Contents

4 Expanding Aboriginal and Torres Strait Islander health research capacity
6 The future of medical research is here
8 Celebrating 25 years of Flinders in the NT
10 Providing the vital boost for us to fight COVID-19
12 2021 Flinders University Alumni Awardees
14 Inspiring a new generation
16 Epic study provides crucial women’s health insight
17 Clinical partners vital in training of medical students
18 Evolution of the paramedic workforce
Developing excellence in our health workforce

The Flinders University geographic footprint along Australia’s central corridor in South Australia and the Northern Territory is a defining feature for the University. It allows us to deliver regional academic programs and research that impact some of the most under-served communities in Australia.

One of Flinders University’s priorities is to develop our capacity to successfully conduct research in areas that enhance the health and wellbeing of First Nations peoples. In this edition of the College of Medicine and Public Health Alumni magazine I am delighted to introduce four new senior Aboriginal and Torres Strait Islander researchers who will be leading our research efforts along Australia’s central corridor.

This is another milestone year for rural and remote health education, as we celebrate 25 years of Flinders University’s presence in the Northern Territory. In 1997 Flinders established the NT Clinical School, enabling medical students to complete up to 12 months of study in the Territory. In 2011 we established the first fully NT based medical degree, the Northern Territory Medical Program. Through these programs more than 375 Flinders University-trained doctors have spent all or part of their medical degree studying in remote settings.

It is also 25 years since Flinders University pioneered the successful Parallel Rural Community Curriculum (now the MD Rural Stream) in South Australia’s Riverland. This program enables senior medical students to undertake 12 months based in rural general practice in the Riverland, Barossa Valley, Hills Mallee Fleurieu and Kangaroo Island, and the Greater Green Triangle based around Mount Gambier in South Australia and Hamilton in western Victoria.

In this edition we also acknowledge and celebrate teaching excellence and the work of our clinical partners, whose clinical knowledge and supervision inspire and support our students. Thank you to our alumni for sharing your expertise and valuable clinical knowledge to train a future-ready health care workforce.

As we share stories of achievements of our graduates, we acknowledge the contribution that you all make in health care, medical research, and public health.

Professor Jonathan Craig
MBChB, DipCH, FRACP, M Med (Clin Epi), PhD, FAHMS
Matthew Flinders Distinguished Professor
Vice President and Executive Dean
College of Medicine and Public Health

Honorary Award for respected Elder

A life of incredible contribution to community and overcoming the odds has seen respected Darwin Elder Richard Fejo presented with a coveted Honorary Doctor of the University by Flinders University.

Uncle Richie, as he is known to many, is a Larrakia man of direct male descent who has dedicated his life to cross-cultural education and improvement of outcomes for Aboriginal people. With a career spanning 25 years, Uncle Richie is a true champion, dedicated to improving the wellbeing of all Aboriginal people. He was joined at the ceremony by members of his family, including his sister Dr Aleeta Fejo who completed Medicine at Flinders University in 2004.

Dr Aleeta Fejo (BMBS(GradEntry) ’04) with Richard Fejo DUniv
Photo: GFP Graduations
Expanding Aboriginal and Torres Strait Islander health research capacity

By Judith Aisthorpe
Flinders Rural and Remote NT

Husband and wife academics Associate Professors Kootsy Canuto and Karla Canuto settled into their new Darwin offices in January, just as the monsoons broke across the Top End of the Northern Territory.

Associate Professor in Aboriginal and Torres Strait Islander Health, Karla Canuto, and Associate Professor in Aboriginal and Torres Strait Islander Male Health and Wellbeing, Kootsy Canuto, are of Torres Strait Islander descent and are passionate about improving the lives of First Nations Australians through health-based research.

Associate Professor Karla Canuto said her research was influenced by her family, her upbringing, and the mentorship received from so many great Aboriginal and Torres Strait Islander leaders over the years.

Working in Aboriginal and Torres Strait Islander health and health research for 20 years, she has experience across a wide range of health research projects, including chronic disease prevention, the promotion of physical activity, and understanding cancer disparities.

“As a Torres Strait Islander, I’m very concerned about the health inequities that Aboriginal and Torres Strait Islander peoples experience and I want to be part of the solution,” Associate Professor Karla Canuto says.

Associate Professor Kootsy Canuto, who has had a diverse career across education, training and within the public service, said he was inspired by his wife to pursue a career in research.

He has a particular interest in investigating Aboriginal and Torres Strait Islander male health and wellbeing, focusing on improving and streamlining primary healthcare services and programs, fatherhood, and co-design of social and emotional wellbeing programs. He was recognised as the 2020 South Australian Health and Medical Research Institute Early Career Researcher of the Year.

“I value listening, understanding and collaborating, and as a result I have developed strong, meaningful relationships with Aboriginal and Torres Strait Islander communities and community organisations across Australia,” he says.

“These relationships are of the utmost importance and will continue to guide all elements of my research and personal development.”

Professor Jaqui Hughes, inaugural Clinical Research Professor for Aboriginal and Torres Strait Islander Health Advancement, joined the NT research team in May.

Professor Hughes is a Torres Strait Islander woman and a Darwin-based clinical researcher who grew up in the NT.

She has previously been based at Menzies School of Health Research and is a clinical nephrology consultant for the NT Department of Health.

Professor Hughes will continue to work closely with her colleagues at Menzies, and with other health institutions and partners, to undertake important health-based research, strengthening Flinders’ existing partnerships and developing new ones.

Professor Hughes is a Fellow of the Royal Australian College of Physicians, Deputy Chairperson of the National Indigenous Kidney Transplant Taskforce, and a member of the Australian and New Zealand Society of Nephrology.

Her research has focused on improving the health of Aboriginal and Torres Strait Islander peoples with, or at risk of, chronic kidney disease, and she currently has an NHMRC Emerging Leader Fellowship.

“I’m excited to move to Flinders as a professor and recognise the extraordinary value these leadership roles can have to support health advancement,” she says.

New Population Health Discipline Lead

Flinders University has created a new Discipline of Population Health that reflects the diversity of the University’s broader public health expertise and that of its Aboriginal and Torres Strait Islander academics.

The discipline will be led by Professor Ray Mahoney, who joined Flinders in June this year as Professor of Aboriginal and Torres Strait Islander Health, and Discipline Lead of Population Health.

Professor Mahoney, a descendant of the Bidjara people of Central West Queensland, joins Flinders University from the Australian e-Health Research Centre at CSIRO.

Professor Mahoney is passionate about leading research into culturally safe care and addressing racism in health care. He has a background in cardiovascular disease research and policy leadership, having investigated the patient journey for Aboriginal and Torres Strait Islander cardiac care across rural and remote settings, and chronic disease risk factor management for those people in acute and primary care settings.

Professor Mahoney also has a background in development and delivery of culturally safe eHealth, leading studies into the accuracy of Indigenous status identification in public hospital patient information systems, and the suitability and applicability of mHealth (a specific way to utilise mobile technology, including apps, to achieve improved health goals) for remote monitoring of chronic disease risk factors in primary health care.

He is a member of national cardiovascular research groups and the Ethics Committee for the Australian Institute of Health and Welfare.

Professor Mahoney says he is looking forward to the challenge of leading a strong team.

“I’m excited about joining our very skilled and experienced team to grow the capacity of Indigenous researchers and health practitioners across undergrad, postgrad and HDR programs at Flinders - so they can lead best practice culturally safe care for our people.”

Photo: Brenton Edwards
Flinders finds funding success in 2021

In a testament to Flinders’ growing research strength, 2021 saw the University continue a four-year trend of increased grant funding, with a strong showing in grants awarded by the federal government and other funding bodies.

A well above average success rate with the National Health and Medical Research Council (NHMRC) now sees Flinders University ranked twelfth in Australia, and the ninth best university, for total funding awarded, with more than a dozen projects sharing in over $12 million.

Across the Ideas, Investigator and Development grant schemes, funded projects will look to tackle some of society’s most pressing health needs, including heart conditions, cancer, mental health and vaccines.

Professor Stuart Brierley had an especially successful 2021, receiving both an NHMRC Investigator grant and a Development grant, along with a successful Australian Research Council (ARC) Discovery project grant. Professor Brierley is a Matthew Flinders Professor, an NHMRC Investigator Fellow, and Director of the Visceral Pain Research Group at Flinders University, which is based at the South Australian Health and Medical Research Institute (SAHMRI).

“I feel very, very fortunate to have been recognised by my peers in receiving these grants. Each grant application is a considerable amount of work, and these funding schemes are extremely competitive due to the high calibre work being submitted,” says Professor Brierley.

“Overall, this funding will allow us to continue our research and international collaborations to find the causes of, and develop new effective therapies for, chronic visceral pain in conditions such as irritable bowel syndrome, inflammatory bowel disease, bladder pain syndrome and endometriosis.”

Capping off a solid year, ARC Discovery Project funding announced in December saw 10 Flinders projects awarded almost $5.5 million in grants, with five projects led by the College of Medicine and Public Health exploring a range of health and medical issues, from pain and memory, to how our body communicates, and ageing cells and cancer.

The College – which received nearly $40 million in total funding for 2021 – was also successful in the ARC Discovery Early Career Researcher Award (DECRA) round, with Dr Alyce Martin (BMedSc ’11, BSc(Hons) ’12, PhD(Med) ’18) receiving a fellowship to explore how gut bacteria and serotonin regulate metabolism.
Professor Stuart Brierley, Dr Alyce Martin (BMedSc ’11, BSc(Hons) ’12, PhD(Med) ’18) and Associate Professor Erin Symonds.

The federal government’s Medical Research Future Fund (MRFF) provided more than $12 million for research projects on liver and bowel cancer, with special COVID-19 grants awarded to explore antibiotics and ventilation, preventing the spread of COVID-19 in aged care, and 3D-printed face masks to reduce leaks.

Associate Professor Erin Symonds, from the Flinders Health and Medical Research Institute, was successfully awarded two funding grants in 2021 – from MRFF and an NHMRC Ideas Grant – for research into gastrointestinal cancers.

“These grants will allow us to investigate new non-invasive ways, such as blood tests, to find people who are at risk for colorectal lesions, including adenomas or cancers,” says Associate Professor Symonds. “We will look at improving clinical care in patients who are at risk for bowel cancer, and in those undergoing treatment for either bowel cancer, oesophageal or gastric cancer.”

New Health and Medical Research Building to open 2024

Flinders University is investing in a world-class Health and Medical Research Building (HMRB). Located just 50 metres from Flinders Medical Centre, the HMRB will energise southern Adelaide, unlocking significant research and catalysing economic growth. The $255 million project will accommodate staff from Flinders’ Colleges of Medicine and Public Health, and Nursing and Health Sciences.

Vice-Chancellor and President Colin Stirling says that through the delivery of world-class research, HMRB will support improved health and wellbeing outcomes throughout the community, with a focus on Aboriginal and Torres Strait Islander Australians.

“Flinders has an impressive history as a pioneer in integrated health – ours is the first medical school in the nation to be integrated into a public hospital,” says Professor Stirling.

“We’re at the core of a health and education precinct that includes the state’s busiest hospital, educates the majority of the state’s medical workforce and contributes a substantial proportion of the state’s biomedical research.”

Medical Research re-imagined

The new Health and Medical Research Building has been designed to house a state-of-the-art medical imaging suite that includes a 7T MRI – the only one in the country to have clinical capacity.

The 7T MRI provides unparalleled resolution of brain, spinal cord, muscles, tendons, and other tissues, which could provide improved surgical outcomes for brain surgery for epilepsy and Parkinson’s disease.

The technology will enable better understanding of the structural basis for neurological diseases such as Alzheimer’s, dementia and multiple sclerosis. Clinicians will be able to detect very small changes in brain blood flow, which would allow more accurate functional maps to avoid injuring critical brain areas during tumour removal or seizure surgery.

Learn more flinders.edu.au/hmrb
The Northern Territory Clinical School began in 1997 as a program designed to educate medical students in the Northern Territory with experiences aimed at graduating a workforce fit for practice in the context of remote and Indigenous communities.

The Northern Territory Medical Program (NTMP) – taught entirely in the NT – was established 14 years later in 2011 in collaboration with Charles Darwin University and funded by the Northern Territory Government and the Australian Government under the Rural Health Multidisciplinary Training program.

Clinicians in NT general practices, hospitals and community clinics continue to facilitate education and mentor students locally, delivering graduates into the Territory workforce.

Dean of Rural and Remote Health for Flinders College of Medicine and Public Health, Professor Robyn Aitken says the NT Clinical School was an integral part of the journey to the NT Medical Program.

“Training locally in our clinical settings has had a positive impact on boosting the Territory medical workforce for 25 years,” she says.

The NT Clinical School was established to provide a regional clinical training pathway for students to complete the final two years of their four-year medical degree in the NT.

Extending this to the full four years of the Doctor of Medicine for local students and Aboriginal and Torres Strait Islander students has been essential to build an ongoing NT educated local medical workforce.

NTMP director Professor Emma Kennedy says the NT Clinical School built on the expertise and depth of skills needed to teach within the clinical context in the NT.

“The NT Clinical School began a new chapter in longitudinal clinical placements in medicine within the Territory,” Professor Kennedy says.

“This cleared the way for local program development and strengthening supervision.”

Flinders University will celebrate the milestone achievement of the NT Clinical School in 2022.
Role models in the community - Flinders NT Health Scholarship

The inaugural Flinders NT Health Scholarships are creating opportunities for Flinders University health students in the NT who want to achieve more for their local communities.

As a proud Gurindji and Noongar woman and a mother of four, Ebony Hill is determined to be a leading example of what you can achieve in life despite the hardships you may face.

Currently a full time second year student in Flinders University’s Northern Territory Paramedic Science degree, Ebony received a Flinders NT Health Scholarship that will support her on her way to becoming a paramedic.

“I want to be a role model to my own children and all other Indigenous youth in my community,” says Ebony who has a passion for her mob, and for being part of closing the gap that exists within health care, education and employment.

The Flinders NT Health Scholarship was established to reduce inequity for students studying health degrees at Flinders campuses in the Northern Territory. The support aims to reduce financial pressures, allowing them to achieve their studies to the best of their abilities.

Demonstrating a commitment to the University’s Reconciliation Action Plan, one scholarship per year is awarded to an Aboriginal or Torres Strait Islander student. This year, a Flinders NT Health Scholarship was also awarded to first year medical student Jason Wilmot who has spent the past ten years working in preventative health services within the Alice Springs region.

“I have worked extensively with the community in an effort to increase health prevention strategies through nutrition and exercise training programs,” says Jason, who is now looking forward to graduating and improving the health of his local community.

“I’m now ready to complete my Doctor of Medicine degree and enter the world of acute care - the next step in a career that will be aimed at helping health care in the Northern Territory, especially its remote communities.”

Donate today to support health students in the NT
flinders.edu.au/nthealthscholarship

NT Clinical School graduate comes full circle

Dr Paul Secombe (BMBS(GradEntry) ’06) is one of more than 375 Flinders University medical graduates who attended the University’s NT Clinical School or graduated from the NT Medical Program. He has devoted his career to rural and remote medicine, clinical education, and research.

Dr Secombe began his career as an audiologist working in Darwin before moving to Adelaide in 2003 to enter the Flinders graduate entry medical program. He was able to return to Darwin in 2005 to complete the last two years at the NT Clinical School. He spent time at several remote locations, including Alice Springs and Jabiru, where he also undertakes teaching and research with Flinders University.

Dr Secombe is undertaking his PhD in critical care outcomes of Aboriginal and Torres Strait Islanders in ICU at the School of Public Health and Preventive Medicine at Monash University.

"My time at the Flinders University NT Clinical School highlighted the importance of teamwork in the delivery of health care and the value of consultant-led teaching in medical education."

He is a Specialist Clinician, a Fellow of and a Supervisor of Training with the College of Intensive Care Medicine, and clinical lead for the Australian and New Zealand Intensive Care Society’s Centre for Outcome and Resource Evaluation Adult Patient Database, where he is involved in quality assurance, benchmarking and research.

“I remain inspired by many of the consultants who were involved in medical education through the NT Clinical School,” says Dr Secombe.

EBONY HILL                                       JASON WILMOT
Providing the vital boost for us to fight COVID-19

By David Sly

As the spread of COVID-19 fuelled apprehension and uncertainty through our community, immunisation expert Associate Professor Nigel Crawford – who completed his medical undergraduate studies at Flinders University in 1996 – brought much-needed clarity to public understanding and acceptance of vaccination.

Associate Professor Crawford was well placed to provide both medical and policy insights. He is the Director of Melbourne Vaccine Education Centre (MVEC) and Surveillance of Adverse Events Following Vaccination in the Community (SAEFVIC), based at the Murdoch Children’s Research Institute in Melbourne. SAEFVIC is a Victorian vaccine safety service and immunisation research group.

When the pandemic took hold in 2020, Associate Professor Crawford was seconded from the Royal Children’s Hospital in Melbourne, where he works as a general paediatrician, to the Victorian Department of Health, to focus on vaccine safety and policy as Australia prepared for the COVID-19 vaccine rollout.

His work helped steer Australia’s successful uptake of COVID-19 vaccines, and especially to help prepare correct vaccine doses for children. “They are not just small adults, they respond to the disease and the vaccines differently,” he explains. “We had to understand why it appears that children seem to be less severely affected by COVID-19 and understand the dynamic of how it gets transmitted within families. Our research into all this is ongoing.”

As current chair of the Australian Technical Advisory Group for Immunisation (ATAGI), the peak vaccine advisory body for the Department of Health in Canberra, Associate Professor Crawford also provides vital expertise in vaccinating special risk groups (such as immunosuppressed patients) and the clinical evaluation of adverse events following immunisation.

“Heat in the success of Australia’s vaccine uptake,” says Associate Professor Crawford. “Just when we think we know where things are heading, the virus keeps shifting. We can never feel truly settled – and the arrival of the Omicron variant showed us this – but we have been able to react and adapt with our vaccine advice.”

He believes successful public discussion about effective immunisation has come through the clarity of communication from health officials to both patients and the general public. Associate Professor Crawford says ATAGI and health authorities were able to combat misinformation being spread through social media channels by using scientific data that shows the mechanism of how the immunisation process works, and scientific literature regarding vaccine safety.

“We understand that the pandemic has been very stressful for the whole population, but we’ve had to encourage people to ask more questions of their doctors and health professionals, rather than proceed down the rabbit hole to follow claims about vaccines being made on some websites. This meant that we had to discuss the safety signals, had open discussions about the occurrence of adverse effects, and provided the necessary help and support for anyone who had such reactions. We need to keep reminding the public that the response to these safety concerns has been proactive.”
Fundamental to the effectiveness of vaccine education has been to clearly state the primary aim of COVID-19 immunisation, which is to provide adequate protection against severe disease, preventing people from being hospitalised and ending up in intensive care units or dying.

Whilst his secondment at the Victorian Department of Health has come to an end, Associate Professor Crawford returned in February 2022 to clinical work at the Royal Children’s Hospital and SAEFVIC.

He remains committed to promoting immunisation and hopes that the population doesn’t succumb to vaccine fatigue. “We can have COVID-19 and flu vaccines together, so therefore continued protection through a robust ongoing immunisation program and booster shots (when recommended) is vital.”

He believes that sustained vaccination awareness is a critical part of paediatric medicine – with more than 95% of Australian children receiving immunisation before their first birthday – and reminds us that without vaccines we would still see widespread outbreaks of such diseases as measles and whooping cough. “I’m keen that we can normalise an ongoing vaccine schedule. We don’t want the current lessons learnt during the pandemic about the value of vaccination vigilance to be lost.”
The outstanding achievements of fourteen Flinders University graduates were celebrated in the 2021 Flinders University Alumni Awards. Among them, two women who have made significant contributions to medicine and medical research.

Making landmark achievements for women’s health

Understanding the traumas attached to high-risk pregnancy has been central to the work of Professor Rosalie Grivell (BMBS ’98), who has spent decades researching and working in maternal fetal medicine. Her distinguished contribution to medicine, both as an educator and researcher in women’s health, earned her a 2021 Flinders University Distinguished Alumni Award.

The clinical data Professor Grivell has produced and examined since graduating from a medical degree at Flinders University has been vital in improving health outcomes for women. Her clinical and scientific expertise has also been highly influential in reforming abortion legislation in South Australia.

Presenting evidence-based clarity to the inflamed abortion debate was a test of mettle for Professor Grivell but, as an expert in her field of medicine, she was willing to stand up for her patients and their right to better care, and advocate for the decriminalisation of abortion.

Without the input of medical evidence and data presented by Professor Grivell and an expert multidisciplinary team, she doubts that the Termination of Pregnancy Bill 2020 would have passed through South Australia’s Parliament.

“It was crucial that everyone examining this issue understood the emotional toll on women and their families through high-risk pregnancies and their often tragic outcomes,” she says. “It is an area I feel very passionately about, and I consider it a great privilege to have been able to present on behalf of all who have been impacted and might be in the future.”

This landmark achievement represents only a fraction of her work. Professor Grivell is a Matthew Flinders Fellow in Maternal Fetal Medicine at Flinders University and works as a consultant obstetrician and Maternal Fetal Medicine subspecialist at Flinders Medical Centre.

Since March 2020 she has also been Director of the Flinders Medical Program, inspiring innovative teaching to enhance student experiences in medical education – a role that has proved especially challenging through the COVID-19 era.

Professor Grivell won the Australian Medical Association (SA) 2021 Award for Outstanding Contribution to Medicine, with reference to her influential advocacy that led to the overhaul of the State’s abortion laws.

“I am proud to have been able to advocate for such positive changes for women, our students, and the community more broadly.”
A global influencer on the gut

The innovative gut serotonin research of Dr Alyce Martin (BMedSc ’11, BSc(Hons) ’12, PhD(Med) ’18) sits at the forefront of global influence in the fast-expanding field of understanding our gut – which could provide the key to a myriad of health dilemmas.

Her significant contribution in the field of gastrointestinal physiology and to her professional community were recognised with a 2021 Early Career Alumni Award.

Studying the role of serotonin-producing cells as sensory cells in the gut, Dr Martin completed her PhD in December 2018 at Flinders University. Now working in Flinders University’s College of Medicine and Public Health and Flinders Health and Medical Research Institute (FHMRI), Dr Martin has authored 24 publications on gut hormones and serotonin that have garnered more than 745 citations. She is ranked the second leading expert in the world among published authors on Enterochromaffin Cell biology.

“The cells in our gut that make serotonin are such a vital cell type that we still know so little about, yet gut serotonin does so many things within our body, such as maintaining a healthy gut and driving our metabolism,” says Dr Martin.

“It’s why I’ve found gut physiology and gut hormone production so fascinating, because the gut is such an essential organ and its proper function is crucial in our lives, yet we still don’t fully know how it works.

“This area of medical research is so fast-paced that we must be connected globally and respond swiftly to developments – and it’s a thrill that our team at Flinders University rides right at the forefront of international gut research.”

Dr Martin is excited that the global reach of her research is leading to further international collaborations with leading researchers – and she realises that such success is rare for a young researcher. It has prompted her to play a leadership role in helping to guide other young researchers.

During 2021, Dr Martin helped create the Early and Mid-Career Academic Community of Practice (EMCA CoP) at Flinders, a support organisation to help researchers grasp opportunities through providing a critical bridge between the University’s leadership teams.

To help these emerging scientists pursue their own independent research, Dr Martin has developed a funding scheme in partnership with the Flinders Foundation, helping to raise donations through multiple fundraisers.

“It’s never been a more difficult time for researchers to obtain funding and enjoy ongoing security for their work, so being able to help create this strong community support is one of my achievements that I’m most proud of.”

Read more about the awards: flinders.edu.au/alumni-awards
Being open to push boundaries, rethink traditional curriculum design, and consider different ways to achieve learning and improve student experience and academic results are central to the education philosophy of Dr Voula Gaganis (PhD(Med) ’05), Course Coordinator of Medical Science and Senior Lecturer in Human Physiology.

It forms part of the process behind her curriculum assessment and design, working in collaboration with students and colleagues to achieve relevant and effective change.

"Working with students as partners is critical to the success of where we are going with any changes," Dr Gaganis says.

"Students are our first point of contact to identifying what’s working well or needs improvement."

Dr Gaganis and College of Medicine and Public Health colleague Associate Professor Christine Barry have been recognised for their significant contributions to the quality of student learning, receiving citations in Universities Australia’s annual Australian Awards for University Teaching.

The national citations are awarded each year to individuals or teams whose contribution to their chosen field has had a significant impact on the quality of student learning. This year, 78 citations were awarded to recipients at universities across the nation.

For Associate Professor Barry, who teaches anatomy and histology, the award highlights the impact that educators can have on students' experience and learning.

"My teaching in anatomy is strongly influenced by knowing my students rely on this knowledge for safe and competent clinical practice in medicine and allied health," she says.

"Many high-performing students find anatomy challenging, so I aim to help them develop different strategies for the different types of learning that anatomy demands.

"This includes team-based tasks that develop written and verbal language skills, so students gain confidence using anatomical terminology, as well as hands-on, three-dimensional tasks in which students physically interact with material, such as manipulating anatomical specimens or plasticine sculpture to develop visuospatial understanding."

"The professional world that our students graduate into is constantly changing. New understandings of disease, new medical and surgical techniques, and imaging advances all influence how we understand the human body.

"New educational tools also present us with more options for how we can help students gain the knowledge and skills they need to serve their community as graduates."

Transforming traditional pedagogy to active learning by using an innovative technology-supported approach across large medical science classes has been a focus for Dr Gaganis, with improving student engagement, experience, and academic success the result.

"Medical science has never been more visible in our local and global community than now," Dr Gaganis says.

"The creation of new or increased job markets due to the pandemic were key drivers for change and the expansion of Flinders’ offerings in medical science."

"Laboratory Medicine is a key addition to the medical science family, and future growth is in fostering the needs of students with clearly defined study pathways mapped to employment opportunities. The course changes were made possible with the support and collaboration of colleagues in our medical science team and our strong relationship with industry partners.

"I see the Flinders medical science graduate of the future as a knowledgeable critical thinker in the medical science disciplines, who is also future-focused, socially accountable and enterprising."
Dr Gaganis, a Flinders graduate herself, is highly regarded amongst the student cohort and well known for her personal approach in building rapport through open and clear communication, removing the “unapproachable academic” stereotype.

It’s an approach that draws on her years of experience from both student and educator perspectives.

“As an educator, I too am always learning – I continue my education with postgraduate study in the Master of Education (Higher Education) here at Flinders. I am inspired by my own learning that ‘a single spark can start a fire’ – this is how I see the effect that I can have as an educator with my students. It excites me that I can be part of the process where a spark can ignite transformative change in a student’s learning journey.

“I have been fortunate to experience Flinders University across varied roles, initially in research as a PhD student in Clinical Pharmacology under the supervision of Professor Kathie Knights, a post-doctoral researcher in Clinical Pharmacology, followed by more than a decade teaching in the Doctor of Medicine program as a problem-based learning educator and lecturer in Medical Science.

“I am extremely grateful for the support of my family and take inspiration from my children Maria, Paul and Angela, who learn and achieve in different ways and challenge me to think of how I can differentiate my teaching approach to meet the needs of diverse cohorts.

“I am also inspired by the wisdom of my late father Michael Tsoutsikos. His words give me strength and courage to push boundaries to achieve new things.”

Associate Professor Barry also pays tribute to those around her who have been a part of her academic journey.

“I’m grateful to have been taught by many excellent university educators in my undergraduate and postgraduate degrees, to work with wonderful educators at Flinders University, and to have a very supportive Dean of Education, Professor Alison Jones.”

The award has given both educators the opportunity to participate in the National Teaching Award Mentor Scheme and has introduced them to inspiring teachers at other universities.
Epic study provides crucial women’s health insight

By David Sly

The fluctuating health priorities and concerns of Australian women throughout their lives is the subject of a landmark study completed by Flinders graduate Professor Cassandra Szoeke (BMBS Grad Entry ’90).

As principal investigator of the Women’s Healthy Ageing Project within the Faculty of Medicine, Dentistry and Health Sciences at The University of Melbourne, Professor Szoeke has driven the longest ongoing study of women’s health in Australia. She is also author of the book detailing the outcomes, called Secrets of Women’s Healthy Ageing – Living Better, Living Longer.

The women’s healthy ageing research engaged the same cohort of 400 Australian women through a 30-year duration (from 1990), making the results unique in a global context. They are now referenced as important evidence to recognise significant health differences between sexes.

Professor Szoeke says that her research career was shaped by formative experiences as a Flinders medical student.

“My experiences working in Alice Springs and Darwin really informed my break with tradition to specialise my research into a tiny, specific area. First Nations’ models of health are holistic and not just patient-centred, but community-centred,” she says.

“Our Healthy Ageing Program collects stories and shares them alongside evidence-based longitudinal analysis, including clinical, biomarker and imaging datasets to find the components of healthy ageing.

“We have looked at issues that the community raises as relevant – like grandparenting – and we have seen that these factors do indeed influence our health as we get older. Our work in grandparenting was so novel it was rapidly translated into news media, not just locally but in CBS and China Daily news.”

“Since the original publications, a host of people around the world are examining the impact of grandparenting on health. Ageing is complex and multimorbidity is a hallmark feature, with most Australians over 50 having two or more diseases,” she adds.

“We now have clear data that environment, lifestyle and social impacts are responsible for a lot of preventable disease. In fact, WHO published that 80% of the chronic diseases of ageing could be prevented by targeting these factors.”

“The Healthy Ageing Program forms only part of Professor Szoeke’s busy workload, which includes being a consultant physician, neurologist, lecturer and board director.

The international exposure gained through the longitudinal study has also drawn attention to Professor Szoeke’s other studies, including the global burden of dementia (especially pertaining to women), and studies showing that women are suffering more long-term side effects to COVID-19 than men. She says research remains an important companion to her continuing work as a clinical practitioner. “They work hand-in-hand, because the intention in all forms of medicine is to keep improving.”

“There are only so many hours in each day, so if you can reach a position where you can change systems that need improvement, you ultimately help bring positive change to the health of the entire population.”
For nearly 50 years Flinders University has benefitted from the co-location of its medical school with Flinders Medical Centre in the Southern Adelaide Local Health Network (SALHN). While the shape of this relationship has changed over time, the links between these institutions remain significant and strong.

Cardiologist Professor Philip Aylward AM (PhD(Med)’85), former Director of the Division of Medicine, Cardiac and Critical Care Services at SALHN, has been involved in the collaborative relationship since the early days.

“It’s understood by everyone at the hospital that there is great value in this symbiotic relationship, and we know through extensive US data that shows hospitals aligned to academic programs provide a better quality of service to patients. We are all very proud of that,” says Professor Aylward.

“At the start there were 20 physicians at Flinders Medical Centre — now there are 20 cardiologists alone. We initially had 30 students in each year; now there are 140 per year level, so there is obviously a lot more pressure on everyone’s time, and finding the necessary space to accommodate everything, but we have overcome difficulties.”

Associate Professor Savio (George) Barreto (PhD(Med)’10) has been teaching in the University’s medical program since 2008 and is now the Deputy Director. A consultant Hepato-Pancreato-Biliary Surgeon at Flinders Medical Centre and a researcher, he has contributed to the development and delivery of the department of surgery’s Structured Clinical Instruction Modules and also leads MD Advanced Studies, a compulsory research subject integrated across all four years of the program.

Associate Professor Barreto has observed that the clinician input into the program has grown over time, “however, the level of general engagement seems to have taken off exponentially over the last few months, driven by the Clinician Support Team under Denise Caretti and supported by the vision of the Acting Director of the Medical Program, Dr Michal Wozniak.”

“This active dialogue with clinicians has revealed their long-standing desire to continue to be actively involved in determining the content of what is being taught, and assessed, at the various levels of the University’s medical program,” Associate Professor Barreto says.

Associate Professor Barreto says that while co-location at Flinders Medical Centre has been vital in the training of Flinders medical students, “feedback and experiences shared by students working at GP clinics and Lyell McEwin has shown that co-location is just part of the story. Continuing engagement and mutual respect between the University and the clinical partners is key to fostering a healthy relationship that will benefit our students.”
Evolution of the paramedic workforce

By David Klar

Working on the frontline of the health system’s response to COVID-19 in often trying and demanding conditions has highlighted the ever-changing role of a paramedic. Flinders University graduates are among those leading the charge to change.

Flinders University’s Paramedic Science Course Coordinator Brad Mitchell says we are witnessing a transformation of the role of paramedics, who traditionally worked in state-based emergency ambulance services, responding to triple-0 calls to help the acutely ill or injured person.

“But things are shifting more to assisting those with a variety of complex health and social needs. Paramedics now frequently treat people in their own homes or refer them to alternate health services, rather than transporting to hospital.

“It’s about trying to get the right level of care and support to meet each individual’s needs,” Brad says.

Paramedicine became a regulated profession under National Law in December 2018, meaning specific qualifications must be held and standards met to be able to register as a paramedic, much like other health practitioners. This development opened the door further for changes in the profession.

The shift in treatment focus and delivery became even more important with the onset of COVID-19. People had to be directed to appropriate services, which often were not hospital emergency departments. Paramedics have also been instrumental in the healthcare system’s COVID response, providing vaccinations and PCR testing, while utilising new technologies like telehealth services to reduce presentations to hospital.

“It is now becoming more common to see paramedics working in GP clinics or urgent care centres, hospital emergency departments, and alongside other healthcare practitioners like community nurses and mental health teams,” Brad says.

“As a university, it is critical we are responsive to the needs of industry to make sure our graduates are not only ready for the transition to practice but will succeed and be resilient in a demanding profession.

“The Flinders Paramedicine program is one of the longest-running paramedicine degrees in Australia, with more than 1500 students graduating over the past 20 years.”

The success of the program in recent years has included an expansion north along the Australian Central Corridor, with the delivery of the program in the Northern Territory launched in 2021.

The Flinders University Bachelor of Paramedic Science boasts strong links to industry, working closely with SA Ambulance Service and St John Ambulance Northern Territory.

“The degree is taught mainly by practising paramedics and paramedic tutors, so everything stays relevant and up to date,” says Brad, who himself came to academia from SA Ambulance Service.
He says he was proud to be able to pass on knowledge and nurture the learning of his future colleagues, watching them develop over their time at university and on clinical placement.

"Due to the relationship between Flinders University and SA Ambulance Service, there are opportunities each year for paramedicine staff to join the University on a teaching secondment.

"I decided to do this in 2014 and have never left," Brad laughs. "I am now the Course Coordinator which sees me responsible for all things related to the degree and the student experience."

The popularity of the Flinders program may have seen the entry criteria for school leavers increase significantly, but there are a range of admission pathway options, including for Indigenous students and St John Ambulance NT volunteers.

"We also provide a seamless transition into the Flinders Medical Program and further research-based studies.

"Many of our graduates have now gone on to become intensive and extended care paramedics in Australia and overseas, senior managers in ambulance services and hospitals, hospital-based doctors, general practitioners, and researchers."
Research Education and Development
RED Hub

Ground-breaking and world-class research requires excellent researchers. RED Hub is a research education and development hub uniquely available to Flinders Health and Medical Research Institute researchers to cultivate their research excellence.

RED Hub is here to help grow your research skills and networks to maximise outcomes and real-world impact.

As an honours, masters or PhD student, we welcome you to join our community of trailblazing researchers at RED Hub.

There is always something happening at RED Hub, with training workshops, a mentorship program, networking and social events, professional and personal development opportunities.

Network among leading supervisors from our Flinders Health and Medical Research Institute (FHMRI), early, mid and senior-career academics, and professional research staff.

Access grants and professional development opportunities. Make a difference with research that matters.

RED Hub would like to hear from Flinders alumni keen to share their journey with HDR students.

Contact us:
cmph.research@flinders.edu.au

Explore research pathways:
Flinders.edu.au/hdr

Scan to learn more about RED Hub