Research fellowship opportunities in the Faculty of Science

THE UNIVERSITY OF SYDNEY

sydney.edu.au/science

Science research fellowship opportunities

Chemistry, Geosciences, History and Philosophy of Science, Life and Environmental Sciences, Mathematics and Statistics, Physics, Psychology, Veterinary Science

We recognise and pay respect to the Elders and communitites - past, present, and emerging - of the lands that the University of Sydney's campuses stand on. For thousands of years they have shared and exchanged knowledge across innumerable generations for the benefit of all.

Welcome from the Associate Dean of Research

Thank you for your interest in research fellowship opportunities in the Faculty of Science at the University of Sydney.

Sydney provides a fantastic environment to take your research ambitions to the next level. From foundational science to translational and transformational research that underpins our missions to improve health and wellbeing, enable a sustainable and resilient society in a complex environment and innovate for tomorrow's industries, our world-leading scientists are blazing the path towards a better world. The Schools and disciplines within the Faculty of Science are routinely lauded as the most comprehensive and successful in Australia and internationally, as evidenced by our successes in all major rankings.

The University of Sydney has invested heavily in research capacity across the full spectrum of the sciences. From an island field station on the Great Barrier Reef, to world leading nanoscience laboratories, as a research fellow in the Faculty of Science you will have access to world-leading facilities and equipment. Our Multi-Disciplinary Institutes and Core Research Facilities offer collaborative spaces, critical mass of researchers, and the best research tools available.

Supporting the best and brightest researchers is at our core. We offer excellent support for our early and mid-career research fellows, through mentoring and targeted support schemes. Many of our fellows have used these opportunities to catapult their career into research leadership roles on the national and international scene. I invite you to read the profiles of a selection of our current fellows. I am sure you will be as inspired as I am by their stories.

By hosting research fellows in areas of research strength and strategic importance we aim to increase the capacity and impact of our research. Please reach out to us and start a discussion. We are keen to hear from you.

Professor Kate Jolliffe
Associate Dean Research

About the Faculty of Science

With a diversity of specialisations, a reputation for research excellence, and partnerships with institutions and industry, the Faculty of Science is positioned as a leading provider of education across the spectrum of the sciences.

The Faculty comprises:

- School of Chemistry
- School of Geosciences
- School of History and Philosophy of Science
- School of Life and Environmental Sciences
- School of Mathematics and Statistics
- School of Physics
- School of Psychology
- Sydney School of Veterinary Science

We are also home to a range of research entities such as:

- Drug Discovery Initiative (DDI)
- The Univerity of Sydney Institute of Agriculture (SIA)
- University of Sydney Mathematical Research Institute (SMRI)

We partner closely with the University's multidisciplinary initiatives and centres including:

- Brain and Mind Centre
- Charles Perkins Centre
- Sydney Environment Institute
- Sydney Infectious Diseases Institute
- University of Sydney Nano Institute

The significant level of funding we receive through the Cooperative Research Centres, National Health and Medical Research Council and the Australian Research Council, amongst other bodies, highlights our reputation for research excellence.

Major facilities that support our research include:

- Astronomical field stations
- One Tree Island Research Station on the Great Barrier Reef
- Sydney Analytical
- Sydney Microscopy and Microanalysis
- Various state-of-the-art spectrometry facilities
- Significant rural and farm teaching and research facilities.

The faculty offers extensive specialist workstations including database networks, and computer graphics systems.

In addition to the range of specialisations offered by our numerous departments and schools, we deliver innovative interdisciplinary programs, including studies in the areas of optical fibre technology, agricultural and veterinary sciences, marine studies and sustainability.

We have established active collaborative programs and international links with teaching and research organisations. Formal staff and student exchange agreements operate with institutions in the USA and Asia.

The Faculty of Science at the University of Sydney boasts an innovative edge and a commitment to challenging traditional ways of thinking. There has never been a better time to join us.

Faculty overview	2023
Undergraduate students	9,411
Postgraduate research students	1,835
Academic staff	745
Professional staff	526
Schools	8

For more information visit: sydney.edu.au/science

About the University of Sydney

The University of Sydney is a leading, comprehensive research and teaching university. We are committed to student-focused education, thriving diversity, and excellent research that tackles the greatest challenges and contributes to the common good.

Building on the First Nations knowledge of these lands, the University of Sydney is Australia's first university, Sydney's university, and a great global university—a place where everyone can thrive and excel.

Our aim is to deliver sustained and consistent excellence while developing the flexibility and resilience needed to adapt to an increasingly fluid and unpredictable world. At the core of our mission is world-class research and teaching that transforms lives. This commitment is reflected in our global ranking of 18th overall (QS 2025) and 1st in Australia for sustainability, social impact, and education impact (QS 2024).

We play a crucial role in shaping national and international agendas by delivering solutions to societal challenges through critical analysis, intellectual leadership, and active participation in public debate.

Learn more:

– sydney.edu.au/strategy/about

Our research

The University of Sydney is recognised as one of the best universities in the world, with a breadth and depth of disciplinary excellence unequalled by any other Australian university.

Our research is driven by the big picture. We take a problem and look at it from all angles, combining the expertise and talents of scholars from many disciplines to address society's most pressing issues and exhilarating new challenges.

Investing in research excellence is a core priority at the University of Sydney. Initiatives that contribute to outstanding research outcomes are key to our University strategy and are being supported by unprecedented investment.

For more information visit:

– sydney.edu.au/research

Our teaching

Undergraduate and postgraduate students are drawn by our comprehensive range of quality degrees, a strong track record in postgraduate research programs, and our rankings (1st in Australia for education impact, QS 2024).

Our students forge deep connections to their studies and leverage the opportunities we offer: our vibrancy, our unsurpassed links to international and domestic partners, our award-winning academics, our technological innovation, our educational offerings in digital domains, and our support – in person and online.

Our students study alongside top researchers and often contribute to their work. We challenge our students to excel and succeed as leaders in their chosen careers.

Our campuses

Our campuses are on lands that are home to the oldest continuous cultures in the world, and we celebrate this culture and its centrality to our work and study

Located near the heart of Australia's largest and most international city, our Camperdown/Darlington Campus features a mix of iconic Gothic-revival buildings and state-of-the-art teaching, research, and student support facilities.

The University also has an extensive footprint throughout Sydney. Some faculties are based in Camperdown/ Darlington but have facilities elsewhere.

Useful links

Careers:

– sydney.edu.au/recruitment

Organisational structure:

– sydney.edu.au/about-us/governance-and-structure/organisational-structure

Annual Report:

– sydney.edu.au/about-us/vision-and-values/ annual-report

News:

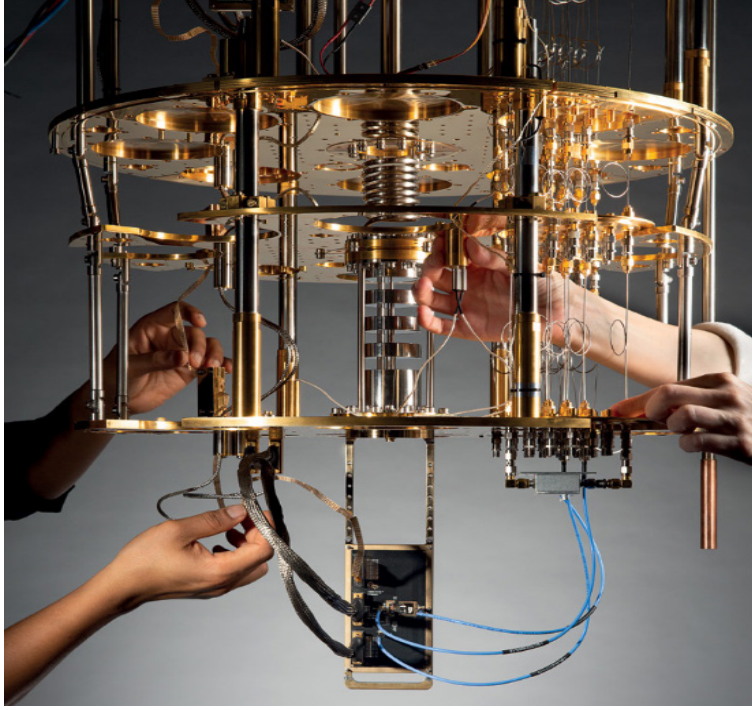
– sydney.edu.au/news-opinion/news

Statistical snapshot 2023

Enrolments, total	68,421
Enrolments, international	31.429
Staff (Academic and Professional)	9,051
Faculties and University schools	8
Research centres, institutes and networks	150+
ARC Centres of Excellence	13
ARC Industrial Transformation Research Hub (ITRP)	3
Cooperative Research Centres (CRC)	5
Commonwealth research funding	$419.9M
NHMRC Centres of Research Excellence	15
Sporting clubs	40+
Clubs and societies	250+
World Health Organisation Collaborating Centres	4

Why choose Sydney for research in science?

The University of Sydney is a world leading institution, placing 18th in the QS World University rankings 2025. The Faculty of Science has a global reputation for research excellence, top international rankings and award-winning researchers and projects.



Our rankings

Subject	Australia	World	Ranking source
Agricultural Sciences	4	43	US News & World Report 2024-25
Chemistry	5	64	QS 2024
Geography	3	21	QS 2024
History, philosophy & theology	2	40	THE 2024
Life sciences & Medicine	2	27	QS 2024
Mathematics	4	54	QS 2024
Microbiology	3	32	US News & World Report 2024-25
Psychology	3	31	QS 2024
Physics & Astronomy	3	86	QS 2024
Space Science	5	60	US News & World Report 2024-25
Veterinary sciences	1	26	QS 2024

- sydney.edu.au/about-us/our-world-rankings.html

Connection with industry

We believe that creative solutions to complex problems aren't developed in silos. That's why we support our researchers in collaborating with the university's 500+ industry partners, ensuring every challenge is approached from multiple angles. This synergy has led to over 650 active invention and copyright disclosures, and more than 45 active spin-out companies. By joining us, you'll have the opportunity to generate groundbreaking ideas, innovative solutions, and critical thought leadership needed to address some of the most intractable problems and unknowns facing our world today.

Research missions

In addition to our strength in foundational research, the Faculty of Science's impact is propelled by our three research missions: improving health and wellbeing, enabling a sustainable and resilient society, and innovating for tomorrow's industries.

Our research impact

The InCites 'Impact Relative to World' indicator assesses the citation impact of a university's publications relative to global averages across different research fields. A value of 1 signifies the world average citation impact in that specific field.

For publications spanning 2019-2023, the Faculty of Science has consistently exceeded the world average citation impact across all relevant disciplines.

Field of Research	Impact Relative to World
Agricultural, Veterinary & Food Science	1.70
Biological Sciences	2.02
Chemical Sciences	2.40
Earth Sciences	1.90
Environmental Sciences	2.40
Mathematical Sciences	1.31
Physical Sciences	1.98
Psychology	1.68

-incites.clarivate.com/#/analysis/0/organization

Benefits of working here

At the University of Sydney, we attract the most vibrant thinkers to form a community dedicated to the pursuit of transformative education and research.

Achieve your ambitions

If you're seeking to engage with brilliant minds, push boundaries, and make a positive difference, you've come to the right place. At the University of Sydney, our community comprises individuals from diverse cultures and backgrounds who enjoy a true sense of belonging.

We recognise the value of our talented staff and are committed to supporting them in achieving their career ambitions and following their dreams. Leveraging our exceptional local and global networks, we offer flexibility, responsibility, personal and professional development, and much more

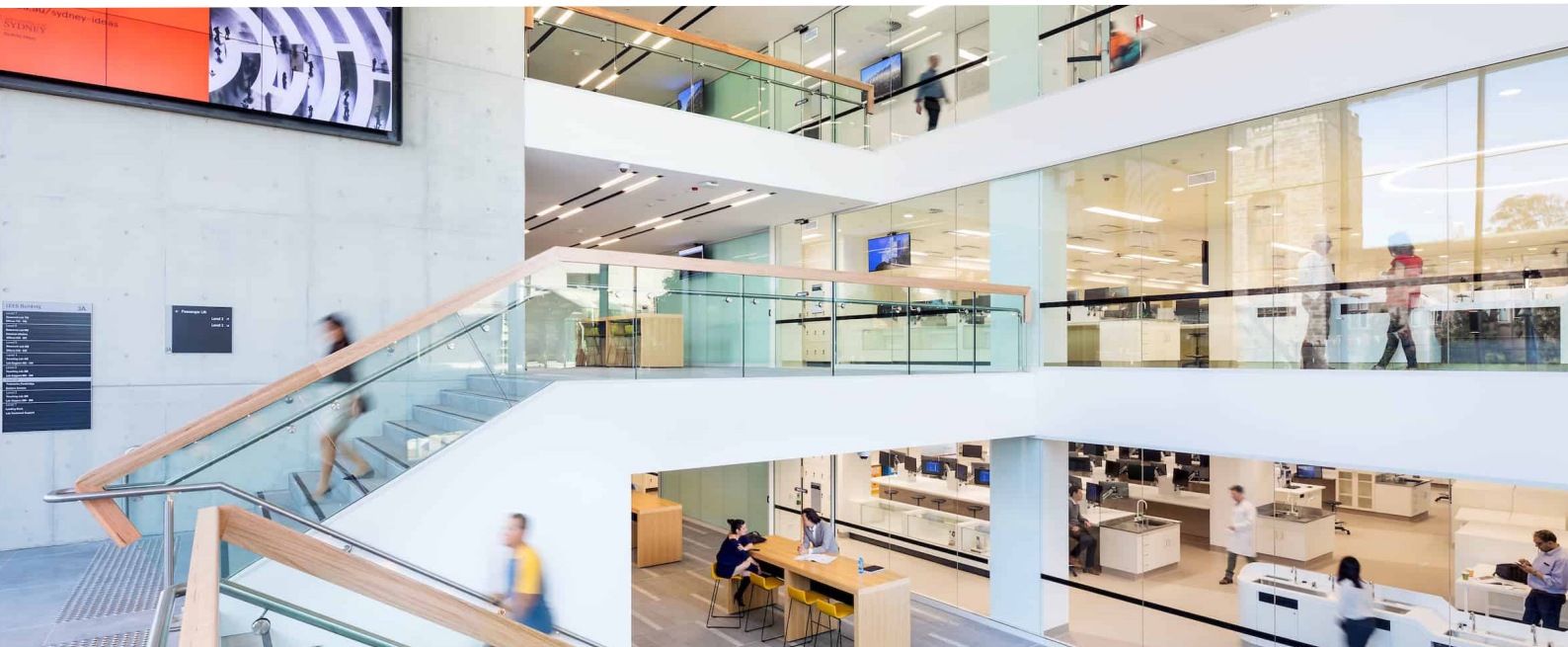
We reward our staff

We embrace open-mindedness, curiosity, and a readiness to tackle significant questions – and we reward it accordingly.

Our people thrive in an exciting environment where development is actively encouraged, and intellectual pursuits instill a profound sense of purpose and confidence. Moreover, we are deeply committed to fostering diversity and ensuring equal opportunities for all.

In addition to a competitive base salary, we offer a wide variety of financial and non-financial benefits to our staff. These include:

- Flexible working arrangements to assist staff in balancing work and personal/family responsibilities
- Family-friendly working hours
- Generous leave entitlements
- A University contribution of up to 17% of base salary to your superannuation (pension) fund
- Opportunities for tax-efficient salary packaging, including motor vehicles, laptops, and additional personal contributions to your superannuation fund
- Various training and development opportunities
- A staff study benefit providing a 50% reduction on tuition for eligible postgraduate coursework studies
- Exceptional health and wellbeing services, including sports and fitness centres, medical clinics, and free counselling via the Employee Assistance Program
- University Parents Network, offering support to parents throughout the University
- On-campus parking and convenient transport services
- Contribution to professional membership fees
- A free Staff Benefits Program providing online discounts across an extensive range of goods and services
- Access to the cultural life on campus, including museums, art galleries, music, and theatre at the Conservatorium of Music and Seymour Centre, and Sydney Ideas, the University's premier public lecture series program aimed at bringing leading thinkers to the wider Sydney community..



Australian Research Council Fellowships: ARC Discovery Early Career Research Awards (DECRA)

Support outstanding early-career researchers with demonstrated capacity for high-quality research.

Overview

The Discovery Early Career Researcher Award (DECRA) offers targeted research assistance for early career researchers. Each year, the ARC may grant up to 200 three-year DECRAs. Successful fellows receive substantial salary and project support from both ARC and the University.

The DECRA scheme aims to:

- Support outstanding basic and applied research conducted by early career researchers.
- Foster national and international research collaborations.
- Strengthen the scope and concentration of research in areas prioritised by the Australian Government.
- Propel promising early career researchers forward and facilitate diverse career pathways.
- Facilitate research and research training within high-quality and supportive environments.

Eligibility

Early Career Researchers who received their PhD within the last five years or have experienced eligible commensurate career disruption are eligible to apply.

Further details of the scheme:

- arc.gov.au/funding-research/funding-schemes/discovery-program/discovery-early-career-researcher-award-decra

Deadline

Applications for DECRA26 award open 30 January and close 18 March 2025. Potential applicants should contact their supporting School by 10 January 2025.

Facts

Of the researchers who were awarded a DECRA fellowship in the Faculty of Science in the last 10 years:

- 97% continued in a research career
- 42% are currently undertaking their DECRA project
- 29% continued as researchers at University of Sydney
- 10% continued as a researcher overseas
- 26% were successfully awarded another research fellowship.

Associate Professor Arunima Malik

School of Physics

ARC DECRA recipent 2023

What attracted you to Sydney?

I first set foot on the University of Sydney campus as a high school student and instantly felt a deep connection. The University fosters an environment of research-led interdisciplinary teaching which has been wonderful to be a part of as an academic. The opportunities are endless, and the wide range of programs ensures that there is no shortage of new and exciting challenges.

What has this fellowship done for your career?

DECRA has provided impetus to my career progression and enhancing my knowledge base. The financial resources have allowed me to grow my research team and forge new connections domestically and internationally. I was able to undertake policy driven research and most importantly apply my time and skills to new projects.

What advice would you give to potential researchers considering University of Sydney as an option?

What are you waiting for! Something that goes unmatched is the passion that our academics and professional staff share for high quality research. The drive to push the boundaries of what is known and accepted is a key reason why the University of Sydney excels in solving the world's most complex scientific problems. The excellent research environment, world class facilities and cutting-edge tools allow you to realise your research dreams. I highly recommend approaching your desired Faculties and Schools for support and guidance on crafting a competitive application.

Australian Research Council Fellowships: ARC Future Fellowships (FT)

Enabling outstanding mid-career researchers 5 to 15 years out of PhD.

Overview

The Future Fellowships scheme seeks to retain and attract the best and brightest mid-career researchers to undertake high-quality research programs in areas of national and international benefit.

Up to 100 four-year Future Fellowships may be awarded each year providing a salary awarded at one of the 3 salary levels by the ARC. The fellows are provided generous project and salary support from both ARC and the University.

The Future Fellowships scheme aims to:

- support excellent basic and applied research and research training by outstanding mid-career researchers to be recruited by universities in academic positions;
- support national and international research collaboration;
- enhance the scale focus of research in Australian Government priority areas.

Further information of the scheme

- arc.gov.au/funding-research/funding-schemes/discovery-program/future-fellowships

Eligibility

Future Fellowships candidates receiving their PhD in the past five to fifteen years or have eligible commensurate career disruption.

- Check your eligibility

Deadline

Applications for Future Fellowships (FT25) open 17 September and close 31 October 2024. Potential applicants should contact their supporting School by 06 August 2024.

Dr Ting Rei Tan

School of Physics

ARC Future Fellow 2022

What attracted you to Sydney?

I completed my PhD in quantum technologies in the United States and held my first postdoctoral position in Singapore. While the US and Singapore offer ample research opportunities, I chose to move to Sydney for several compelling reasons. The greater Sydney area boasts an impressive track record and global reputation in quantum research, with The University of Sydney being a formidable leader in this field. I wanted to position myself among the best talents while charting my research direction in this emerging discipline. Furthermore, the support for research and career development provided by the School, Faculty, and University has been exceptional. Additionally, there are ample opportunities to collaborate with cross-disciplinary experts. For instance, the University supported an interdisciplinary project I led, involving physics, chemistry, and medicine, which attracted significant external funding and contributed to developing cutting-edge technologies to address human health challenges.

What has this fellowship done for your career?

The Future Fellowship has allowed me to focus and build my team to pursue world-class research. It has also opened more doors for exploring new collaborations, both within Sydney and with other institutions.

What advice would you give to potential researchers considering University of Sydney as an option?

The University of Sydney is one of the best universities in Australia with strong inter-disciplinary research. The research environment is very supportive with very good students and great postdocs coming from all over the world. I suggest reaching out to senior academics in the School, Faculty, and Multi-Disciplinary Institute to see how your research will fit in to strengthen the overall research capability of the University. Furthermore, Sydney is an amazing city to live in. It is truly a multi-cultural metropolitan city with amazing food scenes and world-class beaches.

Australian Research Council Fellowships: ARC Australian Laureate Fellowships (FL)

World leaders, building research capacity for the benefit of all.

Overview

The Australian Laureate Fellowships scheme promotes research excellence by attracting top-tier researchers to conduct groundbreaking work within Australia.

Preference is accorded to researchers poised to undertake a substantial, enduring leadership and mentoring role in fortifying Australia's globally competitive research prowess. Up to 17 five-year Australian Laureate Fellowships may be awarded each year by the ARC.

The fellows are provided generous project and salary support from both ARC and University sources.

The Australian Laureate Fellowships scheme aims to:

- support ground-breaking, internationally competitive basic and applied research
- forge strong links among researchers, the international research community and/or industry and other research end-users
- enhance the scale and focus of research in Australian Government priority areas
- attract and retain outstanding researchers and research leaders of international reputation
- provide an excellent research training environment and exemplary mentorship to nurture early-career researchers.

Further details

- arc.gov.au/funding-research/funding-schemes/discovery-program/australian-laureate-fellowships

Timeline

Applications for Australian Laureate Fellowships (FL25) open 22 August and close 02 October 2024, potential applicants should contact their supporting School by 25 March 2024.

Professor Nalini Joshi AO

School of Mathematics and Statistics
ARC Georgina Sweet Australian Laureate Fellow 2012

What attracted you to Sydney?

The extraordinary quality of students who choose to study at the University of Sydney.

What has this fellowship done for your career?

It's like being hit by a truck. It is a game changer for the level and intensity of research you can do and for the quality of researchers you can attract to work with you.

What advice would you give to potential researchers considering University of Sydney as an option?

Think about what support the University can give you to attract others including additional support for students, what you need to carry out your research, for example space, and how you can benefit the community of researchers close to your area in Australia, for example by holding workshops.

Australian Research Council Fellowships: ARC Australian Laureate Fellowships (FL)

Professor David James

School of Life and Environmental Sciences (SOLES)
ARC Australian Laureate Fellow 2021

What attracted you to Sydney?

There were several key incentives for me in coming to Sydney University. First and foremost was the high quality students. The students here are world class and working with them has been an absolute dream. Second, is critical mass in key areas particularly core facilities. The university has developed outstanding core facilities with the latest technology and this has been really game-changing. Third, I was one of the first external faculty to join the Charles Perkins Centre, one of the first multidisciplinary research initiatives at the university. This has been transformational. Finally, the access to philanthropic support here has been so enabling for me I don't know what I would have done without this.

What has this fellowship done for your career?

The fellowship has directly enabled me to undertake a moonshot project, which I would not have been able to do otherwise. Lets see if it pays off but so far so good. I think as researchers we can spend far too much time doing what the system allows us to do rather than what we want to do. The Laureate has changed all this for me and given me the freedom and backing to take on a massive challenge. It has not only impacted me but all the members of my team also feel excited, engaged and empowered.

What advice would you give to potential researchers considering University of Sydney as an option?

Think big, keep your head down and look for opportunities. They are everywhere - even in adversity.

Australian Research Council Fellowships: ARC Industry Fellowships

Creating pathways to support academic researchers in establishing careers in industry, and facilitating industry-based researchers to collaborate and work within university settings.

Overview

The Industry Fellowships Program (IFP) is a suite of three fellowship schemes: Early Career Industry Fellowships, Mid-Career Industry Fellowships, and Industry Laureate Fellowships.

These Fellowships seek to:

- Develop a strong pipeline of researchers in Australia with capabilities in research collaboration, translation, and commercialisation;
- Open up and maintain a diversity of career pathways traversing university and industry settings;
- Increase strategic engagement and alignment between universities and industry;
- Contribute to the solving of industry-identified challenges and opportunities; and
- Create commercial, economic and other benefits for Australia through enhanced translation and commercialisation, including the development of start-up companies
- arc.gov.au/funding-research/funding-schemes/linkage-program/arc-industry-fellowships

Early Career Industry Fellowships (IE)

- Postdoctoral researchers seeking to build industry experience and expertise
- Career researchers from industry looking to return to the university system to work on industry problems

Benefits

- Successful fellows are supported by a generous salary and project support from ARC, Industry Partner and University sources
- Up to 50 Early Career Industry Fellows are awarded annually

Deadline

Applications for Early Career Industry Fellowships (IE25) open 24 September and close 12 November 2024. Potential applicants should contact their supporting School by 30 August 2024.

Mid-Career Industry Fellowships (IM)

- Researchers wanting to build industry connections and tackle a new industry problem.
- Professionals looking to strengthen university connections and research skills.

Benefits

- Successful fellows are supported by a generous salary and project support from ARC, Industry Partners and University sources
- Up to 25 Mid-Career Industry Fellows are awarded annually

Deadline

Applications for Mid-Career Fellowships (IM25) open 24 September and close 12 November 2024. Potential applicants should contact their supporting School by 30 August 2024.

Industry Laureate Fellowships (IL)

- Senior Researcher, with an exemplary record of research translation, who wants to build the next generation in their field
- Chief Technology Officer looking to build and transform an emerging industry

Benefits

- Successful fellows are supported by a generous salary and project support from ARC, Industry Partners and University sources
- Up to 8 Industry Laureate Fellows are awarded annually

Deadline

Applications for Industry Laureate Fellowships (IL25) open 24 September and close 12 November 24, potential applicants should contact their supporting School by 30 August 2024.

Australian Research Council Fellowships: ARC Early-Career Industry Fellowship

Dr Ben Mather

School of Geosciences

ARC Early-Career Industry Fellow 2024

What attracted you to Sydney?

I was approaching the end of a postdoctoral fellowship in Europe and was on the lookout for something new. Luckily for me, a research fellowship opened within the EarthByte Group, a world-leading group in geophysics situated in the School of Geosciences at The University of Sydney. I quickly applied and got the job. The University of Sydney hosts outstanding research and is in one of the most beautiful cities in the world. What more could you want?

The level of research support available within The University of Sydney offers a compelling advantage over many other universities. For example, The University of Sydney hosts some outstanding core research facilities, such as the Sydney Informatics Hub, which can offer specialised support to aid research. I can also recommend applying for one of the many internal research grants to help establish ties with international researchers. This can be highly valuable in building your network..

What do you believe this fellowship will do for your career?

The ARC Early Career Industry Fellowship is the ideal springboard to launch my career. I have always pursued research that in some small way helps to address the economic, environmental, and social challenges the world faces in transitioning to a green energy economy. Working closely with an industry partner to achieve this aim is a real game-changer. Not only does my research continue to benefit the scientific community, but I can also embed myself within a world-leading industry partner to translate my research for practical applications.

What advice would you give to potential researchers considers University of Sydney as an option?

The ARC Industry Fellowship requires you to spend a minimum of 0.2 FTE with your industry partner. Consider how The University of Sydney can benefit your relationship with your industry partner. For instance, it can really help your chances of getting funded if there is an existing relationship between The University of Sydney and your industry partner. Start formulating the project proposal early and reach out to research groups which have established industry ties. Research projects can take some time to get internal funding approval in large companies, so approach your industry partner early with a project description and a clear list of outcomes your project will deliver.

National Health and Medical Research Council (NHMRC) Fellowships: NHMRC Investigator Grants

Investigator grants provides researchers at all career stages with funding for their salary (if required) and a significant research support package for five years.

Investigator Grants will support:

- All career stages:– early career researchers, mid-career researchers and established researchers
- Researchers with clinical responsibilities (such as clinicians, public health and allied health practitioners)
- Research across the four pillars of health and medical research: biomedical, clinical, public health and health services research
- Full-time and part-time researchers

- nhmrc.gov.au/funding/find-funding/investigator-grants

Investigator Grants aim to :

- Allow flexibility for investigators to pursue important new research directions as they arise and to form collaborations as needed
- Foster innovative and creative research
- Create opportunities for researchers at all career stages to establish their own research programs
- Reduce application and peer review burden on researchers

Structure:

Investigator Grants will be offered in two categories:

- Emerging Leadership (EL) – recipients will have the title 'NHMRC Emerging Leadership Fellow' Level 1 or Level 2
- Leadership (L) - recipients will have the title "NHMRC Leadership Fellow' Level 1, Level 2 or Level 3

Five levels of salary support and six tiers of research support packages are offered across the scheme. NHMRC Emerging Leadership Investigator Grants are restricted to researchers who are ≤10 years post-PhD or equivalent on 1 March of the application year.

Salary:

The salary component of Investigator Grants is provided as a contribution to assist Administering Institutions with employing the successful applicant. However, an Investigator Grant recipient's total salary is agreed through negotiation between the researcher and their Administering Institution.

Applicants to the Investigator Grant scheme choose the Leadership Level (Emerging Leader 1 - Leader 3) that best aligns with their career stage and specify the percentage of salary needed to support their research endeavors.

The selected Leadership Level determines the salary granted, which is set at the upper limit of comparable NHMRC Fellowship levels.

Research Support Packages

Successful applicants at Emerging Leadership Levels 1 and Level 2 will be awarded a fixed Research Supporr Package per annum.

Leadership Investigator Grant recipients are eligible for four tiers of Research Support Packages. The tiers are based on the overall peer review score of the application, rather than the Leadership level.

These packages can be utilised to fund Direct Research Costs.

Deadline

Applications for Investigator Grants commencing in 2025 will open on June 19 and close on August 15, 2024. Potential applicants should contact their supporting School by June 30, 2024.

National Health and Medical Research Council (NHMRC) Fellowships: NHMRC Investigator Grants

Dr Jonathan Danon

School of Chemistry
NHMRC Emerging Leadership Fellow (EL) 2022

What attracted you to Sydney?
I did my undergraduate degree, PhD, and postdoc in my native UK, and wanted to get experience of performing research overseas.

I reached out directly to an academic in my field at the University of Sydney to find out about research opportunities in Australia. I had heard that academics here really value work-life balance, which was extremely important to me. I was delighted to find out this was true after taking up a postdoctoral position at USyd in 2017. It is actually possible to carry out interesting research and have a fulfilling personal life!

My positive experiences in Sydney mean that I can easily envision living and working here for the foreseeable future.

Where do you hope the fellowship will take your career?
Shortly after arriving in Australia, I was fortunate enough to win a USyd Postdoctoral Fellowship (2018–2021), which allowed me to start building an independent research program under the guidance of an experienced academic mentor.

This provided me with amazing opportunities to network with interdisciplinary collaborators from across the University and Australia and supervise my own research students.

Moreover, it allowed me to build my track record and become competitive for national fellowships, including the NHMRC Investigator Grant fellowship scheme that currently funds me and my group.

This fellowship has allowed me to capitalize on the momentum of my research program and recruit research assistants and PhD students to carry out our work. The prestige of this fellowship has also opened doors with regards to invitations to speak at conferences and other universities.

What advice would you give to potential researchers considering The University of Sydney as an option?
Reach out to academics in your field who already work at the University of Sydney. They are universally generous with their time and eager to help prospective fellowship applicants negotiate the idiosyncrasies of various Australian grant systems.

It's also useful to have an "in" with the relatively small Australian scientific community for when you start working here. I also recommend contacting the University's research office early (months in advance of application deadlines) to receive general advice and feedback.

Westpac Research Fellowships

Investing in the brightest, most innovative early career researchers to actively help them influence positive change in Australia.

Overview

The Westpac Research Fellowship distinguishes itself from other fellowship opportunities, by prioritising the individual researcher, addressing their specific needs for advancing their research and establishing themselves as notable early career researchers. Westpac collaborates closely with these researchers to enhance their profiles, develop their leadership skills, and expand their professional networks.

Westpac has structured its fellowship program around three key areas vital to Australia's future growth and aligned with Westpac's organizational focus: technology and innovation; Australia-Asia ties; and positive social change. Annually, only two Westpac Research Fellowships are granted, offering recipients flexible funding over a five-year period.
- scholars.westpacgroup.com.aut

Deadline

Applications for Westpac Research Fellowships commencing in 2025 will open on 04 July 2024 and close 28 August, 2024. Potential applicants should contact their supporting School by 30 June 2024.

Dr Shawna Foo

School of Life and Environmental Sciences (SOLES)

Westpac Research Fellow 2022

What attracted you to Sydney?

I had a wonderful time completing my undergraduate and postgraduate studies at The University of Sydney, so I knew that after several positions overseas that I wanted to return, helping to nurture the next group of young scientists!

What has this fellowship done for your career?

The focus and support provided from this fellowship on personal development, has been invaluable. In particular, the focus on developing leadership skills that can best empower those around me makes the fellowship very unique, as we often do not dedicate the time to this. This fellowship has given me greater confidence in my research ideas and abilities.

What advice would you give to potential researchers considering The University of Sydney as an option?

Connect with researchers in the school and faculty you plan to join, and beyond to identify important multidisciplinary collaborations. This will also help you learn the different resources and infrastructure that is available to support your research. Also, make sure to utilise the Research Office. They not only provided extremely important feedback, but the deadlines for drafts kept me on track!

Core research facilities

The University of Sydney's core research facilities provide access to high-end research infrastructure and offer a range of related services to assist researchers with specialist applications.

Research and Prototype Foundry (RPF)

The RPF offers instruments for the fabrication of devices and structures with features on the micro and nanoscale, with specialised processes allowing users to make devices and prototype new ideas.

The RPF enables the development of optical chips, electronic devices and new quantum science and technology via outstanding lithography, etching, deposition and metrology capabilities.

– sydney.edu.au/research/facilities/research-and-prototype-foundry.html

Sydney Analytical

Sydney Analytical is the University's core research facility dedicated to material, chemical and biological analysis.

Sydney Analytical offer, open access to the University's flagship capabilities for vibrational spectroscopy, x-ray analysis, drug discovery and magnetic resonance, as well as expert technical guidance, to support researchers as they address their most challenging research priorities.

– sydney.edu.au/research/facilities/sydney-analytical.html

Sydney Cytometry

Sydney Cytometry is a core research facility for flow cytometry, cell sorting, image cytometry, mass cytometry and genomic cytometry that serves the University of Sydney campus and beyond.

– sydneycytometry.org.au

Sydney Imaging

This biomedical research facility has a comprehensive suite of preclinical and clinical imaging modalities, a state-of-the-art hybrid theatre, and world-class technical expertise.

– Preclinical Imaging - provide a wide range of modality options for healthcare researchers conducting in vivo studies for clinical translation
– Clinical Imaging - capabilities enable the development of best-in-class diagnostic tools and patient treatment options.
– The Hybrid Theatre expands research and training capability in interventional cardiology, neurosurgery, cardiothoracic surgery, laparoscopic surgery, cancer treatment planning and any area where visualisation of devices or contrast is valuable.

– sydney.edu.au/research/facilities/sydneyimaging.html

Sydney Informatics Hub

The Sydney Informatics Hub provides support, training, and expertise in research data management, statistics, data science, software engineering, simulation, visualisation, bioinformatics, and research computing.

- sydney.edu.au/research/facilities/sydney-informatics-hub.html

Sydney Manufacturing Hub

The Sydney Manufacturing Hub is a manufacturing-focussed research facility geared to enable concept-to-production demonstration capabilities, including advanced pre- and post-processing of materials.

- sydney.edu.au/research/facilities/sydney-manufacturing-hub.html

Sydney Mass Spectrometry

Provides state–of-the-art tools and expertise for proteomics, metabolomics and mass spectrometry imaging for the life and biomedical science communities.

- Mass spectrometry imaging (MSI) suite offers the choice of DESI or MALDI methods for the detection and high-resolution visualisation of biomolecules in samples ranging from tissue sections to bacterial colonies.
- Metabolomics. Using liquid chromatography coupled with precision mass spectrometry, we can fully characterise the metabolome or lipidome of a sample using one of our dedicated LCMS systems.
- Proteomics Study the protein complement of cells, tissues and organisms.
- sydney.edu.au/research/facilities/sydney-mass-spectrometry.html

Sydney Microscopy & Microanalysis

Our instrumentation and technical expertise are available for all researchers and include:

- Specimen preparation
- Transmission electron microscopy,
- Light and Laser microscopy,
- Scanning electron microscopy,
- X-Ray microscopy,
- Atom probe tomography, and
- Image visualisation.
- sydney.edu.au/research/facilities/sydney-microscopy-and-microanalysis.html

Faculty research facilities

Applied and Plasma Physics:

Explore new areas of physics with applications spanning novel plasma sources, thin film materials, surface modifications and devices for medicine, manufacturing, microelectronics, renewable energy and sustainability.

- sydney.edu.au/science/our-research/research-areas/physics/applied-and-plasma-physics.html

Astronomy Facilities:

The University of Sydney operates four major Astronomy facilities; Sydney Astrophotonic Instrumentation Laboratories (SAIL), Molonglo Observatory Synthesis Telescope (MOST) Square Kilometre Pathfinder (SKAMP) and Sydney University Stellar Interferometer (SUSI).

- sydney.edu.au/science/our-research/research-centres/sydney-institute-for-astonomy.html

Chemistry Facilities

Housed within the School of Chemistry, our research infrastructure is supported by dedicated high-level professional and technical expertise.

- Mass Spectrometry facility provides analytical services for researchers within the school, other researchers at the University of Sydney, as well as users outside the University.
- Separations facility provides chromatography support and instrumentation for a wide range of research projects.
- Thermophysical Properties Facility provide research support to School of Chemistry staff and students. TPF services are also available to external clients.
- Quartz High Performance Computing Facility provides specialised computational resources to support the theoretical and experimental chemistry community at the School of Chemistry and other associated users.
- sydney.edu.au/science/our-research/research-facilities/chemistry-facilities.html

Faculty Clinics

- Psychology clinic, provides affordable psychological assessment therapy and psychometric assessments.
- Child behavious research clinics, develop and evaluate new treatments for children with a range of developmental, behavioural and emotional problems, including autism, disruptive behaviour problems, anxiety and impulsivity.
- Gambling treatment clinics, offer therapy for difficulties related to gambling and provide support for close friends and relatives of problem gamblers.
- Veterinary teaching hospitals provide not only expert care and treatment of all creatures great and small, but also assist in training the next generation of veterinarians.

Faculty Farms

The Faculty farms offer University academics significant leverage in securing new initiatives arising from government and industry priorities in education, bioscience and food chain research occasioned by climate change, peak oil, urbanisation, food and water security. All University academics with relevant teaching or research interests are invited to utilise the Faculty farms, if feasible.

- Farms are located in the Sydney region: Badgery's Creek, Bringelly and Cobbitty.
- Regional NSW Farms: Arthursleigh, Narrabri and Nowley.
- sydney.edu.au/science/about/locations-and-facilities.html

Field Stations:

- Crommelin Biological Research Station Located 60 km north of Sydney at Pearl Beach, Crommelin Biological Research Station provides accommodation and basic laboratory and library facilities and access to adjacent wet and dry sclerophyll forests, sandy beaches, mangrove swamps and intertidal rock.
- One Tree Island is a coral cay of about 4 hectares, situated at the southeast end of its reef which is 5.5 km long and up to 3.5 km in size. It lies in the centre of the Capricorn Group of the Great Barrier Reef, about 20 km east of Heron Island and about 100 km off the Queensland coast from Gladstone.
- sydney.edu.au/science/our-research/research-facilities/field-stations.html

Museums

- Chau Chak Wing Museum, showcases the University's extraordinary collections of art, ancient history, science and cultural materials. Drawing on the Nicholson, Macleay and University Art collections and featuring objects and expertise from across the entire University
- The John Ray Herbarium is one of the largest university herbaria in the country with approximately 50,000 specimens located in the Heydon-Laurence Building.
- The Psychology Museum has the oldest and largest psychology collection in Australia and is held on campus at the School of Psychology.
- sydney.edu.au/science/about/locations-and-facilities/museums.html

Contacts

The Faculty of Science is structured with Associate Heads of Research located in each of the Schools.

For further information please contact your Associate Head or your Research Adminstration officer who can provide you with an information pack and assistance with your application.

School	Associate Head of Research	Research Administration Officer
School of Chemistry	Associate Professor Markus Muellner E: markus.muellner@sydney.edu.au	E: chemistry.researchsupport@sydney.edu.au
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School of History and Philosophy of Science	Professor Dean Rickles E: dean.rickles@sydney.edu.au	E: hps.admin@sydney.edu.au
School of Life and Environmental Sciences	Associate Professor Andrew Merchant E: andrew.merchant@sydney.edu.au	E: soles.research@sydney.edu.au
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For more information:
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sydney.edu.au/science

Produced by the University of Sydney, Faculty of Science, June 2024.

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