chancellor's Award for Women's Research Excellence, 2018

Why should students study with the University of Adelaide?

The School of Psychology provides exemplary research supervision. Our academics are highly specialised in a range of methodologies that cover the full spectrum of basic to applied research. This ensures that our PhD students receive rigorous training in all aspects of their research, including critical analysis and thinking, communication and academic writing.

The excellence of our supervision is highlighted by our graduate outcomes: many of our students continue in successful research, teaching or professional careers.

We also have one of the largest PhD student cohorts at the University. This is a popular degree with a supportive student committee, making a PhD in our school a very rewarding experience.

Why research psychology at Adelaide?

I am interested in the psychosocial impact of life-altering injuries (e.g., spinal cord injury), neurological disease (e.g., multiple sclerosis), or neurodevelopmental disability
- Psychology Education Research Group
- Wellbeing Research Unit
- Wellbeing in Learning and Development Lab (WiLD lab)
- Affect and Development Lab
- Develop Well: Adelaide Child and Family Research Group

Psychology Postgraduate Coordinator

Dr Diana Dorstyn E: diana.dorstyn@adelaide.edu.au

To find a supervisor, or learn more about this area of research, visit: health.adelaide.edu.au/psychology

Further information or advice

School of Psychology Faculty of Health and Medical Sciences The University of Adelaide SA 5005 Australia

E: research_degrees@ask.adelaide.edu.au W: health.adelaide.edu.au/our-research



The best part about undertaking a PhD at the University of Adelaide was having the freedom to let my intellectual curiosity guide my research. The self-directed nature of the program provided me with a level of responsibility, that ultimately led to an immense sense of accomplishment when it was completed."

Matthew Stevens PhD in Psychology

(e.g., autism). I work closely with local and national disability service providers to improve psychological knowledge and practice for these vulnerable populations. More recently I have focused on the use of digital technologies, including the internet, multimedia and mobile phones, to deliver health and rehabilitation services and improve continuity of care.

I am also a recognised expert in review papers, particularly systematic reviews and meta-analysis. Many students that I have supervised have published highly-cited papers using this methodology for their PhD.

Projects students may be interested in

 Healthcare experiences of women with a spinal cord injury

- Effectiveness of peer mentoring in neurological rehabilitation
- Assessing and treating the psychosocial barriers associated with successful return-to-work following a neurological or musculoskeletal injury

Recent publications

Dorstyn, D., Oxlad, M., Roberts, R., Murphy, G., Potter, E., Kneebone, I., & Craig, A. (2022). MS JobSeek: A pilot randomized controlled trial of an online peer discussion forum for job-seekers with multiple sclerosis. Journal of Vocational Rehabilitation, 56(1), 81-91.

Dorstyn, D., Chur-Hansen, A., Mansell, E., Murphy, G., Roberts, R., Stewart, P., . . . Craig, A. (2021). Facilitators and barriers to employment for persons with chronic spinal cord injury or disorder: A qualitative study framed by the person-environment-occupation model. The Journal of Spinal Cord Medicine, 1-10. Hartley, M., Due, C., & Dorstyn, D. (2021). Barriers and facilitators to engaging individuals and families with autism spectrum disorder in mindfulness and acceptance-based therapies: A meta-synthesis. Disability and Rehabilitation, 12 pages.

Kneebone, I., Van Zanden, B., Dorstyn, D., Roberts, R., Lord, S., Querstret, D., Theadom, A., ...Nair, R. (2022). Relaxation and related therapies for people with multiple sclerosis: A systematic review. Clinical Rehabilitation. Advance online publication.

Osborn, A., Roberts, R., Dorstyn, D., Grave, B., & David, D. (2021). Sagittal Synostosis and Its Association With Cognitive, Behavioral, and Psychological Functioning: A Meta-analysis. JAMA Network Open, 4(9), 1-17.

Schiller, V., Dorstyn, D., & Taylor, A. (2021). The Protective Role of Social Support Sources and Types Against Depression in Caregivers: A Meta-Analysis. Journal of Autism and Developmental Disorders, 51(4), 1304-1315.

Public Health



Strong track record in preventing disease and promoting health, and a genuine influence on health policies and practices



Consistently produces specialist leaders and world-leading researchers making discoveries in diverse fields of health care



Researchers work closely with industry, government, and non-government organisations to ensure research and community engagement remain focused on real world problems Through our engagement as a community of leading scientists, educators and students, the School of Public Health aims to advance innovative ideas to change public policies, health care practice, and individual behaviours.. We are recognised locally, nationally and internationally for our research.

Our senior academic staff are leaders in their fields—in areas such as child health and development, life course epidemiology, genetic epidemiology, health technology assessment, health impacts of climate change, Indigenous health, community engagement, international health, and the use of deliberative methods in health research.

Research areas

Our world-leading researchers can offer you access to a comprehensive research portfolio, with a particular emphasis on health services research, health policy analysis, child health development, and evidence synthesis and review—each highlighted by the McKeon Review's report into Australia's health and medical research sector (2013) as strategic for population health research.

Some specific areas of focus include: evidence-based service provision and health program evaluation; preventive, clinical and occupational (chronic diseases) epidemiology; and the development of public health databases. This is in addition to national priority areas: Indigenous health; primary health care; healthy start for a healthy life; new and emerging health threats; and health in the Asia-Pacific region.

The School of Public Health conducts diverse quantitative and qualitative research in a range of areas extending across the faculty's 17 research areas. Studying with the school will give you the opportunity to undertake research with a range of differently focused groups, including:

- Adelaide Exposure Science and Health
- Adelaide Health Technology
 Assessment (AHTA)
- BetterStart—Child Health and Development Research Group

Supervisor



Dr Rhiannon Pilkington Postdoctoral Fellow, BetterStart Child Health and Development Research group

Fields of research

- Child and adolescent health and wellbeing
- Child protection and youth justice
- Intervention effectiveness

Why should students study with the University of Adelaide?

Students who undertake study in the School of Public Health and the BetterStart Health and Development Research group are trained by world class researchers in an environment that fosters lifelong learning. Research training focuses on skill and knowledge development specifically designed to supports diverse career goals spanning academia, government, and industry. Students enjoy and benefit from a vibrant and supportive peer community.

Why research child health and protection justice at Adelaide?

The BetterStart research group undertakes policy relevant research in close collaboration with government and non-government agencies. We are an interdisciplinary group united in our aim to generate better evidence that supports improving outcomes for disadvantaged populations. The foundation of much of our research is the Better Evidence Better Outcomes Linked Data (BEBOLD) platform which includes over half a million children born 1991 onwards with data spanning health, education, child

- Communities, People and Health Research Group
- Environment and Health Research Group
- Health Workforce Planning Group
- Joanna Briggs Institute
- Life Course and Intergenerational Health Group

Public Health postgraduate coordinator

Associate Professor Jaklin Eliott E: jaklin.eliott@adelaide.edu.au

Dr Afzal Mahmood E: afzal.mahmood@adelaide.edu.au

The Joanna Briggs Institute:

Dr Edoardo Aromataris E: ed.aromataris@adelaide.edu.au

Dr Craig Lockwood E: craig.lockwood@adelaide.edu.au

To find a supervisor or learn more about this area of research, visit: health.adelaide.edu.au/public-health

Industry and research partnerships

The school focuses on developing strong research partnerships and collaborative engagement with health services, state and federal government agencies, health industry and not-forprofit organisations. These include:

- Department of the Premier and Cabinet
- Child and Family Health Service
- SA Health
- Department for Child Protection
- Government of South Australia
- Women's and Children's Health Network
- SA Health Research and Evaluation Unit WCHN
- Wardliparingga Aboriginal Research Unit
- SAHMRI and SA Health: Quality, Information and Performance

- Community based organisations for health and wellbeing
- Northern Adelaide Local Health Network.

Further information or advice

School of Public Health Adelaide Health and Medical Sciences bldg The University of Adelaide SA 5005 Australia

E: sphadmin@adelaide.edu.au E: research_degrees@ask.adelaide.edu.au

W: health.adelaide.edu.au/our-research



My PhD research blends public health and sustainability as I explore the potential to improve schoolchildren's dietary habits while impacting the environment positively by studying school lunchbox contents and packing practices. Choosing to research in public health was the best decision I made. There is so much scope to make small differences that can have meaningful impacts."

Neha Lalchandani PhD (Public Health)

protection, justice, and welfare services. We have active research programs spanning health, wellbeing, child protection, justice, intergenerational disadvantage, and intervention effectiveness and are experts in advanced epidemiological methods, data analytics and translational research.

Projects students may be interested in

- Poverty and child maltreatment
- Pathways through youth and adult justice systems
- Health needs of children and young people in out-of-home care
- Causes and consequences of poor development and wellbeing

Recent publications

Pilkington R, Montgomerie A, Grant J, Gialamas A, Malvaso C, Smithers L, Chittleborough C, Lynch J. 2019. 'An innovative linked data platform to improve the wellbeing of children – the South Australian Early Childhood Data Project' in Australian Institute of Health and Welfare Australia's welfare 2019 data insights. Australia's welfare series no. 14. Cat. no. AUS 226. Canberra. Available https://www.aihw.gov.au/reports/ australias-welfare/australias-welfare-2019-datainsights/contents/table-of-contents

Malvaso C, Pilkington R, Montgomerie A, Delfabbro P & Lynch J, 'A public health approach to preventing child maltreatment: an intelligent information infrastructure to help us know what works'. 2020. Child Abuse & Neglect. doi. org/10.1016/j.chiabu.2020.104466 Falster, K, Hanly M, Pilkington R, Eades S, Stewart J, Jorm L & Lynch J, Cumulative incidence of child protection services involvement before age five: a cross-sectoral data linkage study of 153,670 Australian children. 2020. JAMA Pediatrics doi. org/10.1001/jamapediatrics.2020.1151

Procter, A. M., Gialamas, A., Pilkington, R. M., Montgomerie, A., Chittleborough, C. R., Smithers, L. G., & Lynch, J. W. (2021). Characteristics of paediatric frequent presenters at emergency departments: a whole-of-population study. Journal of Paediatrics and Child Health, 57(1), 64-72.

Fluke JD, Tonmyr L, Gray J, Bettencourt R, Bolter F, Cash S, Jud A, Meinck F, Munoz AC, O'Donnell M, Pilkington R, Weaver L. Child Maltreatment data: A summary of progress, prospects and challenges. 2020. Child Abuse and Neglect. https://doi.org/10.1016/j.chiabu.2020.104650

Faculty of Sciences, Engineering and Technology

The Faculty of Sciences, Engineering and Technology has an outstanding reputation for innovative, highimpact research across all our disciplines.

From the application of AI, machine learning and image analysis tools to help specialists diagnose and monitor diseases to the development of sustainable food solutions, our world-leading researchers are applying their expertise to solve some of our world's most complex challenges.

Through fundamental, advanced and applied research, the faculty is solving real-world problems in collaboration with industry, government and the broader community. Our research positively impacts lives and influences policy. It seeks to positively transform the world around us. It broadens our understanding of the Universe.

Our research is consistently ranked at, or well above, world standard and spans:

- agriculture, food and wine
- advanced materials and manufacturing

- architecture and built environment
- animal and veterinary sciences
- biological sciences
- chemical engineering and advanced materials
- chemistry, earth sciences and physics
- civil, environmental and mining engineering
- computer science
- electrical and electronic engineering
- energy, resources and environment
- mathematical science
- medical, health and bioprocessing technologies
- mechanical engineering
- petroleum and energy resources
- space and defence
- smart technologies and mathematics.

Our research centres and institutes

Australian Institute for Machine Learning

The Australian Institute for Machine Learning (AIML) is a world-leader in the application of machine learning methodologies and is the largest Universitybased machine learning research group in Australia. Machine learning underpins the business models of the largest corporations and has the potential to deliver massive, social, economic and environmental benefits.

AIML's research strengths lie in machine learning and the methods that support this: artificial intelligence, computer vision and deep learning. Their research has enabled AI that helps to cure disease, grow drought-resistant crops, and count carbon in some of the world's most important landscapes.

Environment Institute

The Environment Institute is leading environmental change throughout the world. It connects leading water, climate scientists and researchers with international collaborators and external stakeholders to address complex environmental problems and export innovation round the globe.

Researchers provide new understandings and tools to better monitor and manage biodiversity, invasive species and ecosystems; while our palaeontologists and evolutionary biologists learn from the past to better manage the future world.

Institute for Sustainability, Energy and Resources (ISER)

ISER operates in the sustainability, energy and resources sectors, showcasing the University of Adelaide's finest talent in large-scale research and industry innovation.

An important ongoing focus is developing the energy systems needed for decarbonisation and the transition to a net-zero emissions energy future, working closely with industry and government partners. ISER pursues cutting-edge sustainability and modern energy system projects, to create a vision for a more sustainable world. We collaborate across the globe to <u>make this vision a reality.</u>

Institute for Photonics and Advanced Sensing (IPAS)

The Institute for Photonics and Advanced Sensing (IPAS) is a global hub of photonics research, creating transformational new approaches to sensing and transdisciplinary problem-solving. Many of the challenges we face as a society can only be solved by pursuing a transdisciplinary approach to science.

IPAS has been created to bring together experimental physicists, chemists, material

scientists, and biologists, experimentally driven theoretical scientists and medical researchers to create new sensing and measurement technologies.

Waite Research Institute

The Waite Research Institute (WRI) stimulates and supports research and innovation across the University of Adelaide and its partners that builds capacity for Australia's agriculture, food and wine sectors.

The WRI's broad vision is to drive the innovation to secure a sustainable future for agriculture - by creating highquality, nutritious and climate resilient products. We do this not in isolation, but in close partnership with the agriculture, food and wine sectors. In a climate of limited natural resources, higher energy costs, and increasing urbanisation and environmental degradation, the WRI's work in supporting global food security and agricultural sustainability is critically important.

Research centres

The University of Adelaide is also home to a number of research centres, including Australian Research Centres of Excellence in Biodiversity and Heritage, Dark Matter Particle Physics and Mathematical and Statistical Frontiers.

We also participate in several Australian Government-funded Cooperative Research Centres (CRCs), including a leading role in the Cyber Security CRC, and we lead the ARC Research Hub for Graphene Enabled Industry Transformation and the Australasian Pork Research Institute.

Industry links

Studying right in the heart of Adelaide's innovation and technology precinct, our students deliver real commercial outcomes through their collaborations and connection with a vast network of talented researchers and peers. This includes access to co-located industry partners, high-quality research facilities and specialist laboratories and expertise.

This close proximity to industry and current research offers a unique opportunity for our students to gain practical and theoretical knowledge through collaboration on dynamic national and global research projects.

Agriculture, Food and Wine



A key part of the largest agricultural research precinct in the Southern Hemisphere



Access to cutting-edge research facilities and resources



Top 40 in the World and #1 in South Australia for agricultural sciences* The School of Agriculture, Food and Wine has an outstanding reputation for research, with particular strengths in: systems; food and nutrition (both nationals and international); food and nutrition, plant biology, plant breeding and genetics; plant phenotyping (controlled environment and field), soil science; viticulture and horticulture, wine science.

Based at the Waite campus, the school is co-located with the largest concentration of agricultural research expertise in the Southern Hemisphere.

Through acclaimed research, teaching expertise and world-class facilities, the school plays a key role in advancing agriculture's rapid growth in the Australian and global economy.

Our global student cohort learn skills that will help solve issues of food security, food supply, and other critical issues facing the world today. Our research and research training is delivering the skilled practical graduates that industry needs, whether they be agronomists, farmers, plant breeders, food technologists, researchers or winemakers of the future, as examples.

Industry and research partnerships

The school's research builds on a rich network of collaborations arising from the close co-location of several complementary organisations. This facilitates: co-supervision and industry placements for postgraduate students; joint applications demonstrating critical mass for funding of step-change agricultural research programs; and recruitment of promising graduates to work in industry related programs.

A great example, is the Wine Innovation Cluster (WIC), based at Waite, which aims to boost the competitiveness, quality and sustainability of the Australian wine industry through world-class, collaborative, multidisciplinary research and development across the wine value chain.

Supervisor spotlight

Timothy Cavagnaro

Professor, Deputy Head of School (Research)

Fields of research

- Soil Ecology
- Carbon sequestration
- Climate adaptation

Why should students study with the University of Adelaide?

We do cutting-edge research on real-world issues that matter.

Why research Agriculture, Food and Wine at Adelaide?

The big challenges of our time have one thing in common - the soil. If we are to tackle issues such as food security, climate change, and environmental sustainability, we need to take a multidisciplinary approach. As soil ecologists, we work with experts from disciplines including the sciences, engineering, economics, policy and social sciences, to understand and try to solve these complex issues.

Projects students may be interested in

- Urban Agriculture: safe and sustainable food production where we live.
- Carbon co-benefits: there's more to carbon sequestration that carbon alone.

Research institute

• Waite Research Institute adelaide.edu.au/wri

Research centres

- The University of Adelaide and Shanghai Jiao Tong University Joint Laboratory for Plant Sciences and Breeding <u>set.adelaide.edu.au/agriculture-food-</u> <u>wine/research/plant-science/uoa-sjtu-</u> joint-laboratory-for-plant-sciences-<u>and-breeding</u>
- Fertiliser Technology Research Centre <u>set.adelaide.edu.au/fertiliser</u>
- ARC Training Centre for Innovative Wine Production <u>arcwinecentre.org.au</u>
- Adelaide Glycomics
 <u>agwine.adelaide.edu.au/</u>
 <u>adelaideglycomics</u>
- International Flavour Laboratory
- ARC Research Hub for Graphene Enabled Industry Transformation arcgrapheneresearchhub.com.au

Research areas

School of Agriculture, Food and Wine staff are active across a broad range of fundamental and applied research areas addressing key issues for the agricultural sector. These areas include:

- farming, soil and land systems
- plant breeding, genetics and physiology
- food and nutrition
- horticulture and plant protection
- viticulture and wine science.

To find a supervisor, submit a research proposal or learn more about the University's science research, please visit: <u>set.adelaide.edu.au/our-research</u>

Postgraduate research contacts

Being involved with wine research at the University of Adelaide's Waite campus was an amazing experience. The friendly guidance from the supervisors and resources available to conduct research, has enabled me, not only to gain my PhD with outstanding results, but also to build a portfolio of professional skills."

Ruchira Ranaweera

PhD. School of Agriculture

The following School staff can be contacted to assist in postgraduate research matters:

Associate Professor Matthew Denton E: matthew.denton@adelaide.edu.au

Associate Professor Chris Ford E: christopher.ford@adelaide.edu.au

Further information or advice

School of Agriculture, Food and Wine Waite campus, The University of Adelaide PMB 1, Glen Osmond SA 5064, Australia

T: +61 8 8313 7105 E: afw@adelaide.edu.au W: agwine.adelaide.edu.au

 Ecological intensification: a soil ecological approach to vineyard and orchard management.

Recent publications

Salomon, M. J., & Cavagnaro, T. R. (2022). Healthy soils: The backbone of productive, safe and sustainable urban agriculture. Journal of Cleaner Production, 341, 12 pages.

Hume, I. V., Summers, D. M., & Cavagnaro, T. R. (2021). Self-sufficiency through urban agriculture: Nice idea or plausible reality?. Sustainable Cities and Society, 68, 102770. Summers, D., Regan, C., Settre, C., Connor, J., O'Connor, P., Abbott, H., . . . Cavagnaro, T. R. (2021). Current carbon prices don't stack up to much land use change, despite bundled ecosystem service co-benefits. Glob Chang Biol, 27(12), 2744-2762.

Kopittke, P. M., Berhe, A. A., Carrillo, Y., Cavagnaro, T. R., Chen, D., Chen, Q. L., . . . Minasny, B. (2022). Ensuring planetary survival: the centrality of organic carbon in balancing the multifunctional nature of soils. Critical Reviews in Environmental Science and Technology, 17 pages. Salomon, M. J., Demarmels, R., Watts-Williams, S. J., McLaughlin, M. J., Kafle, A., Ketelsen, C., . . . van der Heijden, M. G. A. (2022). Global evaluation of commercial arbuscular mycorrhizal inoculants under greenhouse and field conditions. Applied Soil Ecology, 169, 11 pages.

Ngo, H. T. T., Watts-Williams, S. J., Panagaris, A., Baird, R., McLaughlin, M. J., & Cavagnaro, T. R. (2022). Development of an organomineral fertiliser formulation that improves tomato growth and sustains arbuscular mycorrhizal colonisation. Science of the Total Environment, 815, 10 pages.

Animal and Veterinary Sciences



Ranked in top 50 in world for animal and veterinary sciences^



Co-located partners provide real-world research and clinical opportunities



The School of Animal and Veterinary Sciences is based at the internationally recognised Roseworthy campus, and has earned a five-star Excellence in Research for Australia ranking for veterinary sciences.* We are ranked in the top 50 in the world for animal and veterinary sciences.^

Our research expertise covers a broad spectrum of animals, including fish, poultry, pigs, sheep, cattle, wildlife, cats, dogs and horses. The school is also home to South Australia's only veterinary school, including its AUD \$37 million state-of-theart veterinary hospital and AUD \$10 million equine health centre.

The campus is a vibrant and exciting centre for teaching, postgraduate training and clinical services. With well-established links to many national and international partner organisations and relevant industries, we provide world-class, outcome-based education and training to future animal and veterinary scientists.

Our graduates work all around the world in animal, veterinary and allied industries, government and corporate organisations, or in their own businesses.

Industry and research partnerships

The School of Animal and Veterinary Science partners with a wide range of industry, research and clinical organisations. These partnerships help students gain industry knowledge and experience, and will assist in developing professional networks and contacts within their areas of chosen specialisation.

The school shares Roseworthy campus with many partner and allied organisations, and is South Australia's premier research hub for animal and veterinary sciences.

Through a PhD in ruminant nutrition and fetal programming, I get to experience components of a hardworking industry, while learning what makes it tick, and what can make it tick better. I have the opportunity to build relationships, develop collaborations and make an impact, all while supported within the scientific community."

Leesa-Joy Flanagan

Higher Degree by Research Candidate, School of Animal and Veterinary Science

Research centre

- Australian Centre for Antimicrobial Resistance Ecology (ACARE) <u>set.adelaide.edu.au/acare</u>
- Davies Research Centre set.adelaide.edu.au/daviesresearch-centre

Research areas

- Animal anatomy and physiology
- Animal behaviour
- Biology
- Infectious diseases
- Livestock and equine health
- Pathobiology, public and population health
- Production and companion animal health
- Reproduction and genetics.

To find a supervisor, submit a research proposal or learn more about this area of research, please visit: <u>set.adelaide.edu.au/our-research</u>

Postgraduate research contacts

The following School staff can be contacted to assist in postgraduate research matters:

Professor Gordon Howarth E: gordon.howarth@adelaide.edu.au

Kiralee Vincent E: kiralee.vincent@adelaide.edu.au

Further information or advice

School of Animal and Veterinary Sciences Roseworthy campus The University of Adelaide Roseworthy SA 5371 Australia

T: +61 8 8313 7987

E: animalvetsci@adelaide.edu.au

- W: set.adelaide.edu.au/animal-veterinarysciences/research
- * Excellence in Research for Australia 2018, Australian Research Council.
- ^ QS World University Rankings by subject 2021.



Architecture and Built Environment



Highly qualified, nationally and internationally recognised staff



Unique expertise in culture-focused design and sustainable built environment research



⁻aculty of Sciences, Engineering and Technology

Multidisciplinary school with research strengths in architecture, landscape architecture, urban design, green infrastructure, and sustainable construction The School of Architecture and Built Environment has two major research streams: humanism and sustainability. It has a strong team of world-class researchers and specialises in delivering internationally recognised postgraduate study programs in architecture, landscape architecture, construction management, urban design and property.

We are recognised for training graduates to the highest professional standards in an educational culture that priotitises creative, critical thinking, sophisticated computer aided-design, cross-cultural sensitivity and a commitment to sustainable design that begins with careful consideration of environment and place.

Our programs are professionally accredited by the Australian Institute of Architects, the Australian Institute of Landscape Architects, the Planning Institute of Australia, the Royal Institution of Chartered Surveyors and the Architectural Practice Board of South Australia.

Industry and research partnerships

The School of Architecture and Built Environment has strong connections with the architecture, landscape architecture, and urban design professions. These links with industry begin in the studio to benefit all students and extends to the rich culture of exhibitions and internships. The established roles of Industry Professors and close collaboration with representative institutes, as well as the Art Gallery of South Australia, the South Australian Museum and the office for Design and Architecture South Australia.

Research centres and units

- Centre for Asian and Middle Eastern Architecture
- Design Research Collective
- China-Australia Sustainable Research Unit



Jian Zuo Professor in Sustainable Construction

Fields of research

- Resource efficiency and construction & demolition waste management
- Smart and digital construction

Why should students study with the University of Adelaide?

- Excellent studying environment
- Close collaboration with industry, hence internship and employment opportunities
- Well-designed curriculum

Research areas

There are two main research streams in the School of Architecture and Built Environment, humanism and sustainability, within which active researchers and supervisors offer a range of established and emerging topics of research covering six key areas.

Culture, history and theory

In this key area, researchers employ a distinctive, critical and cross-cultural approach in their study of a range of social, intellectual, environmental, and economic issues across the fields of architecture, landscape architecture, and urban design.

Examples of broad research topics include:

- early modernity and urbanism in the Arab world
- a cross-cultural perspective on early modern material culture
- art, religion, and the environment.



Why research Architecture and Built Environment at Adelaide?

- strong supervisor team
- close collaboration with industry
- strong focus on multi-disciplinary research

Projects students may be interested in

- Use of advanced technologies to assist construction and demolition waste recycling and management
- Circularity evaluation at the building and community scale

• Use of digital construction to deal with emerging environmental and safety issues

Recent publications

Wu, H., Zuo, J., Zillante, G., Wang, J., & Duan, H. (2021). Environmental impacts of cross-regional mobility of construction and demolition waste: An Australia Study. Resources, Conservation and Recycling, 174, 105805.

Oteng, D., Zuo, J., & Sharifi, E. (2021). A scientometric review of trends in solar photovoltaic waste management research. Solar Energy, 224, [545-562.]

Li, L., Zuo, J., Duan, X., Wang, S., Hu, K., & Chang, R. (2021). Impacts and mitigation measures of plastic waste: A critical review. Environmental Impact Assessment Review, 90, 106642.

Wu, H., Zuo, J., Yuan, H., Zillante, G., & Wang, J. (2020). Cross-regional mobility of construction and demolition waste in Australia: An exploratory study. Resources, Conservation and Recycling, 156, 104710.

Wu, Z., Yang, K., Xue, H., Zuo, J., & Li, S. (2022). Major barriers to information sharing in reverse logistics of construction and demolition waste. Journal of Cleaner Production, 350, 131331.

Du, L., Xu, H., & Zuo, J. (2021). Status quo of illegal dumping research: Way forward. Journal of Environmental Management, 290, 112601.

Design research

Within this key area, researchers will focus on the methods and outputs of investigations that contribute to new knowledge through the creation of design projects in architecture, landscape architecture and urban design.

Examples of broad research topics include:

- the epistemological processes of spatial thinking in practice
- design research pedagogy and methods
- designing for adaptive reuse.

Asia and the Middle East

In this key area researchers will advance new knowledge of the architectures, landscapes, and urbanity of Asia and the Middle East; and promote cross-cultural understanding of the intertwined histories of Western and non-Western peoples.

Examples of broad research topics include:

- transitions to modernity in Asia and the Middle East
- Australian-Asian/Middle Eastern exchanges in art, architecture, and urbanism
- the intellectual and socio-urban history of Asian and Middle Eastern societies.

Environment and building

In this key area researchers apply architectural science and interdisciplinary research to focus on advancing knowledge to plan, design, operate, and manage our built environment.

Examples of broad research topics include:

- mitigation and adaptation to extreme weather conditions in the building and urban scale and the city
- low to zero energy and carbon building design
- all-age friendly urban and building design.

Housing and healthy cities

Researchers in this key area will bring the methods and approaches of architecture, building science, social epidemiology, planning, econometrics, geography and spatial science to address urban housing and health problems.

Examples of broad research topics include:

- planning and urban change
- housing affordability
- the impact of policy on housing, health, transport and other sectors.

Sustainable construction

Researchers in this key area will work on gaining a better understanding of the drivers and mechanisms for achieving sustainable construction in Australia and overseas.

Examples of broad research topics include:

- resource efficiency and constructionand-demolition waste management
- 'green' building rating tools and developments.
- the dynamic interaction between sustainability and other factors (e.g. health and safety) in building and infrastructure projects.

Postgraduate coordinator

Professor Jian Zuo E: jian.zuo@adelaide.edu.au

Further information or advice

School of Architecture and Built Environment North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5836 W: set.adelaide.edu.au/architecture

66

I can confidently say that the School of Architecture and Built Environment is outstanding in providing conducive teaching and research environments to PhD students. I was supported with excellent and friendly supervisors. Due to their exceptional guidance, I am now seen as an expert in my chosen research topic."

Alhassan Ibrahim

PhD, School of Architecture and Built Environment



Australian School of Petroleum and Energy Resources



Excellent industry connections, funding and support



The only integrated petroleum engineering, geoscience and management school in the world

World-class research staff and facilities with access to leading industry data and software The Australian School of Petroleum and Energy Resources is Australia's highest ranked and only multidisciplinary school for education, training and research in petroleum, future geoenegry resources and carbon and hydrogen geostorage.

The school is ranked 10th in the world and 1st in Australia* for petroleum engineering, and the majority of our research leaders have strong, international industry links or backgrounds, ensuring our research is up-to-date and relevant.

Industry and research partnerships

The Australian School of Petroleum and Energy Resources maintains active relationships with business and industry partners at state, national and international levels. This is reflected in numerous collaborative research programs, training and development, student project sponsorships and sponsored staff positions.

Research centres and institutes

- Institute for Mineral and Energy Resources
 <u>adelaide.edu.au/imer</u>
- Mawson Geo Centre adelaide.edu.au/mawson-geo

Research facilities

- Formation Damage and Enhanced Oil-Gas Recovery Laboratory
- Mercury injection porosimeter laboratory
- Drilling Fluids Laboratory

Supervisor spotlight

Simon Holford

South Australian State Chair of Petroleum Geoscience

Fields of research

- Energy Geoscience
- Volcanic activity in sedimentary basins
- Structural geology and geomechanics of CO2 and H2 storage

Awards

- Best Extended Abstract at 2021 APPEA Conference and Exhibition
- Best Paper (Energy) at 2019 Australasian Exploration Geoscience Conference
- 2019 Journal of Structural Geology Student Author of the Year (awarded to PhD student Natalie Debenham)
- Geological Society of Australia's ES Hills Medal

Why should students study with the University of Adelaide?

We are the highest ranked University in Australia (and 10th in the world) for subsurface engineering and geoscience and we have very close ties with a range of industries, which provides great opportunities for students to work on problems that directly address societal challenges, such as the decarbonisation of the energy sector.

Why research Petroleum and Energy Resources at Adelaide?

The most common approach for geological storage of carbon dioxide is sequestration in depleted hydrocarbon reservoir rocks such as sandstones. However, we are conducting exciting research at the University of Adelaide which is seeking to discover whether the vast quantities of buried volcanic rocks in major gas-producing Australian regions such as the Northwest Shelf, Gippsland



I chose the University of Adelaide for its international reputation. I am extremely happy with this decision, not only because I had the opportunity to work with the world's top professors, but I also experience a high quality of life in the fantastic nature of Adelaide."

Nassim Hemmati

PhD, Australian School of Petroleum and Energy Resources

Research areas

At the Australian School of Petroleum and Energy Resources, our research is focused on helping industry and government safely and sustainably discover traditional and future energy resources, whilst accelerating society's transition to carbon neutrality through fundamental and applied research on carbon capture and storage. Staff in the Australian School of Petroleum and Energy Resources are active researchers and supervisors in a variety of areas including:

- Formation damage
- Enhanced oil-gas recovery
- stress, structure and seismic

- decision-making, risk analysis, economic evaluation
- subsurface gas storage (CO2 and hydrogen_
- geothermal energy
- reservoir simulation and uncertainty modelling
- data analytics and machine learning
- unconventional resources and recovery

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>set.adelaide.edu.au/petroleum-andenergy-resources/our-research</u>

Postgraduate coordinator

Dr Abbas Zeinijahromi and Dr Ulrike Schacht

E: abbas.zeinijahromi@adelaide .edu.au or Ulrike.schacht@adelaide.edu.au

Further information or advice

Australian School of Petroleum and Energy Resources Santos Petroleum Engineering building North Terrace campus, The University of Adelaide SA 5005 Australia

T: +61 8 8313 8000

E: admin@asp.adelaide.edu.au W: set.adelaide.edu.au/petroleum-and-

energy-resources

* QS World University Rankings by Subject, 2020

Basin and Cooper Basin, could represent an alternative option for secure storage of large volumes of carbon dioxide. This is due to the chemical reactivity of certain types of volcanic rocks which promotes the permanent storage of carbon dioxide through natural mineral carbonation.

Projects students may be interested in

- Storing carbon in buried volcanoes
- Fault stability during CO2 and hydrogen injection
- The seismic and stratigraphic record of ancient Southern Ocean currents
- Constraints on the Cretaceous topographic evolution of central Australia from geodynamic modelling and subsurface mapping

Recent publications

Reynolds, P., Holford, S., Schofield, N. and Ross, A., 2022. 3D seismic reflection constraints on the emplacement of mafic laccoliths and their role in shallow crustal magma transport: A case study from the Ceduna sub-basin, Great Australian Bight. Marine and Petroleum Geology, 135, p.105419.

Holford, S.P., Green, P.F., Duddy, I.R., Hillis, R.R., Hill, S.M. and Stoker, M.S., 2022. Preservation of late Paleozoic glacial rock surfaces by burial prior to Cenozoic exhumation, Fleurieu Peninsula, Southeastern Australia. Journal of the Geological Society, 179(1).

Hansberry, R.L., King, R.C., Holford, S.P., Hand, M. and Debenham, N., 2021. How wide is a fault damage zone? Using network topology to examine how faultdamage zones overprint regional fracture networks. Journal of Structural Geology, 146, p.104327. Walker, F., Schofield, N., Millett, J., Jolley, D., Holford, S., Planke, S., Jerram, D.A. and Myklebust, R., 2021. Inside the volcano: Threedimensional magmatic architecture of a buried shield volcano. Geology, 49(3), pp.243-247.

Holford, S., Schofield, N., Bunch, M., Bischoff, A. and Swierczek, E., 2021. Storing CO2 in buried volcanoes. The APPEA Journal, 61(2), pp.626-631.

Farrell, N.J.C., Debenham, N., Wilson, L., Wilson, M.J., Healy, D., King, R.C., Holford, S.P. and Taylor, C.W., 2021. The effect of authigenic clays on fault zone permeability. Journal of Geophysical Research: Solid Earth, 126(10), p.e2021JB022615.

Biological Sciences



Large and vibrant postgraduate group, supported by world-class research leaders



고

Cutting-edge research laboratories and facilities, and extensive network of resources

Sustained research excellence and funding The School of Biological Sciences brings together the internationally acclaimed and contemporary disciplines of molecular and cellular biology, and ecology and environmental sciences. We are ranked in the top 150 in the world, and best in South Australia for biological sciences.*

We host a large, vibrant group of postgraduate students, and prepare them for an exciting and diverse range of careers. Our world-class scientists work with a wide range of experimental and natural systems to deliver impact for biological, environmental and health outcomes, attracting more than AUD \$13 million in research funding annually.

We have extensive networks with government agencies and industry organisations to ensure our research has both national relevance and global impact.

* QS World University Rankings by subject 2020.

Industry and research partnerships

The School of Biological Sciences has an extensive partnership network of government, non-government, and private sector organisations, from small start-ups to large multinational pharmaceutical companies. Utilising a multidisciplinary approach, the school's research delivers the knowledge, understanding and technologies needed by end-users in the biomedical, biological and environmental sectors.

Research institutes

Environment Institute
 <u>adelaide.edu.au/environment</u>

Research centres

- ARC Centre of Excellence for Australian Biodiversity and Heritage (Adelaide node) <u>epicaustralia.org.au</u>
- Australian Centre for Ancient DNA
 <u>adelaide.edu.au/acad</u>
- Australian Centre for Antimicrobial Resistance Ecology (ACARE) <u>set.adelaide.edu.au/acare</u>



Dan Peet Associate Professor

Fields of research

- Cellular oxygen sensing
- Hypoxic gene regulation
- Retinal metabolism

Why students should study with University of Adelaide?

The University of Adelaide has an international reputation for high quality research across a broad range of areas. We have state of the art facilities, a great collegial atmosphere, and strong collaborations nationally and internationally.

Many of our graduates can be found working in laboratories around the world. Adelaide is also a great city to live in, being small, very friendly and more affordable.

66

I have had an opportunity to learn new advanced molecular biology techniques, including Seahorse metabolic analysis and CRISPR/Cas9 genome editing. Undertaking a Higher Degree by Research at the University of Adelaide has helped develop my skills both as a scientist and a teacher, and prepared me for my future academic and research career back home."

Thaksaon Kittipassorn

MD Bachelor of Science (Honours) PhD candidate

- Australian Centre for Evolutionary Biology and Biodiversity <u>adelaide.edu.au/environment/acebb</u>
- Australia-China Joint Research Centre of Grains for Health <u>adelaide.edu.au/accgh</u>
- Research Centre for Infectious Diseases set.adelaide.edu.au/research-centrefor-infectious-diseases
- Sprigg Geobiology Centre
 <u>adelaide.edu.au/environment/</u>
 <u>research/sprigg-geobiology-centre</u>
- Water Research Centre adelaide.edu.au/environment/ research/water-quality

Research facilities

- Adelaide Proteomics Centre <u>set.adelaide.edu.au/our-research/</u> <u>facilities-services/adelaide-</u> <u>proteomics-centre</u>
- Unmanned Research Aircraft Facility (URAF) <u>adelaide.edu.au/environment/uraf</u>

Research areas

Our school's research spans two broad areas. These are:

- developing biomedical approaches for major health conditions, such as cancer, neurological disorders, genetic, bacterial and viral diseases
- understanding the past, present and future for plants, animals and ecosystems to better manage marine, freshwater, and terrestrial environments.

Postgraduate research contacts

The following School staff can be contacted to assist in postgraduate research matters. Associate Professor Keith Shearwin E: keith.shearwin@adelaide.edu.au

Jennifer Peters E: jennifer.peters@adelaide.edu.au

Further information or advice

School of Biological Sciences North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5352 E: biolsciences@adelaide.edu.au W: set.adelaide.edu.au/biological-sciences

Why research hypoxic signaling at the University of Adelaide?

It's a very exciting and relevant area of research. We have been successfully researching oxygen sensing and gene regulation for more than 20 years at the University of Adelaide, including collaborating with laboratories working in directly related areas.

The research breadth spans from in vitro assays with purified proteins through to in vivo experiments. Our research is routinely published in high impact international peerreviewed journals and our graduates have taken up research positions in high profile research institutes in the USA, Europe and around the world.

Projects students may be interested in

- How the oxygen sensor FIH controls metabolism
- The role of the HIF transcription factors in Multiple Myeloma
- Regulation of cancer-like metabolism in the retina

Recent publications

Hampton-Smith R, Davenport B, Nagarajan Y, Peet D (2019) The conservation and functionality of the oxygen-sensing enzyme Factor Inhibiting HIF (FIH) in non-vertebrates. PLoS ONE, 14(4), e0216134.

Kittipassorn T, Haydinger C, Wood J, Mammone T, Casson R, Peet, D (2019) RNA sequencing data of cultured primary rat Müller cells, the spontaneously immortalized rat Müller cell line, SIRMu-1, and the SV40-transformed rat Müller cell line, rMC-1. Data in Brief, 23. Kittipassorn T, Haydinger C, Wood J, Mammone T, Casson R, Peet D (2019) Characterization of the novel spontaneously immortalized rat Müller cell line SIRMu-1. Experimental Eye Research, 181, 127-135.

Sim J, Cowburn A, Palazon A, Madhu B, Tyrakis P, Macias D, Bargiela D, Pietsch S, Gralla M, Evans C, Kittipassorn T, Chey Y, Branco C, Rundqvist H, Peet D, Johnson R (2018) The FIH (Factor Inhibiting HIF) asparaginyl hydroxylase regulates oxidative metabolism and accelerates metabolic adaptation to hypoxia. Cell Metabolism, 27(4), 898-913.

Nagarajan Y, Rychkov G, Peet D (2017) Modulation of TRP channel activity by hydroxylation and its therapeutic potential. Pharmaceuticals, 10(2), 35.

Vandyke K, Zeissig M, Hewett D, Martin S, Mrozik K, Cheong C, Diamond P, To L, Gronthos S, Peet D, Croucher P, Zannettino A (2017) HIF-2 promotes dissemination of plasma cells in multiple myeloma by regulating CXCL12/CXCR4 and CCR1. Cancer Research, 77(20), 5452-5463.

Chemical Engineering and Advanced Materials



Conduct cutting-edge research into the most significant challenges facing humanity



Produce real commercial outcomes through industry collaboration



Work with leading researchers nationally and internationally The School of Chemical Engineering and Advanced Materials boasts a vibrant and dynamic research team that undertakes cutting-edge research on challenging global issues, including clean energy and resources, pharmaceuticals, water, food and sustainability.

The school currently hosts more than 100 higher-degree researchers in the main areas of: chemical engineering, advanced materials, and biopharmaceutical processing. The school's research is supported by

The University of Adelaide offers great facilities for research and I can always receive support from the school and the teachers to expand my skills."

Sija Fu

Higher Degree by Research Candidate, School of Chemical Engineering and Advanced Materials state-of-the-art laboratories and analytical equipment—including operando, non-intrusive laser characterisation technologies, batteries manufacturing and high-performance computing facilities.

Industry and research partnerships

The school has established strong links with key industries through a range of research funds and research projects.

These include: the Silanna Group; BHP Billiton; SA Water; Southern Oil Refining; Tarac Technologies; Peats Soil and Garden Supplies; Spraygro Liquid Fertilizers; Treasury Wine Estates; Graphene Technology Solutions; and Melbourne Water.

Research institute

Institute for Mineral and Energy Resources
 <u>adelaide.edu.au/imer</u>

Supervisor spotlight

Yan Jiao

Associate Professor, ARC Fellow, Deputy Head of School of Chemical Engineering and Advanced Materials

Fields of research

- Molecular Modelling
- The Development of Computational Electrochemistry
- The Design of Energy Materials by Computation Methods

Awards

- 2019-2021 Highly Cited Researcher (Chemistry) by Clarivate Analytics
- 2021 Women of the Year Finalist, The Advertiser-Sunday Mail
- 2020 Young Tall Poppy Science Award
- 2019 Rising Star by the Australian

Why should students study with the University of Adelaide?

The University of Adelaide is ranked in the top 1% of universities worldwide, and it is also recognised as one of Australia's most respected research-intensive universities. Over 400 undergraduate and postgraduate coursework degrees, as well as postgraduate research degrees, are offered by the university, covering a wide range of academic fields. Moreover, the University of Adelaide provides various kinds of support to the researchers, such as the library with access to academic journals and research databases and its own research technology support.

The Phoenix High Performance Computing (HPC) service is most appealing to computational-related research, which allows access to large clusters of CPUs and GPUs for solving problems that require large-scale computation.

Why research Chemical Engineering and Advanced Materials at Adelaide?

Australia has a natural endowment of sunshine and prevailing wind. It is now standing at the forefront of transitioning to renewable energy supported economy. South Australia is currently leading the country with more than half of the electricity



- **Research centres**
- Centre for Materials in Energy and Catalysis <u>ecms.adelaide.edu.au/cmec</u>
- Graphene Enabled Industry Transformation Hub arcgrapheneresearchhub.com.au
- CRC Research Hub for Australian Copper-Uranium <u>adelaide.edu.au/copper-</u> <u>uranium-research</u>
- Centre for Energy Technology <u>adelaide.edu.au/cet</u>

Research areas

The School of Chemical Engineering and Advanced Materials has developed strong industry-oriented research capabilities. It focuses on developing innovative chemical and biochemical engineering processes and novel technologies with applications in a range of key areas, including:

- nanotechnology and materials engineering
- pharmaceutical, bioprocessing and biomedical technologies
- energy storage and catalysis
- mineral characterisation and processing
- laser diagnostics and chemical sensing
- waste to value
- advanced water treatment technologies
- food and wine technologies.

Postgraduate coordinator

Associate Professor Abel Santos

E: pgcchemeng@adelaide.edu.au and abel.santos@adelaide.edu.au

To find a supervisor, or learn more about our research, visit: <u>set.adelaide.edu.au/</u> <u>our-research#chemical-engineering-and-</u> <u>advanced-materials</u>

Further information or advice

School of Chemical Engineering and Advanced Materials

Engineering North building, Level 1 North Terrace campus The University of Adelaide SA 5005 Australia

- T: +61 8 8313 5446
- E: chemical.engineering@adelaide.edu.au
- W: set.adelaide.edu.au/chemicalengineering-advanced-materials

generated from renewable energy. In the near future SA will achieve a 100% electricity generated from renewable energy resources. The rapid expansion of generated renewable electricity can lead to short-term and long-term benefits for our society, such as reducing million tons of CO2 emission, solving the energy crisis, and potentially creating huge revenues for Australia on the energy market (billions of dollars). The current bottleneck is the conversion and storage of renewable electricity, where the development of catalyst materials is the most critical. Solving this problem by molecular modelling is a powerful approach, which can tell if and why a type of material is suitable for a specific reaction and design better materials different from the normal trialand-error materials discovery process.

Using hydrogen/carbon/nitrogen/battery as energy carriers and renewable energy as input, better catalyst materials that can produce and utilise clean fuels that do not pollute our planet will be synthesized.

Projects students may be interested in

- Electrochemical Energy Conversion Reactions by Operando Computation
- Design of Electrocatalysts for solar fuel production by Molecular Modelling
- Semiconductor Based Materials for Clean Energy Conversion

Recent publications

Local environment determined reactant adsorption configuration for enhanced electrocatalytic acetone hydrogenation to propane, Angew. Chem. Int. Ed. 2022,61,e202114253 C_3 production from CO_2 reduction by concerted *CO trimerization on a single-atom alloy catalyst. J. Mater. Chem. A, 2022,10, 5998-6006.

Role of oxygen-bound reaction intermediates in selective electrochemical CO2 reduction, Energy Environ. Sci., 2021, 14, 3912-3930.

Promoting ethylene production over a wide potential window on Cu crystallites induced and stabilized via current shock and charge delocalization, Nature communications, 2021, 12, 1-11.

Isolated boron sites for electroreduction of dinitrogen to ammonia, ACS Catalysis, 2020, 10, 1847-1854.

Building up a picture of the electrocatalytic nitrogen reduction activity of transition metal single-atom catalysts, J. Am. Chem. Soc., 2019, 141, 9664-9672

Civil, Environmental and Mining Engineering



Internationally recognised as one of the top civil and mining engineering schools in the world – ranked 35 for civil engineering and 7 for mining engineering by the prestigious Academic Ranking of World Universities, 2021



Home to some of Australia's finest researchers, and considered 'well above world-class' by Excellence in Research Australia, 2018

State-of-the-art research facilities – including laboratories and supercomputers – capable of supporting cuttingedge fundamental and industrial research Delivering award-winning and worldleading research, the School of Civil, Environmental and Mining Engineering offers postgraduate students exceptional opportunities to conduct fundamental and industry-relevant research. This includes in a wide range of areas surrounding the design, construction, maintenance and environmental sustainability of civil infrastructure, and the extraction of resources to build such infrastructure.

Research areas

The school has several areas of research concentration, that include but are not limited to the following:

- Structural Engineering and Materials for Civil Infrastructure
- Intelligent Water Decisions
- Mining and Geotechnical Engineering
- Environmental Engineering

A broad range of specialist research topics are available within each area.

The Structural Engineering and Materials for Civil Engineering Group develops new environmentally and economically sustainable construction materials, computational models and algorithms for simulations of structural failure, and monitoring technologies as well as strengthening and repair approaches f or the built environment.

The Intelligent Water Decisions Research Group develops the tools, technology and insights to enable government and industry to make better decisions to manage Australian and global water resources.

The Mining and Geotechnical Engineering Research Group develops new technology for deep mining and rock fracture analysis, and geothermal systems and dynamic soil compaction to improve our practice in geotechnical and resource engineering.



I'm from Colombia and this is my first experience working in research overseas. By doing my PhD at the University of Adelaide, I'm getting experience in water management in the context of Australia. This exposure will strengthen my professional profile to deal with water-related problems back home or anywhere in the world."

Jessica Bohorquez PhD in Civil Engineering



There is also a group of Computational Engineering researchers across the above disciplines working on the development of computational models and algorithms for simulations of engineering failure, and statistical approaches and algorithms for mining operations and water resources.

There is also an extensive expertise in environmental engineering addressing such topics as sustainable management of infrastructure, and climate risk.

To find a supervisor, submit a research proposal or learn more about these research areas, visit: <u>set.adelaide.edu.au/</u> <u>civil-environmental-mining-engineering/</u> <u>our-research</u>

Industry and research partnerships

There has been active participation in developing research programs with various Cooperative Research Centres (CRCs) such as the Bushfire and Natural Hazards CRC, Deep Exploration Technologies CRC and the Future Batteries CRC. External research engagement has been actively pursued, and with long-established research collaborations including the Bureau of Meteorology (BOM), Defence Science and Technology (DST) Group, South Australia (SA) Water, Oz Minerals, BHP, Department of Transport and Infrastructure, Broons, as well as state government and local councils.

The establishment of the Andy Thomas Centre for Space Resources (ATCSR) in 2019 has attracted several new Industry Partners who either committed to the activities of the Centre (Capra Robotics, Space Tango) or showed interest for commitment in the near future (Boeing, ispace, Oz Minerals).

From a civil engineering perspective, the ATCSR is undertaking projects related to off-earth construction and for the ability of structures to sustain human life, in topics areas sucvh as materials and structures development, construction processes, and geotechnical engineering for site preparation.

Research centres

 Andy Thomas Centre for Space Resources (ATCSR) <u>set.adelaide.edu.au/atcsr</u>

Postgraduate coordinator

Professor Nigel Cook E: nigel.cook@adelaide.edu.au

Further information or advice

School of Civil, Environmental and Mining Engineering Engineering North building, Level 1 North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5451 E: ceme@adelaide.edu.au W: set.adelaide.edu.au/civilenvironmental-mining-engineering

Computer Science



Highly qualified and experienced academic staff



World-leading research supported by prestigious research grants and industry contracts



National and international prizes awarded for research

commercialisation

The School of Computer Science undertakes a wide range of cutting-edge research activities, with highly qualified and experienced academic staff supervising a large number of master degree and PhD students. Our particular areas of research strength include:

- computer vision (ranked third worldwide according to <u>csrankings.org</u>)
- machine learning, and especially deep learning and probabilistic graphical models
- robotic perception
- optimisation and logistics
- evolutionary computing
- distributed systems
- internet computing and web technologies
- algorithms
- cybersecurity
- software engineering
- computer science education.

The school has recently spawned the Australian Institute for Machine Learning, with support from the South Australian Government, to further capitalise on our unique and world-class expertise in computer vision and machine learning.

We have close links with numerous local and international companies, and access to world-class computing facilities, including exclusive use of a dedicated deep-learning supercomputer.

Industry and research partnerships

The school hosts a node of the ARC (Australian Research Council) Centre of Excellence in Robotic Vision—a \$25 million collaboration between four Australian universities, developing new generation perception for robots in unstructured environments. We also host a node of the Cooperative Research Centre in Cybersecurity, a \$140 million venture to strengthen Australia's cybersecurity capability. And the school collaborates on a variety of projects with local and international companies, such as: Canon; Maptek; LBT Innovations; Lockheed Martin; Boeing; and Schneider Electric.

Research institutes

 Australian Institute for Machine Learning adelaide.edu.au/aiml

Research areas

School of Computer Science staff are active researchers and supervisors in a variety of areas:

- computer vision, robotic vision, machine learning
- cyber security
- distributed computing, the Internet of Things, and web technologies
- optimisation and logistics
- computer science education research
- complex systems
- networking and security
- software systems engineering.

Postgraduate coordinator

Dr Markus Wagner

E: pgccompsci@adelaide.edu.au

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>set.adelaide.edu.au/</u> <u>computer-science</u>

Further information or advice

School of Computer Science Ingkarni Wardli building, Level 4 North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5586 E: reception@cs.adelaide.edu.au W: set.adelaide.edu.au/computer-science

Studying Computer Science has boosted my confidence and given me the skills and knowledge to pave way for an awesome and rewarding career"

Chieh-Ju Trinity Liao

Bachelor of Computer Science (Advanced)



Electrical and Electronic Engineering



Proven track record in nurturing high-calibre graduates prepared for leading international careers



Academic staff who are world leaders in their disciplines



⁻aculty of Sciences, Engineering and Technology

More than 60 years of research excellence The School of Electrical and Electronic Engineering has a strong research focus. We achieved the maximum research quality rating in the 2018 Excellence in Research for Australia (ERA) assessment, and are ranked 1 in Australia and 42 in the world in our field.

Our academic staff excel in: systems and control; autonomous systems; energy storage; machine and drives; applied electromagnetics; photonics; radar systems; sonar signal processing; and biomedical and health technology.

The school's vision is to contribute to solving real-world problems through fundamental and applied research. We provide the highest quality PhD supervision and a supportive research environment, with strong linkages to local and international partners.

* Academic Ranking of World Universities, 2020

Industry and research partnerships

Medical and health technologies

- Adelaide Women's and Children's Hospital
- Royal Adelaide Hospital
- South Australian Health and Medical Research Institute (SAHMRI)

Energy and control

- Australian Energy Market Operator (AEMO)
- Australian Renewable Energy Agency
- Future Battery Industries CRC
- SA Power Networks

Sensing and security

- BAE Systems
- Defence Science and Technology Group

Supervisor spotlight

Jiawen Li

Senior Lecturer

Fields of research

- Medical Imaging
- BioPhotonics
- Fibre-optics

Awards

- L'Oréal-UNESCO For Women in Science Fellowship 2021
- National Heart Foundation Paul Korner Innovation Award 2021
- University Award for Outstanding Achievement: Excellence in Research (early career) 2020
- Australian Optical Society Geoff
 Opat Early Career Researcher
 Prize 2019, et al.

Why should students study with the University of Adelaide?

- The University of Adelaide is a Group of Eight University, and Electrical and Electronic Engineering ranked the 11th in the world (according to 2021 US News Global Ranking).
- Studying in one of the most liveable cities gives you a fantastic opportunity to have enjoyable and memorable time while making research breakthrough.
- Adelaide values science and research translation greatly, for example, new technologies developed at Uni (East End of North Terrace) are translated into deployable devices that can save lives in the BioMed City (including hospitals at West End of North Terrace).

- Los Alamos National Laboratory
- Osaka University
- Raytheon
- SmartSat CRC
- Universita Di Pisa

Research institutes

- Environmental Institute adelaide.edu.au/environment
- Robinson Research Institute
 <u>adelaide.edu.au/rri</u>

Research centres

- Centre for Energy Technology <u>adelaide.edu.au/cet</u>
- Cyber Security CRC

Research areas

School of Electrical and Electronic Engineering staff are active researchers and supervisors in the following three main themes:

Health technology

- Biomedical signal and image processing
- Biomedical electronic devices



Power and energy

- Systems analysis and control
- Machines and drives
- Renewable energy, energy storage and power systems

Sensing and security

- Microwave, terahertz, and photonics technologies
- Radar for surveillance and remote sensing
- Autonomous systems
- Applied electromagnetics

Postgraduate coordinator

Dr Withawat Withayachumnankul E: pgceee@adelaide.edu.au

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>set.adelaide.edu.au/</u> <u>electrical-electronic-engineering</u>

Further information or advice

School of Electrical and Electronic Engineering Ingkarni Wardli building, Level 3 North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5277 E: eee@adelaide.edu.au W: set.adelaide.edu.au/electricalelectronic-engineering

Why research Electrical and Electronic Engineering at Adelaide?

The University of Adelaide is the headquarter of the national centre of excellence in BioPhotonics (Australian Research Council Centre for Nanoscale Biophotonics, CNBP) and has many world-leading researchers working in this area. A nurturing and supportive interdisciplinary research environment has been created here in Adelaide.

Projects students may be interested in

- Developing more accurate cardiovascular disease detection with a cellularresolution imaging catheter
- Two-photon 3D printing of cellularresolution imaging devices

- Serial imaging of molecular and microstructural changes in atherosclerosis: tracking plaques towards destabilisation
- Automatic detection of high-risk plaques using machine learning algorithms

Recent publications

J. Li., S. Thiele, R. Kirk, et al. 3D-printed micro lens-in-lens for in vivo multimodal microendoscopy. Small (2022). Accepted. IF=13.281. Li has been invited for 'Rising Stars' Series.

J. Li, N. Montarello, A. Hoogendoorn, et al. Multimodality intravascular imaging of high-risk coronary plaque. JACC Cardiovascular Imaging, 15:1:145-159 (2022). IF=14.805. Rank 1/133 in Radiology, nuclear medicine & medical imaging. P. Capon, J. Li, A. Horsfall, et al. A silk-based functionalisation architecture for single fiber imaging and sensing. Advanced Functional Materials. 32:3:2010713 (2022) IF=18.808.

J. Li, S. Thiele, B. Quirk, et al. Ultrathin monolithic 3D printed optical coherence tomography endoscope for preclinical and clinical use. Light: Science and Applications. 9 (2020). IF=17.782. Altmetric attention score ranked Top 3 out of all papers from this journal. Altmetric score>240.

A. Khlaid, L. Peng, A. Arman, ..., J. Li, Silk: a bio-derived coating for optical fibre sensing applications. Sensors and Actuators, B: Chemical. 311 (2020). IF=7.200. Rank 2/61 in Instrumentation.

Mathematical Sciences



One of Australia's leading mathematics schools, receiving the top rating of 'well above world standard' on the most recent national evaluation of research*



Award-winning staff, including medallist of the Australian Mathematical Society and Australian Academy of Science

Excellent opportunities and facilities in a thriving and stimulating environment, including access to one of the country's best supercomputers The School of Mathematical Sciences has a long history of achievement in research and postgraduate education, and a reputation for providing a stimulating and supportive environment. Recognised for excellence in both research and teaching across applied mathematics, pure mathematics and statistics, our staff are Australian leaders in postgraduate research training in these areas.

We're highly respected internationally for our research in: geometry and mathematical physics; statistics; operations research; stochastic modelling; theoretical fluid dynamics; computational methods; modelling of problems in biology, materials science, geophysics and more.

Industry and research partnerships

The school's research partnerships notably include strong collaborative links with the Australian Wine Research Institute, the South Australian Health and Medical Research Institute, the Institute for Photonics and Advanced Sensing, the Australian Antarctic Division, the Australia-China Joint Research Centre on Wind and Wave Energy Harnessing and the Bureau of Meteorology, and CSIRO—providing the opportunity for students to work on projects at the interface of mathematics and the life and physical sciences.



Luke Bennetts

Associate Professor in Applied Mathematics

Fields of research

- Antarctic marine science
- Offshore renewables
- Acoustic metamaterials

Awards

- Australian Research Council Future Fellow 2019
- Alexander von Humboldt Foundation Experienced Research Fellow 2020
- Australian Mathematical Society Medal 2020
- Australian Mathematical Society Gavin Brown Best Paper Prize 2021

Research areas

- Pure mathematics: geometry and mathematical physics
- Statistics
- Applied mathematics: stochastic modelling and operations research
- Applied mathematics: fluid dynamics, computational methods, modelling of problems in biology, materials science and geophysics

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>set.adelaide.edu.au/</u> <u>mathematical-sciences</u>

Postgraduate coordinator

Associate Professor Ben Binder E: pgcmaths@adelaide.edu.au

Further information or advice

School of Mathematical Sciences Ingkarni Wardli building, Level 6 North Terrace campus The University of Adelaide SA 5005 Australia

T: + 61 8 8313 5407 E: admin.maths@list.adelaide.edu.au W: set.adelaide.edu.au/ mathematical-sciences The School of Mathematical Sciences pushes students to excel and engage with opportunities to diversify their experience, cutting-edge research, and professionals in their field. Alongside my studies, I've been a part of some amazing student-led clubs and worked with leading researchers in my field from around the world."

Bridget Smart

Higher Degree by Research Candidate, School of Mathematical Sciences

Why should students study with the University of Adelaide?

We're consistently ranked in the top 150 universities in the world and rising, and are one of Australia's Group of 8 research-intensive universities.

We're situated in the heart of one the world's most beautiful and thriving cities, which is rated as Australia's most liveable city, and with easy access to the CBD, parklands and beaches.

Why research Mathematics at Adelaide?

Applied mathematics at Adelaide has a long history of excellence in research, teaching and supervision.

We received the highest ranking of well above world standard in the most recent ARC Excellence in Research for Australia assessment. We offer a range of research projects in developing advanced mathematical techniques to solve in important applied problems in the fields of, e.g., biology, microfluidics and earth science, and often in collaboration with industry and research organisations such as CSIRO, the Bureau of Meteorology and more.

Projects students may be interested in

- Empowering next generation sea ice models with wave-ice mathematics
- Integrating rifts and swell in the mathematics of ice shelf disintegration
- Protecting coastlines while generating power
- Acoustic metamaterials for effective vibro-isolation

Recent publications

N Teder, LG Bennetts, P Reid, RA Massom, 2022, Sea ice-free corridors for large swell to reach Antarctic ice shelves, Environmental Research Letters, doi.org/10.1088/1748-9326/ac5edd LG Bennetts, MG Meylan, 2021, Complex resonant ice shelf vibrations, SIAM Journal on Applied Mathematics, 81(4), 1483–1502, doi. org/10.1137/20M13851

KM Golden, LG Bennetts, E Cherkaev, I Eisenman, DL Feltham, C Horvat, E Hunke, C Jones, DK Perovich, P Ponte-Castaneda, C Strong, D Sulsky, AJ Wells, 2020, Modeling sea ice, Notices of the American Mathematical Society, 67(10), 1535–1555

R Massom, T. Scambos, L. Bennetts, P. Reid, V. Squire, S. Stammerjohn, 2018, Antarctic ice shelf disintegration triggered by sea ice loss and ocean swell, Nature, 558, 383–389, https://doi. org/10.1038/s41586-018-0212-1

LG Bennetts, MA Peter, P Dylejko, A Skvortsov, 2019, Effective properties of acoustic metamaterial chains with low-frequency bandgaps controlled by the geometry of lightweight attachment, Journal of Sound and Vibration, 456, 1–12, doi. org/10.1016/j.jsv.2019.05.022

LG Bennetts, MA Peter, RV Craster, 2018, Graded resonator arrays for spatial frequency separation and amplification of water waves, Journal of Fluid Mechanics, 854, R4, doi:10.1017/jfm.2018.648, arXiv:1806.05404

Mechanical Engineering



World-leading researchers and teaching expertise

Vibrant and innovative environment focused on making an impact on knowledge generation and technology development



⁻aculty of Sciences, Engineering and Technology

State-of-the-art research facilities and technical support The School of Mechanical Engineering is proud of its long-standing tradition of high-quality research and postgraduate student education. Undertaking a range of fundamental and applied research, we've developed many new and innovative technologies that have made an impact throughout the world.

Our research is conducted across a diverse range of areas, including: fluid mechanics and aerodynamics; acoustics and vibrations; combustion; robotics and automation; renewable energy technology; humanitarian technology; biomechanics and sports engineering; and materials and structures.

The school has received the Australian Government's highest ranking for research quality*. Highly-skilled technical staff and fully equipped instrumentation, electronics and mechanical workshops support the sophisticated facilities and equipment necessary to sustain the research activities of the school.

* Excellence in Research for Australia rating of 5, 'well above world-standard', 2018.

Research institutes

- Institute for Mineral and Energy Resources
 <u>adelaide.edu.au/imer</u>
- Australian Institute for Machine Learning adelaide.edu.au/aiml
- Institute for Photonics and Advanced Sensing <u>adelaide.edu.au/ipas</u>

Research centres

- Centre for Energy Technology
 <u>adelaide.edu.au/cet</u>
- Humanitarian Research
 <u>adelaide.edu.au/humanitarian</u>



Fields of research

- Fluid dynamics
- Biofluid
- Renewable energy

Awards

 Australian Research Council Discovery Early Career Researcher Award

Why should students study with the University of Adelaide?

The University of Adelaide is one of the top Universities in the world and Adelaide is the most liveable city in Australia. Third most liveable city in the world. Here at the University, you will experience rich

Research areas

School of Mechanical Engineering staff have active research interests in a variety of areas.

These include:

- acoustics, vibration and control
- mechanics of materials and advanced manufacturing
- robotics and automation
- biomechanics and sports engineering
- thermofluids.

To find a supervisor, submit a research proposal or learn more about this area of research, visit: <u>set.adelaide.edu.au/</u><u>mechanical-engineering</u>

Postgraduate coordinator

Dr. Lei Chen E: pgcmecheng@adelaide.edu.au

Further information or advice

School of Mechanical Engineering Engineering South building, Level 1 North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5460 E: mecheng@adelaide.edu.au W: set.adelaide.edu.au/ mechanical-engineering



university life and quality education. You will work with Academics and peers who show genuine interest in helping you develop into an independent researcher.

Why research fluid dynamics at Adelaide?

The University of Adelaide is a researchintensive University. It has a rich history of excellent fluid dynamics research. In fact, Australian's first astronaut Andrew Thomas completed his PhD at the University of Adelaide and in the specific field of fluid dynamics. The University of Adelaide has world class experimental facilities and also has a supercomputer in the TOP500. The research training received here will prepare you to excel in academia, industry and government sector.

Projects students may be interested in

- Fundamental studies on wall turbulence.
- Flow control methodologies for suppressing drag to achieve zero carbon emission.
- Coronary blood flow in diseased arteries (Experimental, numerical and machine learning).
- Multiphase flow with heat transfer applications.

Recent publications

Abdelaziz, M., Djenidi, L., Ghayesh, M.H. & CHIN, R.C. (2022) A new equivalent sand grain roughness relation for two-dimensional rough wall turbulent boundary layers. J. Fluids Mech, 940.

Guerrero, B., Lambert, M. & CHIN, R. C. (2022) Precursors of backflow events and their relationship with the near-wall self-sustaining process. J. Fluids Mech., 933, A33.

Chan, C. & CHIN, R. C. (2022) Investigation of the influence of miniature vortex generators on the large-scale motions of a turbulent boundary layer. J. Fluids Mech., 932, A29.

Chan, C., Orlu, R., Schlatter, P. & CHIN, R. C. (2022) Large-scale and small-scale contribution to the skin friction reduction in a modified turbulent boundary layer by a large-eddy break-up device. Physical Review Fluids 7 (3), 034601.

Zhang, X.C., Nathan, G.J., Tian, Z. F. & CHIN, R.C. (2021) The influence of the coefficient of restitution on flow regimes within horizontal particle-laden pipe flows. Phys. Fluids., 33(12), 123318.

Chan, C. Schlatter, P. & CHIN, R. C. (2021) Interscale transport mechanisms in turbulent boundary layers. J. Fluids Mech., 921, A13

Physical Sciences



World-leading researchers with a tradition of sustained research excellence and impact



Career opportunities in the growth industries of energy, defence, and mining

State-of-the-art research facilities and supporting infrastructure

The School of Physical Sciences undertakes world-leading research in the disciplines of:

- Chemistry
- Earth Science
- Physics.

We are ranked number one in South Australia for physical sciences research*, and our postgraduate students play a key role in this work. They have contributed to breakthroughs that have captured international attention, such as the

detection of gravitational waves that won the 2017 Nobel Prize for Physics.

Our research, which has the potential to change lives, is attracting significant external funding and involves collaborations with leading international researchers. The school supports this research with a wide range of state-ofthe-art equipment, IT and infrastructure.

* Excellence in Research for Australia 2018, Australian Research Council.



Industry and research partnerships

The School of Physical Sciences has an extensive international network of research, government and private sector partners, spanning industries such as energy, mining, defence and health. By working together with our partners, we're able to deliver fundamental knowledge and technologies that provide applied research solutions and deliver real-world impact and benefit.

Research institutes and centres

- Environment Institute
 <u>adelaide.edu.au/environment</u>
- Institute for Mineral and Energy Resources <u>adelaide.edu.au/imer</u>
- Institute for Photonics and Advanced Sensing <u>adelaide.edu.au/ipas</u>
- ARC Centre of Excellence for Nanoscale BioPhotonics (host) <u>cnbp.org.au</u>
- ARC Centre of Excellence for Gravitational Wave Discovery (Adelaide node) <u>ozgrav.org</u>
- Special Research Centre for the Subatomic Structure of Matter <u>set.adelaide.edu.au/physical-sciences/</u> <u>research/physics-research/cssm</u>
- ARC Research Hub for Australian Copper-Uranium <u>adelaide.edu.au/copper-</u> <u>uranium-research</u>
- Centre for Energy Technology <u>adelaide.edu.au/cet</u>
- Mawson Geo Centre adelaide.edu.au/mawson-geo
- MinEx Cooperative Research Centre <u>minexcrc.com.au</u>
- Sprigg Geobiology Centre
 <u>adelaide.edu.au/environment/</u>
 <u>research/sprigg-geobiology-centre</u>



Research areas

- Chemistry
- Earth science
- Physics

To find a supervisor, submit a research proposal or learn more about our research areas, please visit: <u>set.adelaide.edu.au/our-research</u>

Postgraduate research contacts

The following School staff can be contacted to assist in postgraduate research matters. Associate Professor Tara Pukala E: tara.pukala@adelaide.edu.au

Jenny Reiners E: jenny.reiners@adelaide.edu.au

Further information or advice

School of Physical Sciences North Terrace campus The University of Adelaide SA 5005 Australia

T: +61 8 8313 5996 E: physicalsciences@adelaide.edu.au W: set.adelaide.edu.au/physical-sciences



As a PhD student working at the interface of chemistry and biochemistry, the availability of a broad range of equipment enables me to conduct my research projects. The training sessions and workshops with academic and professional staff across the University have helped me to develop my research skills and apply them across my projects. This assured me that I made the right decision to choose the University of Adelaide!"

Shaghayegh Dezvarei PhD Chemistry





International research student fees

2023 commencement

The quoted fee is a base fee and may be subject to an annual increase for each subsequent year of the degree. Information regarding fees and how to access fee increases will be included in successful applicants' Offer of Admission letter.

Faculty/broad discipline	Degree	2023 (per year) AUD
Sciences, Engineering and Technology	Doctor of Philosophy (Architecture)	\$45,500
	Doctor of Philosophy (Engineering)	\$49,500
	Doctor of Philosophy (Maths & Computer Sciences)	\$49,000
	Doctor of Philosophy (Sciences)	\$50,000
	Doctor of Philosophy (Veterinary Science)	\$56,000
	Master of Philosophy (Architecture)	\$45,500
	Master of Philosophy (Engineering)	\$49,500
	Master of Philosophy (Maths & Computer Sciences)	\$49,500
	Master of Philosophy (Sciences)	\$50,000
	Master of Philosophy (Veterinary Science)	\$56,000
Health and Medical Sciences	Doctor of Nursing	\$46,000
	Doctor of Philosophy (Dentistry)	\$56,000
	Doctor of Philosophy (Medicine)	\$56,000
	Doctor of Philosophy (Medicine) Nursing / Public Health	\$50,000
	Doctor of Philosophy (Ophthalmology)	\$56,000
	Doctor of Philosophy (Surgery)	\$56,000
	Master of Clinical Science (Public Health)	\$50,000
	Master of Philosophy (Clinical Science) Public Health	\$50,000
	Master of Clinical Science (Nursing)	\$46,000
	Master of Philosophy (Clinical Science) Nursing	\$46,000
	Master of Philosophy (Dentistry)	\$56,000
	Master of Philosophy (Medical Science)	\$56,000
	Master of Philosophy (Ophthalmology)	\$56,000
	Master of Philosophy (Public Health)	\$50,000
	Master of Philosophy (Surgery)	\$56,000
Arts, Business, Law and Education	Doctor of Philosophy (Arts) • Geography / Environmental Studies	\$49,000
	Doctor of Philosophy (Arts) • Human Society / Commmunication and Media Studies / Language and Literature / Philosophy / Political Science	\$39,500
	Doctor of Philosophy (Education)	\$39,500
	Doctor of Philosophy (Elder Con)	\$39,500
	Doctor of Philosophy (Professions) • Business, Law, Economics and Public Policy	\$45,000
	Master of Philosophy (Arts) • Geography / Environmental Studies	\$49,000
	Master of Philosophy (Arts) • Human Society / Commmunication and Media Studies / Language and Literature / Philosophy / Political Science	\$39,500
	Master of Philosophy (Education)	\$39,500
	Master of Philosophy (Elder Con)	\$39,500
	Master of Philosophy (Professions) • Business, Law, Economics and Public Policy	\$45,000



Further enquiries

The University of Adelaide SA 5005 Australia enquiries future.ask.adelaide.edu.au phone +61 8 8313 7335 web adelaide.edu.au facebook facebook.com/uniofadelaide snapchat snapchat.com/add/uniofadelaide instagram instagram.com/uniofadelaide wechat UniversityOfAdelaide weibo weibo.com/uniadelaide

Disclaimer The information in this publication is current as at the date of printing and is subject to change. You can find updated information on our website at <u>adelaide.edu.au</u> The University of Adelaide assumes no responsibility for the accuracy of information provided by third parties.

© The University of Adelaide Published July 2022. Job no. 6647 CRICOS 00123M

Kaurna acknowledgement

We acknowledge and pay our respects to the Kaurna people, the original custodians of the Adelaide Plains and the land on which the University of Adelaide's campuses at North Terrace, Waite, and Roseworthy are built. We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs. The University continues to develop respectful and reciprocal relationships with all Indigenous peoples in Australia, and with other Indigenous peoples throughout the world.



Please visit our website: international.adelaide.edu.au