The last month has been positively brimming with proud Dean moments.

The Faculty won over $7 million in funding in the latest ARC grants round. We’re leading 13 Discovery Projects and are involved in two more; four members of staff have received Discovery Early Career Research Awards; and we’re also leading one Linkage Infrastructure, Equipment and Facilities project, and are part of five more led by other institutions.

Devika Kamath, Lizzy Lowe and Kate Selway have been named as part of Science & Technology Australia’s next Superstars of STEM cohort. Juan Carlos Afonso will be awarded an 2019 Early Career Scientist Award by the International Union of Geodesy and Geophysics, Shoba Ranganathan has received the 2018 Australian Bioinformatics and Computational Biology Society’s Honorary Senior Fellow Award, and Anita Petzler has won the Royal Society of NSW’s Jak Kelly Award.

Six of our researchers have been recognised in the Web of Science’s Highly Cited Researchers 2018 list: Sue O’Reilly, Ian Paulsen, Hendrik Poorter, Colin Prentice, Mark Westoby and Ian Wright. Ian Wright appeared in the list twice.

We’ve officially opened the School of Engineering’s new facilities at 44 Waterloo Road. The new facilities are an important part of our vision to attract and grow the best researchers, be the place where students with a passion and aptitude for science and engineering want to study, and further engage with industry.
Astronomical Optics (AAO) consortium has also been officially launched, and our FIRST Australia team has celebrated their biggest year yet.

A Faculty delegation had a very successful visit to China in October, and we’re part of a project to make ground-based telescopes that can produce images up to three times sharper than the Hubble Space Telescope.

Congratulations to Biology’s Brian Atwell and former Macquarie PhD student and post-doc Andrew Scafaro, whose work isolating a gene from a wild Australian rice that renders plants tolerant to very hot days beyond the mid-30s has recently been licensed by BASF.

In research news from our Faculty: Australia is unprepared for climate change’s impact on allergies, chromosome 14 of the synthetic yeast genome is complete, and a new intervention aims to reduce the use of unnecessary imaging for low back pain. And in research tweets: how electric vehicles could be used like a huge battery, stopping whales becoming ‘roadkill’, super-fast fibre and being an academic primary carer.

Read on for information about the three new staff who have joined the Faculty in the past month, the 12 vacancies we’re currently advertising, and all the details of the FSE Staff Awards and the recently announced promotions.

This will be my last newsletter for 2018 so I’d like to take this opportunity to thank you for all your hard work over the past year, and to wish you and your loved ones a happy and relaxing break over the Christmas and New Year period.

If you want to know more about what’s happening across the Faculty, follow our Faculty Twitter account @MQSciEng and my personal account @BarbaraMesserle. If you’ve got news to share, please tweet about it and include our Faculty handle so we can see it and retweet. If you’re not on Twitter, then email us at fse.execdean@mq.edu.au and we’ll share the news.

Regards,

Barbara

In this bulletin

- Faculty success in latest ARC grants round
- Our STEM superstars smashing gender assumptions about scientists
- More gongs for our staff
- Engineering the future
- Sky's the limit for AAO
- FIRST Australia celebrates its biggest year yet
Faculty success in latest ARC grants round

Quantum chemistry, cosmic cannibalism, and the role of water in planetary evolution are some of the Faculty projects funded in the latest Australian Research Council (ARC) grants round, announced last month.

Thirteen Discovery Projects being led by the Faculty were funded. We’ll also be involved in another Discovery Project being led by the Faculty of Arts, and a Discovery Project being led by Rick Shine who joins Biology from the University of Sydney.

Congratulations to Engineering’s Zichun Wang, Biology’s Chris Reid and Jonas Wolff, and Physics and Astronomy’s Devika Kamath who all received Discovery Early Career Research Awards.

The Faculty is also leading one Linkage Infrastructure, Equipment and Facilities project, and are part of five more being led by other institutions.
In total we’ve won over $7 million in funding this round, representing projects from our School of Engineering and Departments of Physics and Astronomy, Environmental Sciences, Mathematics and Statistics, Biological Sciences, Molecular Sciences, and Earth and Planetary Sciences.

Congratulations to all who were successful.

Find out more

Photo of two merging galaxies by NASA, Holland Ford (JHU), the ACS Science Team and ESA.

---

**Our STEM superstars smashing gender assumptions about scientists**

Three scientists from the Faculty of Science and Engineering have been named as part of Science & Technology Australia’s (STA) next Superstars of STEM cohort.

Physics and Astronomy’s Devika Kamath is internationally recognised for her work on observational studies of dying stars and their implications for the origin of elements in the Universe. She decided to become an astronomer at the age of 13.

Biology’s Lizzy Lowe is passionate about working with local communities to improve the health of our cities, through reducing insecticide use and creating healthy urban spaces that support biodiversity of all shapes and sizes.

Earth and Planetary Sciences’ Kate Selway makes measurements on the Earth’s surface to peer deep inside it. She has led research teams in the deserts of central Australia, the savannas of East Africa and the frozen expanses of the Greenland & Antarctic ice sheets.
Superstars of STEM aims to smash society’s gender assumptions about scientists and increase the public visibility of women in STEM. STA created Superstars of STEM to build a critical mass of celebrity Australian female scientists and technologists—role models for young women and girls—and to work towards equal representation in the media of women and men working in all fields in STEM.

“We need more young women taking up STEM in schools and universities so it’s fantastic to have these role models in STA’s Superstars of STEM program,” says Barbara Messerle, Executive Dean of the Faculty of Science and Engineering.

“We know that empowering women to achieve in science, technology, engineering and maths leads to great research and teaching outcomes, and helps us find better solutions to today’s global challenges.”

Find out more

More gongs for our staff

Congratulations to Earth and Planetary Sciences’ Juan Carlos Afonso who is being awarded an 2019 Early Career Scientist Award by the International Union of Geodesy and Geophysics.

Juan Carlos has revolutionised the interpretation of seismic data, and made his approach globally accessible through open-source software which is used for mineral and energy exploration, to better understand the Earth, and to study the interior of other planets and moons.

Congratulations to Molecular Sciences’ Shoba Ranganathan who has received the 2018 Australian Bioinformatics and Computational Biology Society’s Honorary Senior
Fellow Award. Her research seeks to understand biological systems using computational approaches.

Physics and Astronomy’s Anita Petzler has won the Royal Society of NSW’s Jak Kelly Award. She studies the interstellar medium—the gas and dust between the stars of a galaxy—to better understand how stars form.

And six Faculty researchers have been recognised in the Web of Science’s Highly Cited Researchers 2018 list.

They are Earth and Planetary Sciences’ Sue O’Reilly, Molecular Sciences’ Ian Paulsen and Biology’s Hendrik Poorter, Colin Prentice, Mark Westoby and Ian Wright. Ian Wright appeared in the list twice.

---

**Engineering the future**

Minister for Finance, Services and Property Victor Dominello officially opened the School of Engineering’s new facilities at 44 Waterloo Road last month.

This expansion of the School is a key part of our vision to attract and grow the best research, be a university where students come to study with passion, and further engage with industry.

Speaking at the launch, the Vice Chancellor of Macquarie University S. Bruce Dowton highlighted what these facilities can do both for our students and our broader engagement.

“We are preparing students not for only their first job after university but to help them shift and shape their careers,” he says.
"The location of this facility is right in the heart of the Macquarie Park Innovation District. It is of key importance having a university close to or in an innovation district."

And Dean of the School of Engineering Darren Bagnall spoke about the current shortage of engineers in Australia.

"Australia needs more engineers and Macquarie University has a role to play in growing those engineers," he says. "We need to provide a diverse interdisciplinary team inspired by mentors."

---

**Sky’s the limit for AAO**

The Member for Bennelong John Alexander officially launched the Australian Astronomical Optics (AAO) consortium last month.

Speaking on behalf of Science Minister Karen Andrews, he acknowledged the significant amount of work done in the last 18 months to bring this partnership to fruition.

"Australian Astronomical Optics is a great example of the power of industry and research partnerships, and there are many more opportunities in optics and spectroscopy, robotics, automated manufacturing and precision engineering."

The AAO is a partnership between Macquarie, the University of Sydney, the Australian National University and Astronomy Australia Limited.

[Read the Minister's media release](#)
FIRST Australia celebrates its biggest year yet

The Faculty hosted a thank you event for all our FIRST Australia partners earlier this month, in recognition of the program’s biggest year yet.

In 2018 over 500 teams competed in FIRST robotics events across Australia, giving 5,000 students invaluable new skills in science, technology, engineering and maths to better prepare them for the jobs of the future.

Thank you to all our partners for working with us to make FIRST Australia such a success.

They are Google Australia, LEGO Education, Boeing Australia, Ford Australia, Blackbird Ventures, AARNet, Rockwell Automation, David Barling and Alec Cox.

Macquarie University brought FIRST Robotics to Australia in 2006 and it has grown rapidly thanks to the support of our partners. We’re looking forward to working with you in 2019.

Watch a thank you video to our partners
Australia leads project to revolutionise astronomy

Australian scientists will lead the design phase of a multimillion-dollar project for a new system on one of the world’s most powerful ground-based optical telescopes that will produce images up to three times sharper than the Hubble Space Telescope.

Two partners in the Australian Astronomical Optics (AAO) consortium – The Australian National University (ANU, AAO-Stromlo) and Macquarie University (AAO-MQ) – will design the new $AU32-million adaptive-optics system, called MAVIS, for one of the 8-metre Unit Telescopes at the European Southern Observatory’s Very Large Telescope in Chile.

Mike Steel, interim Director at AAO-MQ, says the design study will investigate different options for obtaining spectroscopic information from different sources simultaneously across the field, in addition to direct imaging.

“Australia has led the world in this area, for instance developing various technologies for accurately positioning hundreds of optical fibres to collect light from the desired astronomical sources,” he says.

MAVIS Project Scientist Richard McDermid from the Department of Physics and Astronomy said this ambitious instrument would enable a huge range of new science and discoveries that would otherwise not be possible.

“When we asked for ideas on research that MAVIS could tackle, the science community responded in force, with topics ranging from monitoring moons and planets in our solar system, to detecting light from the first star clusters forming 13 billion years ago,” he says.

Find out more

Photo of the unbarred spiral galaxy NGC 5033 by ESA/Hubble & NASA.
Thank you to everyone involved in our very successful visit to China in October.

The delegation joining me on the trip included our Deputy Executive Dean Bernard Mans, our Associate Dean Global Engagement Richard de Grijs, and Heads of Department Michael Sheng (Computing), Juan Carlos Afonso (Earth and Planetary Sciences) and Alison Rodger (Molecular Sciences).

Highlights of the trip included the 2018 Macquarie University Thought Leadership Workshop in Beijing, visiting the National Key Laboratories at the University of Science and Technology of China in Hefei, and visiting the Harbin Institute of Technology (HIT) in Weihai.

There were great interactions between Macquarie academics and our wonderful hosts. I look forward to deepening our relationships with our Chinese collaborators going forward.
A technology 10 years in the making is now set to help tens of millions of people, with the world’s largest chemical company licensing the rights to a Macquarie University discovery.

The Department of Biological Sciences’ Brian Atwell has worked with former Macquarie PhD student and post-doc Andrew Scafaro to isolate a gene from a wild Australian rice that renders plants tolerant to very hot days beyond the mid-30s. This is about three degrees hotter than the optimum for commercial cereal crops.

With conservative estimates predicting an average increase in the Earth’s temperature of at least two degrees over the next century, major grain shortages are expected. This innovation will help the world sustain wheat yields through heatwaves and general global warming.

The technology was developed in a team involving international collaborations and supported by colleagues at Bayer CropScience in Belgium. The recent transfer of agreements to the German company BASF—the largest chemical producer in the world—has culminated in a mutual licence agreement with Macquarie University to bring a heat resistant wheat crop to market.

“We’ve spent the last two years negotiating the license for this technology,” says Anna Grocholsky, Macquarie University’s Director of Commercialisation and Innovation. “Research started with Bayer. Bayer acquired Monsanto and then Bayer CropScience’s wheat business was acquired by BASF.”

“Macquarie University has such a strong record for innovation and it’s immensely satisfying to be able to help people like Brian and Andrew translate their incredible efforts into solutions with truly global potential.”
“This deal with BASF represents a fantastic team effort from Brian and Andrew, Legal and the Commercialisation and Innovation team.”

With BASF having licensed the rights for wheat, Anna’s team are also working with Brian and Andrew to license the technology in other crops and grains, expanding its potential to secure a staple food source for many millions of people.

Find out more

Read about the research on The Lighthouse

---

**Australia unprepared for climate change impact on allergies**

A rise in dangerous and even fatal asthma and other allergic attacks—as occurred in Melbourne’s deadly 2016 ‘thunderstorm asthma event’—could be one of Australia’s biggest health challenges from climate change, warns the author of a major new review of international evidence.

The review in the latest issue of *Public Health Research & Practice*, published by the Sax Institute, looks at studies since 2000 relating to climate change, allergens and allergy.

It includes recent research from Europe and North America that finds higher temperatures and more carbon dioxide in the atmosphere will significantly boost levels of allergens in the air such as grass pollen. At the same time, the pollen season is changing, starting earlier and going on for longer. Again, the result is substantially more pollen in the air.
However, the review’s author, Paul Beggs from the Department of Environmental Sciences, found that almost all the research about climate change’s effects on allergies is from overseas, and Australian-focused research “is therefore urgently needed”.

Paul also found that Australia’s systems for monitoring, reporting and forecasting atmospheric concentrations of allergens such as pollen were not fit for purpose.

The review notes that allergic illness is “already a very significant public health issue in Australia”. Asthma prevalence in Australia is among the highest in the world, with some estimates suggesting one child in five has wheeze symptoms and one in 13 has asthma.

Find out more

**Chromosome 14 complete**

Macquarie researchers have completed chromosome 14 of the synthetic yeast genome, or what they’re dubbing yeast 2.0.

The only previous synthetic genome created was of a much simpler bacterium.

Molecular Sciences’ Ian Paulsen and his team are part of an international consortium of scientists across five countries and 14 different institutions, working together to create yeast 2.0—the world’s first synthetic genome of a more complex, eukaryotic, organism.

“We design the DNA on a computer, chemically synthesise it, and then replace 50,000 base pairs of the chromosome’s approximately one million base pairs at a time,” explains Ian.
A quarter or a third of the time, the yeast becomes “sick” when the new synthetic DNA is added and the team have to figure out why.

“One of the most surprising findings so far is the profound effect some minor changes have—those we would think would be of little consequence—versus making larger changes that have had no impact at all,” says Ian.

But each step forward or backwards in the lab is a step towards better understanding what we can do to living cells and genomes, he says.

“This project is a proof of principle that it can be done, and it is teaching us lessons on how to design genomes—where the pitfalls are and where the opportunities are.”

In the short term, Ian says, synthetic yeast would be used as a lab tool, but in five to ten years we could be talking about creating synthetic plant or mouse genomes.

“This opens up the possibility we can design organisms from scratch and then synthesise them,” he says.

The team is now working on completing chromosome 16, and it is hoped the entire project will be completed some time next year.

Find out more

Visit the project’s website

Reducing unnecessary imaging for low back pain

An intervention to try to reduce the use of unnecessary imaging for low back pain has been developed by Macquarie researchers.
Most cases of low back pain that present to a GP, physiotherapist or chiropractor are what are referred to as nonspecific low back pain, where the pain can't be attributed to any specific cause.

“In those cases, taking an X-ray or an MRI really doesn’t show us anything that helps us manage the patient,” explains lead author Hazel Jenkins, from the Department of Chiropractic.

One of the main drivers of increased imaging use is pressure from the patient.

“GPs are often quite time poor so often they’ll end up just giving an imaging referral knowing it’s not going to show much and that will hopefully just reassure the patient,” says Hazel.

But the research has shown this course of action can actually worry the patient more.

“What we wanted to do was try and develop an intervention that would help GPs to manage these patients without having to give them an X-ray referral.”

Hazel and her colleagues developed an interactive booklet that GPs can use during consultations.

The booklet includes a screening tool, information on why imaging isn’t particularly helpful, general information on low back pain, and a section the GP can customise for the patient to give them some specific management advice.

“Through this we’re hoping that GPs can just use that to communicate a bit more effectively with the patient,” says Hazel. “It will be quite quick for them to use as it’s all there in front of them and that will help to reassure the patient so they don’t feel like they need the imaging referral.”

The research was published in *BMC Health Services Research*.

[Read the paper](#)

Photo by [raw pixel](#).
A quantum roadtrip

A team of quantum researchers from the Department of Physics and Astronomy have completed an epic roadtrip from Sydney to Perth, all in the name of science outreach.

Dubbed Quantum Coast-to-Coast, the trip visited six schools in New South Wales and Victoria and stopped at Coober Pedy for physics in the pub before crossing the Nullarbor to arrive in Perth in time for the Australian Institute of Physics Congress.

The main aim of the trip was to take quantum materials out to regional schools to inspire future physicists.

As well as visiting schools in Orange, Parkes, West Wyalong, Hay, Robinvale and Red Cliff, the researchers also spoke to students from Aurora College (the virtual selective school), met visiting students from Ouyen and Manangatang and chatted with students from Werrimull and Murrayville over Skype.

“It’s an exciting time for quantum technologies, which are starting to transition from research labs to commercial applications,” says Lachlan Rogers, one of the researchers behind the trip.

“The students we met were excited to hear about this ‘second quantum revolution’ and the opportunities that physics provides—one of which is to become part of the first-ever generation of quantum engineers.”

Look back at the team’s adventures on Twitter and Instagram.
Students track toxic trace elements in Broken Hill

Five Environmental Sciences students have conducted a soil and dust contaminant project in Broken Hill, through Macquarie’s Professional and Community Engagement (PACE) program.

The students worked with the Macquarie’s 360 Dust Analysis program, the NSW EPA and its Broken Hill Environmental Lead Program.

The aim of their work was to identify concentrations of potentially toxic trace elements in household vacuum cleaner dust and outdoor surface soils, and the relationship between these concentrations and the Broken Hill city mining operations.

Over one week they visited 62 houses around Broken Hill, collecting vacuum bags and using X-ray fluorescence spectrometers to measure trace elements in the verge and garden soils at each home.

The students found that a quarter of verges and one half of yards exceeded the health investigation level for lead in residential yard soils.

And houses with high lead levels in their yard were also likely to have elevated concentrations in their household dust. While there are currently no accepted guidelines for household dust, 98 per cent of indoor dust samples exceeded the soil guideline.

“The week was a unique and challenging introduction to the field of environmental contamination,” says Kara Fry, one of the students involved.

“But it’s certainly motivated all of us to pursue future research that benefits both science and communities.”

Read more about their project on ABC News
The Department of Mathematics and Statistics celebrated their 2018 Moyal Medallist, Professor Noel Cressie from the University of Wollongong, at an event at the beginning of November.

As well as accepting the award, Noel gave a lecture entitled ‘Statistics, Mathematics, and Rocket Science’ which looked at some of the work he is doing with NASA as a team member for the Orbiting Carbon Observatory-2 mission. The principal scientific objective of the mission is to estimate the global geographic distribution of CO2 sources and sinks at Earth’s surface, through time.

Earlier in the day Noel enjoyed lunch with the late Professor Joe Moyal’s wife, Dr Ann Moyal (pictured above).

Find out more about the medal

Research in tweets

We’ve been sharing snippets of our recently published research and Faculty members being mentioned in the media on Twitter.

Here are some recent highlights from @MQSciEng.
RT @STEMwomenMQ: Heather Handley @VMRG_MQ shares her personal story as an academic primary carer and how a supportive employer, their policies and initiatives are crucial to keeping women in the pipeline #womeninSTEM

“Most people don’t think about the positive impact vehicles can have for electricity storage, they only think about them draining energy,” says @MQEngineering’s Graham Town. QT @Macquarie_Uni: A little known benefit of electric vehicles is highlighted in new research by Macquarie Professor Graham Town showing that en masse, they could be used like a huge battery connected to the grid. Read more on today’s Lighthouse

RT @VanessaPirotta: Our new #shipping paper: #Whale experts call for rethink of global shipping routes to stop marine giants becoming ‘roadkill’

New pedestrian counters aim to improve walkability: “The sensors developed by @Macquarie_Uni will collect crucial real-time data that will help improve management of traffic & pedestrian activity in Macquarie Park,” says @computing_mq’s Michael Sheng

RT @computerworldau: Macquarie Uni coupler enables super-fast fibre, a potential antidote to ‘capacity crunch’

RT @ravindra_pn: Did you know that there are #wasps called #fairflies and they are among the smallest known #insects (about the size of average human hair)? What do we know and what can we learn from them? Find out in our new article

“We know dogs have 60x more receptors in their olfactory system & the area in the brain that processes scents is around 40x larger,” says @MQEngineering’s @noushinnasiri “But the reality is that we don't know exactly how they can detect biomarkers at very low concentrations.” QT @abcnews: Meet Freya, the diagnostic dog that can smell malaria in kids’ socks

Faculty bulletin

New staff | Current vacancies | Vice-Chancellor’s Learning and Teaching Awards | FSE Staff Awards | FSE Promotions

Welcome to new Faculty staff
A warm welcome to all the new staff who have joined the Faculty in the past month.

Please join me in welcoming Melissa Gorman who joins Engineering as a Project Engineer from MACOM Technologies.

Belinda Wallis joins Physics and Astronomy as a Research Centre Administrator from Resilium.

And Rick Shine joins Biology as a Professor from the University of Sydney.

**Current vacancies**

We’re looking for up to three Postdoctoral Research Fellows to work under Stephen Foley on the Australian Laureate Fellowship project Deep Earth Cycles of Carbon, Water and Nitrogen.

We need a suitably qualified Scientific Officer to develop, construct, test, review, modify, repair and maintain equipment, experiments and their associated documentation in the Department of Physics and Astronomy.

We’re seeking an energetic and innovative Postdoctoral Research Fellow to join a new project in Bioclimatic modelling.

We’re recruiting for a Postdoctoral Research Fellow in Diamond Lasers.

AAO-Macquarie is seeking a skilled Administration and Outreach Coordinator to provide administrative support for the Department’s outreach activities.

We are currently seeking a suitably qualified part-time Postdoctoral Research Fellow and a part-time Research Assistant to work on the Department of Environmental Sciences’ DustSafe project.

We need an enthusiastic and motivated Faculty PACE Officer to join a small team in the Faculty of Science and Engineering.

The Optus Macquarie University Cyber Security Hub in the Department of Computing is seeking an experienced Postdoctoral Research Fellow with experience in Privacy Preserving Technologies.

And we have an opportunity for a Laboratory Coordinator to join the prestigious Nanobiophotonics Laboratory in The ARC Centre of Excellence for Nanoscale BioPhotonics.
2018 Vice-Chancellor’s Learning and Teaching Awards

Congratulations to the Faculty winners of the 2018 Vice-Chancellor’s Learning and Teaching Awards.

The Human Anatomy Program led by Chiropractic’s Goran Strkalj won a Vice-Chancellor’s Award for Programs that Enhance Learning. The program is a collaboration between Goran and Anneliese Hulme in Chiropractic, with Richard Appleyard and Mirjana Strkalj in the Faculty of Medicine and Health Sciences, and Michael Rampe in the Faculty of Arts.

Find out more about this program

Mathematics and Statistics' Carolyn Kennett receive a Vice-Chancellor’s Citation for Outstanding Contribution to Student Learning for empowering students to become confident, flexible and creative users of mathematics.

And Computing's Gaurav Gupta and Biology’s Lachlan Roach won the Student-Led Awards for the Faculty.

FSE Staff Awards

Congratulations to all the winners of the FSE Staff Awards. They are:

- Early career researcher—Winner Engineering’s Mohsen Asadnia and highly commended Biology’s Alexandra Carthey
- Higher degree research supervision—Environmental Sciences’ Kirstie Fryirs
- Higher degree research—Winner Earth and Planetary Sciences’ Michael Förster and highly commended Biology’s Timothy Michael Ghaly
- Excellence in research leadership—Earth and Planetary Sciences’ Juan Carlos Afonso
- Award for Teaching Excellence: Approaches to teaching that influence, motivate, and inspire students to learn—Winner Biology Capstone Team of Matthew Bulbert, Serene Lin-Stephens, Fiona Jones and Martin Whiting, and highly commended Environmental Sciences' Kira Westaway
- Award for Teaching Excellence: Development of curricula and resources that enhance research-integrated teaching in our coursework program—Molecular Sciences' Louise Brown
• Teaching Excellence: Innovative approaches to assessment and feedback that foster independent learning and teaching—Engineering’s Project Based Learning Team of Nicholas Tse and Rex Di Bona
• Awards for Excellence in Sessional Teaching—Biology’s Susie Hewlett, Belinda Fabian and Kathryn Korbel
• Professional Staff—Biology’s Victoria Graham
• Technical Staff—Macquarie GeoAnalytical Team from Earth and Planetary Sciences of Yi-Jen Lai, Timothy Murphy and Peter Wieland.

FSE Promotions

Congratulations to all staff who were successful in their application for promotion. All promotions are effective from 1 January 2019.

The following staff are being promoted to Lecturer:

• Andrew Care, Molecular Sciences
• Abidali Mohamedali, Faculty of Science and Engineering Administration
• Annemarie Nadort, Physics and Astronomy
• Robert Williams, Physics and Astronomy

The following staff are being promoted to Senior Lecturer:

• Matthew Bulbert, Biological Sciences
• Sophie Calabretto, Mathematics and Statistics
• Anthony Chariton, Biological Sciences
• Nazmul Huda, Engineering
• Mohsen Jahromi, Engineering
• Andrew Lee, Physics and Astronomy
• Maina Mbui, Environmental Sciences
• Michael Swain, Chiropractic
• Sasha Tetu, Molecular Sciences
• Stephney Whillier, Chiropractic
• Huaiyu Yuan, Earth and Planetary Science

The following staff are being promoted to Associate Professor:

• Linda Beaumont, Biological Sciences
• Elena Belousova, Earth and Planetary Sciences
• Dominic Berry, Physics and Astronomy
• Louise Brown, Molecular Sciences
• James Downes, Associate Dean of Learning and Teaching
The following staff are being promoted to Professor:

- Juan Carlos Alfonso, Earth and Planetary Sciences
- Gavin Brennen, Physics and Astronomy
- Culum Brown, Biological Sciences
- Grant Hose, Biological Sciences
- Stuart Jackson, Engineering
- Yan Wang, Computing

---

**Connect with us**

If you have comments, questions or research news you think might be of interest to the rest of Faculty, I’d love to hear from you. Drop me a line at fse.execdean@mq.edu.au.

**Connect with your Faculty online:**

- Website: [science.mq.edu.au](http://science.mq.edu.au)
- Faculty on Twitter: [@MQSciEng](https://twitter.com/MQSciEng)
- Barbara on Twitter: [@BarbaraMesserle](https://twitter.com/BarbaraMesserle)