

## Celebrating 25 Years

Impact and Partnership in the Northern Territory

Northern Territory Medical Program Flinders University We have the opportunity to recognise the importance of our foundations, but also to ask what more we can do.

> Flinders University's Gala Dinner celebrating 10 years of the Northern Territory Medical Program

### 25 years of impact & partnership

Flinders officially became a university of the Northern Territory in 1997 to recognise not just our capacity to effect change, but also a strong commitment to contribute.

The establishment of the NT Clinical School, a precursor of the Northern Territory Medical Program, formalised a closer relationship along the Australian Central Corridor, building on existing linkages in health and education between South Australia and the Northern Territory.

As we celebrate 25 years in the Northern Territory and 10 years of the Northern Territory Medical Program, we have the opportunity to recognise the importance of those foundations, but also to ask what more we can do.

This publication provides a window into the lives of a cross-section of alumni, partners, students and staff who contribute to Flinders University programs in the NT. Alone, we can do relatively little, but walking in partnership with Aboriginal and Torres Strait Islander people and partners across the Territory, we are committed to having an even stronger impact over the next 25 years.

We look forward to finding ways to work together in future.



## Holistic approach

#### We are pleased to see that Flinders University is committed to working with Aboriginal and Torres Strait Islander people to improve the health of all Territorians.

Flinders has been a leader in recognising the importance of holistic approaches to improving health, recognising the importance of traditional knowledge and culture as well as the social determinants of health, alongside medical workforce development.

Flinders has come a long way in the 25 years it has been working in the Territory and we are committed to go a whole lot further in the future.

The most important part of this process is partnership. The University will have a far greater impact by continuing its journey alongside Aboriginal people – this means enabling co-design of projects, listening and acting on the priorities and goals of communities, and enabling agency for Aboriginal and Torres Strait Islander people to make decisions for themselves in the health system.

With commitment and partnership, Flinders and Territorians can expect to make significant progress over the next 25 years.

#### **Professor Colin Stirling**

Vice Chancellor and President Flinders University



Photographer: Daniel Purvis



## For the greater good

#### It is a personal and professional highlight for me to be affiliated with the outstanding work and commitment of so many people who have developed and nurtured Flinders in the Northern Territory.

The University could not be more proud of the progress of the Northern Territory Medical Program, and grateful for the expert contributions from a host of clinicians and partners, particularly Charles Darwin University. More than 90% of students have been Territorians and 150 doctors have graduated – 10% of whom are Aboriginal and Torres Strait Islanders – making a significant contribution to improving the health of Territorians.

Across five sites in the Territory, our staff are providing high quality education and training for nurses, paramedics and doctors ready to work in the NT.

At a recent meeting with many of our Aboriginal and Torres Strait Islander students in Darwin, they all told me of their very concrete plans for delivering medical care in remote communities.

It wasn't aspirational, it was very real, and in the context of what must be challenging family circumstances, multiple children, others on the way, single parenthood, learning language, boarding school and numerous other hurdles, their achievements are all the more remarkable.

The success of our students and graduates is our collective success and is demonstrated by the marvellous diversity and commitment of our student cohort, reflecting the values, passion, diversity and excellence of their educators.

The Northern Territory Medical Program is delivering an impressive pipeline of Aboriginal and Torres Strait Islander graduates and growing cultural support and Indigenous student numbers will be a key focus in future.

Our research programs have also made significant, practical contributions to the Territory health system – including point-of-care testing in a range of remote locations and foundational work on evaluating the incidence of blindness.

Our firm aspiration is to continue to work with our partners, clinicians, local health networks and the communities to build on this success and work together for a strong future for healthcare in the NT. It's all part of our commitment to working for the greater good.

#### **Professor Jonathan Craig**

Vice President and Executive Dean Flinders University College of Medicine and Public Health



# Building a substant of the second sec

**Professor Robyn Aitken** Dean of Rural and Remote Health Flinders University

It's hot, sometimes feels a bit edgy and the only constant is change, as you try to help people with a kaleidoscope of health conditions, health needs and injuries, hundreds of kilometres from any other health professionals.

What makes someone keep working in critically important remote health centres dotted across Australia?

Professor Robyn Aitken has some ideas – and they're based on years of experience in health services leadership across the NT, as well as World Health Organisation projects in Southeast Asia.

Spoiler alert: a couple of decades of romantic dramas with medical staff in pristine uniforms and perfect hair tending for occasional patients in spectacular landscapes across the outback have popularised the idea, but not the reality of healthcare in remote areas of Australia. "It's a really exciting time to be collaborating with other universities, clinicians, patients, community groups and government to build a stronger, more sustainable NT health system," Robyn says.

"Most importantly, we are doing this with evidence, after years of working with medical, nursing and allied health staff across the NT.

"It's time to leave the drama on the small screen, and build better career pathways based on the needs of communities and realities of day-to-day health care in remote areas."

When Australia's health leaders and policy makers want to know more about how to create a sustainable health workforce for rural and remote areas, Robyn is one of the people that they call. The Dean of Rural and Remote Health has a CV littered with highlights, which with the benefit of hindsight each stand out as a perfect training ground for her current role, masterminding the future of training and development for the health workforce in the NT.

Growing up in Melbourne, and training as a nurse, Robyn quickly recognised her passion for education, training student nurses. She completed a Master of Education, determined to understand the best ways to develop curriculum for students and transitioned into academic roles, while also running practical programs – such as a three-year program in Java, upskilling Indonesian nurses in education and research through an in-country mentorship program.

After the 2002 Bali bombings saw other staff leave Indonesia, Robyn moved to Java for a year, visiting each of the nine health service teaching facilities participating in the World Bank Sister School program every three weeks to maintain continuity of training and development.

After stints in Darwin and Alice Springs, Robyn became the Chief Nursing and Midwifery Officer and then Executive Director Clinical Services, Education and Public Health head of public health in the NT.

It was while she was serving as the Chief Nursing and Midwifery Officer that Robyn received the news that remote area nurse Gayle Woodford was missing and then found murdered whilst working in the APY Lands in 2016, in a community close to South Australia's border with the NT.

"The network of people working in remote area clinics is so small, that I knew people would be worried, when this terrible story came through, so we immediately sat down and rang all the staff at all our remote clinics in the NT, checking if they were ok and making sure they felt safe and secure," Robyn says.

"In South Australia, Gayle's murder led to new legislation, called Gayle's Law, requiring health professionals to be accompanied on out of hours and unscheduled call-outs in designated remote areas of South Australia.

"In the Northern Territory, I had been working with the Chief Health Officer to review termination of pregnancy legislation which was taking many years to change, so this taught us that legislation takes too long to enact, so instead we responded through establishing new policy and procedures.

"Within weeks we had new policies in place that meant no person should attend a call out on their own. We made sure there were alarms, vehicle safety features and other measures to get protection in place very quickly for our staff – things which would have taken far longer if we had waited for legislation to be developed. Our initiatives also created employment as drivers for local Aboriginal people."

The success of her work in the NT meant that Robyn was commissioned to review the effectiveness of the South Australian legislation. Her report made a range of recommendations to Parliament to improve safety and protection for remote health workers. "It doesn't matter whether you are in South Australia, the NT or Western Australia, remote area health professionals need safety, support and upskilling if we are going to keep them as part of our workforce in remote areas," Robyn says.

"There is no one-size-fits-all solution to workforce shortages. We need policies and procedures that are much more nuanced, that recognise that challenges are different across the range of communities and the diversity of health care professionals.

"We also need to set up a process where jobs are set up with flexibility in mind. People who allocate health funding focus on doctor shortages, and often overlook that we have a large nursing workforce already in place, and an allied health workforce that could be mobilised and supported through better job design and training.

"We need locals who are familiar with the complexities of the NT, and also need to focus on the largely untapped pool of local Aboriginal people – who are already embedded in their communities and are better prepared both culturally and linguistically than non-Indigenous health workers will ever be.

"Health workers interested in working in remote areas need security to take on these fascinating, challenging and incredibly important remote area jobs and forge bonds with community, but also have enough leave and training time that they can get a break, look after their own mental health and also keep up to date with their knowledge and skills.

"At the moment jobs aren't designed this way, with a result that many gaps are created, covered with short term workers and people living in remote areas don't get continuity of care."

Robyn will work with partners across the Territory to grow the Northern Territory Medical Program, bringing more NT doctors into teaching the curriculum, and also enhance nursing and allied health training, to provide upskilling opportunities for existing staff and also recruit and train more health workers who are born in the NT.

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## Change the world

#### **Richard Fejo DUniv**

Chair, Darwin Waterfront Corporation Senior Larrakia Elder



#### Anger. Apathy. Pride.

Richard Fejo DUniv's story gives him every right to have been captured by one of these emotions, but none are dominant.

Instead, he has become a unique, humble leader whose care, culture and magnetic personality have had a profound impact on many.

As Chair of the Darwin Waterfront Corporation and a senior Larrakia Elder, the man known widely and fondly as 'Uncle Richie' has opened festivals, conferences, ceremonies, buildings and most famously, football games, in front of crowds of thousands. But the story he recounts most often is not about the legion of celebrities who have embraced him, or the crowds who have quietened to listen to his Welcomes to Country – but rather a quiet solo moment with a young teenager he met a decade ago, in the grip of poverty and addiction.

"I was a youth mentor and I saw a young girl chroming," Uncle Richie says.

"She lived in poverty. Her living conditions were shocking and I could see this family was trapped in a bubble of poverty and they might never get an opportunity to escape.

"I said to this girl, 'If you are chroming and one of your friends stops breathing, what would you do?'

"She looked at me and said, 'I don't know,' and you could tell she hadn't really thought about that before.

"I took her to a first aid course and I guess I didn't realise how much she enjoyed it.

"About 10 years later, I went to a conference. A young woman came to me and said, 'Do you know who I am?'

"I said, 'no'.

"She said, 'I am the girl who you took to the first aid course, who used to do chroming. Now I am a registered nurse'.

"She blew me out of my shoes. I would never have expected that. She loved first aid and that led to her deciding to become a nurse, helping our people.

"You can be the difference in one person's life and if you can help one person at a time, you never know how far a little act of kindness will go.

"Everyone is entitled to change the world – or at least have a go."

Uncle Richie was born into a famous family. His father, grandfather and many earlier generations of Fejos had been respected Larrakia Elders.

But despite his lineage, there was no special consideration for the infant.

"I was born with one arm. On the day that I was born, the doctors wanted to take me away from my family, because I had been born with one arm, so mum didn't let me out of her sight. They were going to put me in a home," Uncle Richie recounts.

There were rumours about experimental drugs being used on pregnant Aboriginal women at the time, nobody took time to diagnose exactly why Richie was born with just one arm.

"Being the baby of the family and the youngest of seven, I grew up in a very loving family," Uncle Richie says.

"Dad was a surveyor and we lived in Rapid Creek, a block away from the ocean. Mum used to work as a cleaner at Darwin Hospital and after a while, she was approached by Menzies to work with Aboriginal people on health programs, because they didn't know where to start."

At six-weeks-old, Richie became an uncle, when his sister had a son, James and the two have always been close. The extended family were musical and close and Richie grew up around a campfire in the backyard, with his uncles and aunties playing ukulele, the spoons and any other instrument that came to hand. The early exposure to performance rubbed off – with Uncle Richie developing a career as a stand-up comedian, sharing culture through comedy, in recent years.

"We had a very social, loving environment and that pierced deep into our hearts and souls, shaping who we wanted to be," he says.

"We also had a lot of obstacles. Going through uni and sometimes failing. Experiencing racism. At times I have had experiences where the racism was unexpected and I reflect on it and think maybe I just didn't fit into that picture, maybe I wasn't meant to be there.

"One time I took a car to a mechanic because a rock had hit the windscreen and while I was waiting, the mechanic called the cops on me, and they asked me to prove that it was my car and I hadn't stolen it – just because I was Aboriginal. I pulled out my licence and my registration and showed them, and then took the keys and just walked out of there.

"We all face those sorts of incidents pretty regularly and it has made me thick-skinned. If we go backwards and cower into a corner and accept everything that happens to us in life, then the world wouldn't change. The kids in our family were shaped from a young age into leaders, seeing how our fathers, mothers, uncles and aunties behaved."

When Uncle Richie turned eight, his mother bumped into one of her brothers at the Darwin Mall. She had been born in Tennant Creek, but was a member of the Stolen Generation, eventually arriving in Wollongong where she completed her schooling, separated from her family by half a continent.

Meeting a previously unknown uncle was bittersweet for Richie – embracing new chapters of the family was awesome, but the journey three days south to the small town of Elliott was a jolt.

"A lot of services that we have now didn't exist in the 70s and I encountered culture shock for the first time. People asleep with dogs and fleas – and you even had to shake your sandwich when you were eating it to get the flies off," Uncle Richie says.

"I asked Dad to take me home straight away, but of course we couldn't, so the immersion process started. I learned where the shops and the schools were, met more people.

"That trip caused a passion and a drive for most of us in the family to succeed, so we could be part of making change.

"My sister was driven to become a GP by that, and that experience really fuelled a fire in my belly. It fired us up to be instigators of change and solidified in our family right there.

"With Mum and her background in health, I wanted to be different. I started in law, in Aboriginal Legal Aid. My first job was to go down to the cells to talk to the prisoners without a lawyer, to get their story off them. When I got there, I realised this was seven guys with seven different languages and different cultural backgrounds and stories.

"I wasn't an interpreter, but I knew how to talk to countrymen. So I learned about law and power of arrest and people's rights. We are filling the prisons and the hospitals with people who often don't need to be there, because we are reactive and not proactive.

"Then I started working in health. I knew a fair bit about cultural exchanges and began training GPs in our culture and now working with medical students at Flinders and with Poche SA+NT as the Senior Elder on Campus.

"We are still the most disadvantaged people in Australia, and that's not acceptable, but it will take a massive effort of both Aboriginal and non-Aboriginal people to make change. That's why I became a cultural educator, equipping doctors and nurses with knowledge to go out into communities, so they understand what they can experience and immerse into our lifestyle and better understand the challenges we face.

"A lot of non-Aboriginal people say to me, 'We don't know where to start.' I tell them to go find out whose land they are on, talk to the traditional owners on the land you are standing on, go to a museum and find out more. Knowledge and understanding are essential if we are going to make changes in our health.

"Medicine is vital, but our health is about so much more than that. In addition to the social determinants of health, spirituality is really important to Aboriginal people.

"My journey now is about building the leaders of tomorrow. I want to pass on to people that if you are helping people who are more disadvantaged than you, you always get a reward for it. It may not be financial, but it's still a great reward and that's satisfying enough. You can't put a price on that.

"If you take a moment to learn about Aboriginal knowledge and culture, and you dig a bit deeper, you will find a whole different world will open up to you. Your mind is like a sponge so go live life and let it absorb the wonders, the cultures, the adventure, the beautiful moments and memories you will make. What are you waiting for?"

## Redefining leadership

#### Associate Professor Maree Meredith

Director, Poche SA+NT

#### It can feel lonely, being Maree Meredith.

After working across Australia, then spending seven years in remote communities developing her PhD, she has recently been appointed Associate Professor, having led the Poche SA+NT team within Flinders for three years .

Maree was the first person awarded a Poche scholarship to her PhD at Flinders University in 2018 and is living proof that it is possible to carve out a career pipeline – ascending to be Director of Poche SA+NT within a few years.

However, it is a slender pipeline, with no other Poche PhD scholarships awarded. Maree is passionate about growing opportunities for Aboriginal and Torres Strait Islander people to be health leaders in the academic world, but also in many other roles – recognising the importance of health leadership in a whole range of roles.

"I thought there would be more like me, getting PhD scholarships and researching in all sorts of areas related to health, but so far there isn't. It's just me," Maree says.

"I was able to succeed in some ways in spite of the academic system. The financial support of the scholarship from the Poche family was wonderful, but as I have reflected upon it, I have recognised that the support I had from people inside and outside the university was even more important, to help me complete that journey.

"I studied linkages between the arts and health, looking at the impacts of community arts centres in remote communities, which are often a hub of employment, social connection, information and support.

"Research we conducted as part of that project and since then have shown just how important it is to establish strong community connections and key roles in the health system which enable Aboriginal people to understand and feel safe and empowered to access care."

Maree is currently working with communities and health professionals across the NT to start conversations that seek to better define and understand what a health leader looks like.

As she works with Poche SA+NT to support and empower 500 health leaders over the next five years, she has realised from her own experience and research that a broad range of people are required to support, encourage and facilitate the journey of health leaders – and those people often seen as being enablers are in themselves fulfilling a key leadership role.

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"The people who have day-to-day liaison roles working with Aboriginal people are demonstrating true leadership, but their importance is rarely recognised."





"In terms of health leadership, we can see that facilitation roles like Aboriginal health practitioners and interpreters are often every bit as important or more important than roles of surgeons and medical specialists," Maree says.

"The people who have day-to-day liaison roles working with Aboriginal people – interpreters, Aboriginal health practitioners, and community liaison staff – are demonstrating true leadership, but their importance is rarely recognised.

"Each day, those facilitators in frontline roles are doing critical work, enabling Aboriginal people to understand proposed treatments, translating medical diagnoses and recommendations and ultimately allowing people who previously had no power to decide their own destiny in the health system to have agency and to accept or reject the treatment being offered.

"I have seen the difference great leadership can make. Football and basketball coaches create an opportunity where kids from disadvantaged backgrounds can leave their problems behind when they put on a uniform and start the game. On the field their story is different and their lives can change."

Redefining health leadership and recognising the significance of facilitators in Aboriginal and Torres Strait Islander health has strong parallels with Maree's professional journey – recognising the critical significance of many different people to achieve success.

"I took a route which enabled me to be recognised as a leader in the academic and policy arena, but I would never have achieved my PhD or moved along this pathway if I had not had the support of the people who worked with me on my research, and who supported me along the journey," Maree says.

"Financial support is really important, but the collaboration, facilitation, and social and emotional support of a host of other people has been critical in my journey. Recognising that has been really helpful in unpacking the next steps of where we need to go, so I am not the only one.

"Poche SA+NT is going to succeed by recognising the importance of these structures, and work with Aboriginal and Torres Strait Islander people in ways that they want to work.

"We aim to encourage a lot more Aboriginal and Torres Strait Islander students to undertake their PhD, but also recognise that we need to help engage a wide range of people across the community to make those pathways a success.

"At the same time, we want to also raise the recognition of health facilitators, so the value and significance of their role in the health system is acknowledged and valued.

"Leaders are art centre managers; tour guides; people running sporting programs; Aboriginal health practitioners; translators – and in lots of other roles that are critical to the health and wellbeing of individuals.

"We need to start by redefining an understanding of the range of people who are important in improving the health of Aboriginal and Torres Strait Islander people and then with recognition of the diversity of leadership, we can start to look at what tools we can create for people from all walks of life to help them keep improving their impact.

"Poche SA+NT is heading in a new direction. We are proudly Aboriginal-led, determined to partner with a wide range of groups and seeking to find and build on programs that are already working.

## NT experience reshapes medical training

#### **Associate Professor Emma Kennedy** Director, Flinders Northern Territory Medical Program (NTMP)

"Each day I go on a walk near my house in Darwin and I see people in a worse off situation than me, because of the socio-economic determinants of health," Associate Professor Emma Kennedy says.

"Of course, it is not my position to make a judgement. I might value my education and my family's experiences and opportunities highly – and I do – but that doesn't mean those things are of more value than the life of someone who has grown up and appreciated what the land means to them.

"I had a patient in a wheelchair who preferred to be living in the long-grass, outdoors near a beach. There were so many well-meaning people trying to move him into a house, but he really valued the lifestyle that he had."

As the Director of the Northern Territory Medical Program (NTMP), Emma is re-shaping educational experiences for medical students in the Northern Territory and is very conscious of the need to equip graduates with an understanding of Aboriginal and Torres Strait Islander people.

Emma graduated from Flinders with a BMBS in 1993. As a and leading medical academic based in Darwin, Emma is excited about the opportunity to build a workforce equipped to practice in the NT.

"Practicing medicine in the NT has given me an equally strong sense of what needs to happen and also the disparity between Indigenous and non-Indigenous health," she says.

"I get frustrated by the ignorance which means policies and decision making don't adequately provide for the populations that are in dire health need.

"Being a doctor enables me to evaluate why people are unhealthy.

"When the answer comes back disrespect, lack of dignity, lack of understanding about culture and health, I take all those examples and look at how we can address them in the curriculum.

"The medical profession has a lot of power in being able to define things and raise awareness of them, so in my position I need to be aware of how that power is managed. "Because there is such a health need and because the health need sits within a larger context, we need to address the ignorance about Aboriginal culture in order to make a significant impact on health.

"These changes are significant because our initiatives to focus on the individual more is significant for all Territorians, Aboriginal and non-Aboriginal, because with better understanding and communication we can get them the healthcare they need.

Emma grew up in Papua New Guinea and Darwin, watching the impact her father could have working as a GP, while also listening to her mother's passion for cultural respect, which eventually led to a PhD on the effect of cultural identity on the understanding of health.

As the daughter of two doctors, it was hardly a surprise that Emma pursued medicine at Flinders in Adelaide before finding her sense of belonging in Darwin. The opportunity to live around greater numbers of Aboriginal people and gain a deeper insight into culture and context made her a passionate advocate for furthering reconciliation in her work.

"Our society can't change if we are not aware of the problems and prepared to face up to them and own them," Emma says.

"Reconciliation is about working out where things have gone wrong and recognising that. There isn't a need to beat each other over the back, the biggest thing is to come together and move forward together.

"Through the NTMP I can influence a curriculum, set priorities and drive a focus on integrating how individual patients and people influence the learning of the doctor.

"I also am recognising the need to give more access to Aboriginal people in our program to translate real every day issues for students and to carry the humour and stories of the human condition into the program, so that it is real.

"I am just so grateful to have agency and opportunity to make a difference."

"Through the Flinders Northern Territory Medical Program I can influence a curriculum, set priorities and drive a focus on integrating how individual patients and people influence the learning of the doctor."

## Taking no chances

#### **Dr Kelum Priyadarshana** Clinical Dean Flinders Northern Territory

Medical Program (NTMP)

#### So many lives revolve around chance – chance encounters and sliding door moments where we could choose two utterly divergent paths.

But not the life of Dr Kelum Priyadarshana.

Born in Colombo, Sri Lanka, the almost always good son of school teachers, he felt a weight of unspoken familial expectation to turn his prodigious academic talents towards medicine.

"If you do well at school in Sri Lanka, there is an expectation that you will become a doctor, because it is such a highly regarded profession," Kelum says.

"My actual passion was engineering, but there was some expectation that I would pursue medicine if I could, so I was a good boy and I went along."

While he fell into medicine as a consequence of his intellect, he was hooked by the challenge and breadth of medicine almost immediately.

"I literally enjoyed every minute of my medical education. There was not a single day I felt tired or unhappy. Studying along similar-minded people, working hard together and then having a little bit of fun every now and then was good," Kelum says.

"I loved medical school and that is one of the reasons I wanted to keep teaching, to be a part of that environment."

After completing medical training, physician training and a specialisation in renal medicine in Sri Lanka, the world beckoned. Kelum had been awarded a scholarship to work in England at the end of his nephrology training in 2005, but had found both the weather and the work culture too frosty. Pointing his compass in the opposite direction, he took up a scholarship to come to Melbourne and was astonished by the difference.

"I went to Royal Melbourne Hospital and it was December, so the weather was hot and familiar and the people were very warm too. We were invited to the Professor's house straight away, on the first night we arrived, whereas when I was in London, no-one even wanted to talk to us at work," Dr Priyadarshana said.

"I thought, this is a significantly different country, and that's the day I thought I wanted to come to Australia."

He moved to Adelaide for a two-year fellowship, but obligation beckoned. To fulfill the requirements of his training, Dr Priyadarshana had to work for a time back in Sri Lanka, so he returned to the beautiful seaside city of Galle.

"I was the only nephrologist, serving a population of 3.5 million people and had to build a renal service from scratch," Dr Priyadarshana says.

"I applied a lot of knowledge that I had learned in Australia and set about getting the equipment, training nurses and doctors and establishing a renal service and its eight chair dialysis unit."

The work was extremely rewarding, but after getting the unit up and running, he was tired of spending five days a week away from his family and wanted to regain some life balance, so headed to Australia again in 2012: this time moving to Darwin via a short stint in Mt Gambier. While there wasn't an element of chance in the pathway leading Kelum to medicine, it is clear he has found his calling.

Working alongside his wife at Flinders, and recently appointed Clinical Dean, Kelum has become accustomed to wearing many hats, and thrives in the NT where there continues to be a need for innovative solutions delivered with often limited resources.

He is closely involved in service planning and policy development with the Northern Territory Government; serves as Clinical Lead in Renal Outreach and Telehealth Services with NT Renal Services and has designed and lead Territory-wide changes in health systems, particularly in ambulatory care and virtual care. He also maintains an active role in clinical research, in partnership with Charles Darwin University's Menzies School of Health Research.

"All this gives me a great sense of satisfaction as they come into fruition, but there is so much more to do," Kelum says.

While being pulled in many different directions, and with an apparently endless vista of health system challenges ahead, the hard-working young man from Colombo is now in a place where he can practice, stay involved in medical education through the Northern Territory Medical Program (NTMP) and still salvage a little work-life balance.

"There have been a couple of times we thought about moving to Adelaide and other cities, but we always come back and say that we have a better life in Darwin," Kelum says.

"I get to teach general medicine and renal medicine and am also heavily involved in planning curriculum and programs for the NTMP.

"Royal Darwin Hospital is a friendly place and has a focus on encouraging people. There is a better culture of listening to what clinicians have to say than in some other hospitals.

"On Saturday nights we book out some badminton courts and a group of about 20 of our friends from Royal Darwin Hospital play.

"On weekends I sometimes get to drive my daughters around for sport, watching them swim and play weekend games. They are good things for a dad to do."

> "I loved medical school and that is one of the reasons I wanted to keep teaching, to be part of that environment."

## Following the people path

#### **Dr Jean Pepperill**



#### Life was at a crossroads for Jean Pepperill.

A child of the desert, she was born in Alice Springs, but grew up in Brisbane, before the siren call of the red earth lured her back to the NT. She worked in the arts and the media and had just finished a stint in Brisbane completing a Bachelor of Science degree when she found herself back at her Dad's kitchen table in Alice Springs, contemplating what the future could hold.

"I had loved health, and was tempted to go down the medical research route after my science degree, but I felt like medicine was a better fit for me," Jean says.

"I had no idea where or how I was going to study medicine, the only thing I knew was I wanted to come home to the Territory.

"Just the day I got back my Dad had bought a copy of the Koori Mail and there was an ad with a picture of Belinda Washington (Flinders Northern Territory Medical Program graduate), and it said, 'Do you want to become a doctor in the Territory?'.

"I called up straight away and it happened to be a week before applications closed and then within a few months, I was in Darwin, studying in the Northern Territory Medical Program with Flinders."

Jean had been tempted to be a nurse, and also to work in pathology, but after a volunteer placement doing lung function testing on patients in Brisbane, she found she was most interested in why people were sent to do a lung function test.

"We had a lot of Aboriginal patients sent for lung function testing and most of the time they had no idea why there were being tested," Jean says.

"I wanted to understand the results and also the reason for the test – but I also could see the communication problems first hand and the opportunity to improve the information provided to patients.

"I love to understand how disease processes work and apply that through my work. I also am definitely a people person. It's one of the favourite parts of my job, meeting people every day and hearing their stories.

"On the flip side, one of the hardest parts of the job is that you can't spend as much time with some patients as you would like to. It's not an issue specific to Alice Springs, it's how hospitals are set up. "There are things that you don't get time to address and you don't focus on holistic care as much as you would like to – that's one of the biggest things I struggle with.

"It is also a big jump to move from being a medical student to an intern. Sometimes it's full on. To go from being a medical student where you have a lot more time, to a job where you have to be completely switched on all the time is sometimes draining and it can take a while to adapt."

Jean graduated from the Flinders NT Medical Program with her MD in 2020 and is and is now working as an intern in Alice Springs. She is doing rotations through general medicine, general surgery and the emergency department before heading to Tennant Creek five hours north of Alice Springs, to work with GPs there.

"I'm really looking forward to Tennant Creek. My Dad's family come from Barrow Creek and I have spent so long being away from family that I wanted to reconnect – also it's just beautiful out there," Jean says.

With a fresh perspective on the health system and the challenges of best serving Aboriginal patients from many different areas, Jean has noticed several opportunities to improve the patient and practitioner experience.

"Alice Springs does some things a lot better than other places. There are interpreters and Aboriginal Liaison Officers to translate information to patients, because English is a second or third language for a lot of people. But there is a lot further we could go – there is nothing written in the hospital in other languages, no consent forms, signs or writing on the wall that is in any language other than English, and I would love to see more information provided in language for patients, particularly consent forms and critical information for patients," she says.

"Alice Springs is one of those places people like to come to, and they have a good time when they are here and do what they can, but mostly they end up leaving and it's hard to build up a permanent dedicated workforce.

"If there are more opportunities to complete your specialisation in Alice Springs, it will really help to encourage a more permanent medical workforce."

"I had no idea where or how I was going to study medicine, the only thing I knew was I wanted to come home to the Territory."

## Head for home

#### **Associate Professor Sue Lenthall**

#### Some people are inextricably linked to the place they were born. Others only find their country later in life – sometimes by chance.

Born in Queensland, Associate Professor Sue Lenthall took a few decades to find her true home, in parts of the Northern Territory that were big enough for her heart and sense of adventure. She has played a vital role in delivering – and training others to deliver – health care that is sensitive to the holistic needs and wishes of patients.

Thoughtful, practical and open, Sue grew up in Cairns and trained as a registered nurse at Cairns Base Hospital, now known as Cairns Hospital. She found herself working as a remote area nurse almost by accident.

"After I graduated I went around the world for a couple of years and when I got back to Cairns I was broke," Sue says.

"I registered as unemployed and then got a phone call about coming in to interview for a job out in the bush.

"Nursing-wise I wasn't that experienced, but they rang me on the morning of the interview to make sure I was coming and when I arrived, they said they were desperate for nurses and wanted to know when I could start.

"They said there was a plane going the next morning at 7am. I went out to the job, you used to dress up for planes then and I had a nice white dress with a pink bow on the side. I was 23. That's what I turned up wearing to my first Aboriginal community."

The dress may have clashed with expectations, but Sue's willingness to re-learn the way to care for Aboriginal people with lessons from local Elders made it clear she was cut out for the role.

"I loved the place," Sue says.

"I was taught by Elders about Aboriginal culture as I worked. It took me years I think to realise that I had had this cultural upbringing that had racist overtones - taught to perceive Aboriginal people as inferior.

"People were very sick, the death rate and infectious diseases rates were very high. We were losing kids from dehydration and malnutrition, and housing and the hospital were in a terrible state.

"I was in my first community for 18 months and there were lots of adventures – helicopter flights in bush helicopters with no doors and two seats, bringing patients in. Plane crashes, and all sorts of other challenges."

Sue received very little orientation or education on the advanced practice role as a remote area nurse.

"In my first five years in remote I received just one week of inservice, which was on pre and post HIV counselling," Sue says.

"It was probably because access to any sort of education was so limited, I developed a passion for the preparation and education of remote health professionals."

After training as a midwife, Sue worked in a range of other remote locations, before beginning university studies in her thirties and taking on new roles training doctors and nurses on how to work in remote areas.

In 1999, Sue became the first employee of the Flinders University Centre for Remote Health in Alice Springs. She moved to Katherine to become Director of the Flinders campus there in 2017. She has developed many documents used in curriculum to train Indigenous and Remote Health nurses and developed a program to prepare health professionals to practice in remote areas for Flinders from scratch, while also completing a PhD on ways to reduce occupational stress among nurses in remote areas, graduating in 2015.

"I have been fighting to get good people in the health workforce in the NT for years," Sue says.

"There used to be a joke that to get a nursing job out bush all you needed was a registration and a pulse and while we have significantly improved standards and training, there is still a shortage of people willing to stay in remote areas.

"Fly-in fly-out workforces can work, but have to be carefully managed. Many remote areas have had close encounters or have been targets of violence.

"I used to think I was pretty tough, but we have been fighting against that idea, that you have to be tough. Twenty years ago we realised that Post Traumatic Stress Disorder (PTSD) was a normal reaction to abnormal situations that you are thrust into in remote nursing – and we looked at ways to mitigate it and treat it.

"I used to think just ignoring traumatic incidents and moving on would make me tougher, but it doesn't – it sticks with you.

"I have spent the last two decades trying to improve the delivery of remote health services, working to support Aboriginal peoples and now I am at the stage where I am trying to mentor people to replace me.

"A lot of our staff are Aboriginal now, which makes a huge difference, as we have a lot of connections to Aboriginal community groups. We need to partner with Aboriginal organisations and provide opportunities to train Aboriginal people to work in health so that we can develop a more sustainable NT health system for the future."

"We need to partner with Aboriginal organisations and provide opportunities to train Aboriginal people to work in health so that we can develop a more sustainable NT health system for the future."

## Putting Australia on notice

**Dr Wendy Page** 2021 NT Australian of the Year

Decades after the guns fell silent and the beatings stopped, Australian veterans who survived jungle battles and the horrors of the Thai-Burma railway had to confront another lethal enemy – a 2.5mm worm.

*Strongyloides stercoralis*, a worm that can enter the body as a larvae and lives in the small intestine, was first documented in French soldiers returning from excursions into Indochina in the 19th century. However, it wasn't until World War II veterans started turning up with repeat cases of strongyloidiasis, the disease caused by the worm, 40 years later, that medical scientists recognised the full extent of the danger posed by the disease.

It had previously been assumed that the worm had died off after being treated, but in fact Strongyloides thrives inside the human body and can live undetected for decades due to its unique autoinfective lifecycle. When the host's immunity drops, or when given corticosteroids, the autoinfective larvae can increase exponentially, penetrating the intestine wall and migrating to other organs. The underlying cause of septicaemia, meningitis or multiple-end organ failure can go unrecognised.

Often described as one of the world's most neglected tropical diseases, strongyloidiasis has recently been estimated to infect 8.1% of the world's population – an astonishing 614 million people, most of whom live in the poorer countries of the world.

While previously considered rare in Australia, the 2021 NT Australian of the Year Dr Wendy Page and colleagues at Miwatj Aboriginal Health Corporation have found the disease affected up to 60% of people in some Aboriginal communities in East Arnhem Land and have spent decades developing programs to fight it.

Wendy has taught Flinders University students on rotation at Nhulunbuy, raising awareness of the disease and its relatively simple treatment with each student she meets. For her work in diagnosing, treating and raising awareness tirelessly about the disease, Wendy has received a slew of honours and recognition for her work and is recognised as a world expert on strongyloidiasis.

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Each time the spotlight beckons, Wendy shows not a glimmer of interest in any personal accolades, but deftly diverts the spotlight firmly back onto the worm, in her indefatigable quest to have strongyloidiasis declared a notifiable disease in Australia. If the disease is declared notifiable like COVID, hepatitis A and a range of other well-known health threats, then resources will be devoted to tracking, tracing and treating the disease when it is found.

"I think awards like the Australian of the Year give people the chance to take a cause further," Wendy says.

"I am just one of so many GPs who are passionate about their work and love what they do. We don't have time to go on social media and we are relatively private people who just want to get on with the work we are doing.

"There is a tremendous network of dedicated, highly skilled medical staff across the NT and we have made sure that tropical diseases are well documented – with staff volunteering to pool their knowledge and expertise voluntarily for the *Tropical Health Orientation Manual*, which is now used to provide information for doctors coming into northern Australia about diseases they are likely to find here.

"The Manual has been developed over 20 years, and started with the realisation that we needed to describe the conditions most common in the NT, because they were very different to the conditions that doctors coming in from city areas would have seen before.

"It has made sure that people know about how to identify, investigate, diagnose and treat diseases like strongyloidiasis,



"The Manual has been developed over 20 years and started with the realisation that we needed to describe the conditions most common in the NT, because they were very different to the conditions that city doctors had seen before."

which are found not only in a range of northern Australian communities, but also in migrants from many other countries."

Summing up years of concern about lack of awareness about strongyloidiasis, Wendy co-wrote a landmark article for GPs, *Chronic strongyloidiasis – don't look, and you won't find,* outlining their important role in early diagnosis, treatment and prevention of life-threatening complications.

The worm can remain undetected in the small intestine for decades, but when a patient has cancer treatment or other interventions that affect the body, its response is to multiply and spread rapidly through the body.

Wendy moved to Nhulunbuy with her husband in 1993, undertaking to stay five years – and has stayed for decades. One of the reasons was the satisfaction of working with Miwatj.

"When you look at most hospital environments, you see hierarchies as a triangle, with doctors at the apex, determining how things are managed and making the decision, but Aboriginal Community Controlled Health Organisations reverse that triangle, so the doctor is required to listen to patients and respect the community's priorities," Wendy says.

"We have lots of interaction with individuals and find out their relationship to their family, so often you might see three or four generations of a family in one day, which is really important if you want to treat something like strongyloides, as you have to trace contacts – just as we do now with COVID."

After seeing the impact of the worm on many communities in East Arnhem Land, Wendy was galvanised to become an outspoken advocate for Strongyloides recognition and treatment when a much-loved colleague died. "In 1999 our colleague, an Aboriginal Health Worker from Miwatj, a beautiful person and queen of her people needed to go to Adelaide for treatment and she passed away while she was there, from disseminated strongyloidiasis," Wendy says.

"It had a huge impact on so many people in the community and she was so missed, we decided that many others could die in similar circumstances, but we had the drugs to treat the disease, once it was diagnosed – this was an issue we could do something about.

"In 2000 we introduced Ivermectin, a relatively new drug which has a wonderful effect in controlling the *Strongyloides stercoralis*, and we found we were able to reduce the rate of infection from 60% to under 10% in some communities.

"Strongyloidiasis is one of the most neglected tropical diseases – affecting so many, and treatable, but traced and eliminated far too infrequently.

"It is high time it is recognised as a notifiable disease because it can affect not just people in the far north of Australia, but anyone who has been on holiday to a sub-tropical location, as well as many people who migrate to Australia."

Wendy and colleagues have now formed a group, Strongyloides Australia, to campaign for the disease to be recognised as notifiable.

In the meantime, she will continue to treat patients and welcome new Flinders students to Miwatj.

"It's great to see the students come through and I am sure to tell them about *Strongyloides stercoralis*," Wendy says.

"We need to be passing the baton on, with more people having the word (and not the worm) on the tip of their tongue. It's remarkably persistent, so we need to be as well!"

## A special place

#### Associate Professor Marco Briceno Chief Medical Officer NT Department of Health

#### If science and sport enjoyed the same public veneration, then Associate Professor Marco Briceno would be a household name and a regular on the All-Australian team.

He would have his own footy card, modified for science (making a glorious reach with his stethoscope) and he would be much easier to categorise. A sublime medical all-rounder, with grit to meet all diseases head-on.

All the other parts of his life would fall in behind the hero image of the cheerfully engaging doctor persevering late into the night in one of the most remote hospitals in Australia, in his adopted home of Nhulunbuy.

But Australia is not inclined to lionising its carers and Marco is not inclined to be anybody's poster boy – a true advocate for the value of the champion team, rather than the team of champions in the health sector.

Instead, for a peek into the life of a man who should be famous, one only needs to read his email signature – too long to fit onto any conventional business card.

Marco is Associate Professor at Flinders, Chief Medical Officer – NT Health, Director of Medical Services for the East Arnhem Regional Health Service, Medical Director of the NT Rural Generalist Pathway and the NT Pre-Vocational Medical Assurance Service and Senior Rural Generalist Surgeon at Gove District Hospital. But in a community-minded town like Nhulunbuy, he is also the dad of two children, the coach of 100 kids in the Nhulunbuy soccer team and the bloke who sometimes manages to fit in a few holes of golf at the local course.

The sum of these roles is a man who is energetic, enthusiastic – and perpetually busy. He fits in, in addition to the roles above, a day a month as a GP in Nhulunbuy and a day a week working in the emergency department, or doing rounds at Gove Hospital, and when possible, teaching students, doctors in training and colleagues.

But the man who loved to provide individual care is spending increasing amounts of time caring for many thousands of people from afar as his expertise leads him into meetings, presentations and events where people try to learn how to build successful rural and remote medical facilities.

The city boy from urban Venezuela found his calling during his first year out of medical school, spending six months serving Indigenous people in the Amazon jungle with rudimentary facilities and minimal supplies – falling in love with rural and remote medicine, and sparking a lifelong commitment to humanitarian work.

He spent another 10 years rapidly acquiring a broad range of medical skills in Venezuela, England, Wales, and he was moving to complete his advanced training as a surgeon after completing some of it in the UK.

Marco watched a number of friends head into humanitarian medical work, and he always felt a strong calling, but he thought that he needed to stick to a mainstream pathway, at least for a while.

"I had a job offer to move to London, before we move to Spain, but there was nothing exciting about that particular job. As a Venezuelan, there is nothing more exotic than Australia, so I went to an expo on working in Australia as a doctor to see where that would lead me," Marco says.

Job offers quickly flooded in from across Australia, but a couple of days later, the recruitment agency called to pitch a left-field idea. The tiny town of Nhulunbuy, 13-hours' drive east of Darwin, needed a doctor.

"After 10 years of a mainstream medical career, it reminded me of the time in the Amazon, which I thought I would never experience again. I thought, why not do something different for six months and then travel around Australia, before I took up my next appointment in Spain?" Marco says.

The turquoise waters, white sands and quirky former mining town were attractive as soon as Marco landed, but it was the medical culture and opportunity that has kept the Briceno-Rossis family in Nhulunbuy ever since.

"People say that to come here you may be mad, or a mercenary or misfit or a missionary – and I guess we all have a little bit of all of those here!" Marco says.

"Nhulunbuy is a very special place – it's as remote as it gets, but it's a beautiful town, with a golf course, BMX clubs, an Olympic-sized swimming pool and insane fishing. But more importantly, Nhulunbuy is an amazing community.

"Our kids were born here, and they have been able to grow up exposed to the world's oldest living culture, as well as the beautiful country and a great lifestyle".

"At the same time, the workforce tends to be transient here, but the people who come tend to have similar traits. They are adventurous, altruistic, interested in culture and social accountability – and open to friendships, so you have an interesting and enriching life.

"I believe in excellence in medicine and academia and also being involved in policy, so that you can make change, and I previously had thought that a mainstream medical "I realised when I got to Nhulunbuy that I could have a very rewarding and sustainable career helping people, getting remunerated well and build a very fruitful career in rural generalist medicine."

specialisation like surgery was the only way to have a voice, but I realised when I got to Nhulunbuy that I could have a very rewarding and sustainable career helping people, getting remunerated well and build a very fruitful career in rural generalist medicine.

"I stepped into a welcoming, progressive culture and since I came, the hospital has grown from 10 doctors to 25 and we have integrated a whole range of additional workers and services.

"We are oversubscribed for interns, residents and registrar positions and I never have to advertise them. People come to Nhulunbuy because they want to be here, and they are seeing that the rural generalist pathway can be satisfying and influential.

"One of the reasons for that is that we have tried to create a model, so that when people feel like they need to move away for family reasons or another job, we maintain an ongoing relationship with them on a fly-in fly-out basis, and they continue to help us mentor the next generation coming through the ranks, and so they continue to provide care for patients that they have been engaged with for many years."

"It is one of the most remote hospitals in Australia, but people keep coming back here because it's so fulfilling, exciting and diverse." Marco thrives on teaching third and fourth year students on rotation through Nhulunbuy and says Flinders, Medical Colleges, Regional Training Organisations, the NT and the Commonwealth Governments among others have all been critical to the success of East Arnhem and Gove Hospital, and to the elevation of rural generalist medical health as a sought-after career pathway.

"This place is extremely special to me and I will always be connected to Arnhem Land wherever I live, but as I take on more work that takes me away from here, we need to make sure there is strong succession planning and active steps to preserve the strong, excellence-focused culture that we have here," he says.

"Over my career, I have realised that to run a successful, sustainable health service, it is critical to invest in education and training.

"If you don't, then excellence suffers, vision and passion suffers, and succession planning also suffers – and also if you don't, then you may be in the position where many rural and remote hospitals find themselves, understaffed, closing down services and not attractive to doctors.

"Education and training is the lifeblood of the pipeline that will keep developing great health services here."

## No cape required

#### **Monica Barolits**

#### In Hollywood, superheroes face down apparently insurmountable odds using a combination of cunning, weapons and special powers to prevail over an enemy.

Monica Barolits would laugh long and hard at the suggestion she appear in a Marvel movie, but while the challenges in front of her might appear insurmountable to others, she needs no cape to get through the day.

Aboriginal and Torres Strait Islander people represent just 0.1% of medical personnel Australia-wide and as the previous CEO of the Australian Indigenous Doctors Association, groups across the country look to Monica for some answers on how to rapidly grow representation.

Despite the challenges, the stories of the 620 Indigenous doctors and 404 medical students she represents gives her energy each day.

"It's always exciting in this job – the only variation is the degree of excitement each day," Monica says.

"Almost every day I get to talk to our members and every single one of them has had an amazing journey – not just through medicine, but also through their life before medicine.

"The inspiration we get from our doctors and students is amazing, and just seeing the difference they can make every day to the lives of our people is awesome."

As a Kungarakan woman who grew up in the NT, Monica would always visit an Aboriginal Community health centre when she needed to see a doctor, but didn't appreciate the importance of the work that they did until later in life.

Demonstrating the importance contributions from a diversity of skillsets to build a better health system, Monica trained as an accountant, but has used her financial and organisational skills in roles across the health sector – first with the Commonwealth Government, then peak body AMSANT and then Darwin Aboriginal Health Service Danila Dilba.

"At Danila Dilba I got a firsthand look at the extraordinary impact that Aboriginal Community Controlled Health Organisations can have, but also the huge challenges in recruiting and keeping hold of doctors in the NT," Monica says.

"When I went to Flinders as NT Manager I saw I could make a real difference by supporting the Northern Territory Medical Program (NTMP) and ensuring Aboriginal and Torres Strait Islander doctors could come through the program. "The Flinders Northern Territory Medical Program only has a small cohort each year, but it's critically important to enable the NT to grow our own doctors and develop professionals who will stay in the Territory."

Monica spent six years with Flinders before moving to her current role, where she leads the peak organisation for Aboriginal and Torres Strait Islander doctors across Australia.

Her experience and new role means she is involved in a huge range of committees and also is playing a key role in developing strategies to grow the Australian Indigenous health workforce.

'We are focused on enabling Indigenous doctors to be able to help their communities, but also to grow recognition of the value of holistic and culturally-safe healthcare," she says.

"When a doctor is really focused on communicating effectively with the patient, taking a holistic look at their health and providing a culturally-safe environment, it helps not just Aboriginal and Torres Strait Islander Australians, it helps all Australians.

"Our goal for the NT is to work towards everyone in the Territory having access to culturally-safe healthcare. To do that we need to train more Indigenous doctors and also ensure we have more culturally-safe workplaces where they can work.

"It can be very hard to be the only Aboriginal doctor in a workplace – expected to be on the RAP committee and the community advisory committee and answer all sorts of questions about being Aboriginal, in addition to just getting on and doing the job that they are employed to do.

"This cultural loading is an extra challenge for Aboriginal and Torres Strait Islander doctors and so we need to work with doctors and employers to look at ways to prevent burnout. One of the ways workplaces can do that is to employ not just one, but multiple Aboriginal doctors, so a safe and inclusive culture can be created much more effectively."

In the meantime, Monica and her colleagues are aiming to recruit thousands more Indigenous people into the medical profession and will be working with universities and Indigenous doctors to achieve that goal.

The focus is no longer on the scale of the challenge ahead, but rather the excitement as Indigenous doctors and the wider Australian community take key steps forward along the way.

With the inspiration of each Indigenous doctor spurring her along, it is clear that no cape is required.

"We are focused on enabling Indigenous doctors to be able to help their communities, but also to grow recognition of the value of holistic and culturally-safe healthcare."

## Leading the world

#### **Associate Professor Sam Heard OAM**

Medical Director of the Central Australian Aboriginal Congress

#### In a parallel universe, Associate Professor Sam Heard OAM would be one of the Territory's most famous sons.

He invented the first shared electronic health records system to be used in Australia, is director of an international informatics company, chaired an international health record committee in the US, setting global standards for health records and is now Medical Director for Congress, leading 400 staff across 16 clinics. He could even be forgiven for growing up in the small town of Naracoorte, in South Australia, because he has been a loyal subject and resident of the Northern Territory since 1992.

But instead, in this Universe, this international leader in health records management and master of medical education has a relatively low profile, with no signs of coins being minted or stamps printed with his feats any time soon.

Which is just the way Sam likes it.

"I can hold my own in the big corporate world, but there is a scale I like to work with that is a bit smaller," Sam says.

"I have enjoyed being in the Territory massively. There are a lot of people who miss out on health care here and shared health records have made a massive difference to health care in this part of the world.

"Ever since I set up GP training in the Territory with the Royal Australian College of General Practitioners in the early 90s I have also enjoyed teaching."

After completing his intern year at Flinders in 1979, Sam rode a motorbike to London with his then girlfriend, to do his GP training there.

Gravitating towards helping people in the less-moneyed districts of inner London, Sam set up a teaching practice with London University in Shoreditch and suddenly realised the importance of health records.

"I wanted to do some research and find out how we were managing... but the records were a mess, with bad data entry.

"So in my spare time I wrote my first computer program for data records and made a lot of progress. A policeman told me the postcode and number of the street were unique to your house, so I set up the system to require the receptionist to choose from a list to create that code.

"A lot of people were quite poor and hadn't had much access to health, but when they came in, using this system, we got not only their history but also reminders for all the checks that were due in their household, so we could follow up.

"Two big incentives came in for practices that had more than 70% of women to have a pap smear and 95% of children to have their immunisations and using this system, our practice was the only one in inner London that achieved those targets – which meant big payments would come through."

As word spread about Sam's program, other clinics clamoured to get access to it, and soon he was awarded a then-record 5 million Euro grant to develop an online health records system.

Part-way through the project in 1992, the Heards decided that 12 years was long enough in England, and made the move to Darwin. He continued the project, but also created Australia's first electronic health records, the Green Kangaroo, and maintained links with other health informatics experts around the world. He has been teaching medical students with Flinders as one of his many jobs in the Territory for more than 20 years and has an undimmed enthusiasm for medicine, music and the NT.

Sam continues to sit on the Australian Digital Health Agency Board, is a Director of Ocean Informatics and is deeply involved in continuing to develop OpenEHR – the open-source health records platform that is the digital descendant of that code he wrote during his spare time in Shoreditch. The platform now underpins health records in multiple countries.

"We crowdsource the standards for the protection and privacy of records. If we want to have a debate on how to store certain data, sometimes 150 people from around the world will join the debate online and the specs that come out of that process are inside any bits of data you have within the system," Sam says.

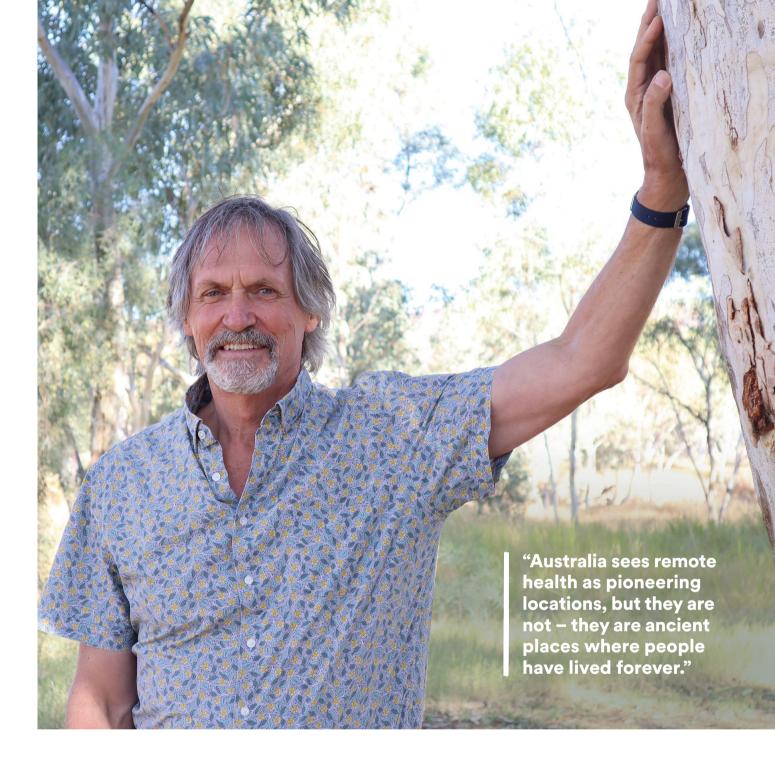
"I am probably a million in the red for my work on information systems. My old man put money in and I put money in along the way, so we could employ people to get it off the ground. It's a big investment but from the outset, the return we were looking for was not just about finance – there's a social return and also a satisfaction dividend that are quite significant."

Sam is working with the Anangu people to develop a medical service for local Aboriginal people around Uluru, as Congress looks to expand its reach to more communities in the NT.

To attract more people to rural work, Sam says it is essential to refocus on the opportunities that can arise.

"Australia sees remote health as pioneering locations, but they are not – they are ancient places where people have lived forever, so we need to flip the mindset and make people not think it's some sort of hardship," he said.

"You meet people from Melbourne who come here and they reckon they have 15 hours a week extra from not having to commute. Instead of standing back and having to watch, you have to make your own culture and entertainment and share that with other people.



"With the internet, you can be a real participant from a distance in almost anything over Zoom, but imagine what you can do with your extra time when you are living here.

"For me that interest is in music. We have a band, the Cheeky Docs and people have to have worked in the NT to get in the band. We perform around Australia but more frequently in the NT.

"I want to also set up a music academy at Yulara and we want to find more medical people interested in music.

"You have to make sure it's fun – you can improve your musical skills and earn money at the same time."

At an age when many people are planning cruises and golf, Sam seems to be just warming up, with a passion shared equally across being part of a rock band, a clinical lead and an informatics expert. The next chapters of his life are bound to be full, but he cheerily has charted the curve of his life terminating in the Territory.

"I am a bit of fun, but it's not easy being with me all the time. I am a Darwin fella. I have 12 grandchildren and they are mainly in the Top End. I am dying in Darwin, so I know the end point," he says.

"In the meantime, I am playing a lot of music and looking for philanthropy for my new projects, working with people just to see what we can do."

### Anatomy of Success

Associate Professor Buddhika Weerasundera

#### New approaches to make the study and dissection of cadavers more culturally safe for Aboriginal and Torres Strait Islander students have been developed in the Northern Territory Medical Program (NTMP).

While generations of medical students have struggled with the emotions of meeting and dissecting their first dead person as part of their studies of anatomy, Associate Professor Buddhika Weerasundera recognised that additional support was required for Aboriginal students dealing with the dead.

"I was so proud to have students from the very first cohort of the NTMP who were Aboriginal. I taught them anatomy, and they also taught me lots of things," Buddhika says.

"They described how it was very special to work with a dead body and also explained how it was a significant cultural challenge to take on cadaver teaching.

"I learned from them the importance of sensitising students to cadaver teaching and that is something now used by everybody here."

Warm, humble and enthusiastic, Buddhika had an appreciation for some of the challenges of being an outsider in the medical arena.

After training as a doctor in Colombo, Sri Lanka, she was only the third woman to study forensic pathology in Sri Lanka and absorbed the challenges of moving into a male-dominated world. Even her family struggled to understand why such a talented, vivacious person would devote her time to the morgue, even though TV crime shows were just starting to make the field more popular in some countries.

"When I told my father I was getting into forensic pathology, he said, 'I raised a daughter to look after the sick, not to be with the dead," Buddhika recalls.

"I went into that field because it was a time of war in Sri Lanka and there were so many events occurring in the world, I wanted to understand what was going on. I never had the intention of making it a career, but I saw it was a very multidisciplinary field and you become the voice of the dead.

"If you have good ethics, you will stand up for what is correct and testify in court as to what is wrong. Nobody can buy you. It is very important to be the voice of people who have passed away."

Buddhika embarked on an international career in forensic pathology, training in Australia and the UK before taking up roles across Southeast Asia and heading up the Department of Forensic Medicine and Toxicology at the University of Colombo in Sri Lanka.

After more than a decade of training and building up an extraordinary CV, Buddhika arrived in Darwin on sabbatical with her husband and with typical selflessness decided to stay, so that her husband could pursue his career and she might spend more time with her children.

Within months her career break had become a metamorphosis, as she was snapped up by Flinders to teach anatomy just as the Northern Territory Medical Program started in 2011. "I hadn't taught anatomy, and as a forensic pathologist I was mainly interested in the investigative aspect of it, but it was very interesting to refresh my undergraduate knowledge of anatomy," Buddhika says.

"In Sri Lanka I had 200 students per class, but here it was a small cohort, with just 24 students. I knew not just their names, but their family backgrounds and how they were doing each day, it was like one big family.

"The first cohort that graduated, I will always remember it, it was very special to me, it was like watching my own children graduate.

"That's the kind of passion that we all have for medical education here. There are a lot of things you have to do that are not included in the job description.

"Every morning when I get ready for work, my husband and children tell me that I am having too much fun and getting paid for it, it shouldn't be called work!

"I do miss forensic pathology, it is really interesting and I studied that field because it is multidisciplinary – and I think I would consider going back to that field on a voluntary basis after I retire, but in life you get taken in different directions, and I love the fact that we moved to Darwin.

"I had been to Australia before, for training in Melbourne but when we landed in Darwin it felt like going from Colombo to another area of Sri Lanka. There isn't much traffic, it is a very multicultural city and the people in Darwin are so warm – and so is the climate!

"Now when I go to the hospital, I walk down a corridor and will hear someone shouting, 'Hey Buddhika, what are you doing here?' It will be one of our students. They are busy working in their various disciplines but always find time for a greeting, recalling how I worked with them during their student days.

"I always encourage students to leave the NT if they want further experience and to specialise, but also to come back. We are proud that more than 50% of our graduates choose to stay in the NT after the return to service obligation and we can grow the number of health professionals here by recruiting the right people.

"I am so happy that I can be part of growing the health workforce in the NT, and to contribute even in the smallest possible way."

> "I was so proud to have students from the very first cohort of the NTMP who were Aboriginal. I taught them anatomy, and they also taught me lots of things."

## Building a health workforce

**Professor Bart Currie** 



#### The horizons of medical knowledge have exploded within a generation, and medical education has become more sophisticated, but pernicious health problems persist, particularly in rural and remote areas of Australia.

Professor Bart Currie's delight at Australia's evolving capacity to train medical researchers and practitioners is tempered with a certain weariness about the unbalanced distribution of the nation's medical researchers and resources.

As the guru of tropical and emerging infectious diseases in Darwin, Bart holds appointments across numerous universities, programs and institutions, but his passion is bringing collaborators together to deliver health reform – and in particular to attract a larger health workforce to the Territory.

"The breadth of medical expertise and resourcing have definitely improved, but huge medical challenges are still there, and there are outstanding opportunities for health workers to get involved in improving healthcare in the Territory, particularly in rural and remote areas," Bart says.

"Darwin has a great lifestyle and there are opportunities to work on diseases and challenges that you won't see anywhere else in Australia. We now have some world-class researchers in for example malaria, tuberculosis, kidney diseases and diabetes to learn from and work with here in the Territory.

"For medical colleagues with young families, there is no place in Australia more interesting, exciting and safe to work in and bring up your kids than Darwin."

Bart, who originally hails from Melbourne, and his wife, Dr Vicki Krause, from the US and the long term Director of the NT Centre for Disease Control, moved to Darwin in 1989 and have played key roles in growing health capabilities in the Territory – and are exemplars in growing the medical profession in the Top End.

Bart had worked in Papua New Guinea, India and Zimbabwe, before settling in Darwin and found the burden of disease, shortage of resources and scarcity of health personnel in the Territory eerily familiar - bearing many similarities to the health problems and systems of an underdeveloped nation.

Appointed by the University of Sydney to work with the Menzies School of Health Research alongside a clinical role at Royal Darwin Hospital, Bart was an advocate for medical training in the Territory from the start.

Initially, he supervised medical students on rotation from Sydney and other Universities, before the then Flinders Dean of Medicine, Professor Nick Saunders and Flinders Vice-Chancellor Ian Chubb proposed a clinical school based in the Northern Territory in the 90s. The Northern Territory Government liked the idea, and Bart worked with inaugural NT Clinical School Dean Professor Alan Walker and surgeon Professor Phil Carson, amongst other colleagues to support the NT-based program. The NT clinical program provided training for students who studied the first two years of their degree in Adelaide before completing their last two clinical years in the NT. He has since held positions with Flinders alongside his roles with Royal Darwin Hospital and what is now Charles Darwin University.

In 2011, the clinical school was replaced by the Northern Territory Medical Program – providing a full graduate medical degree program in the NT for the first time, with a goal of developing a home grown medical workforce.

While the attractive lifestyle of Darwin is immediately obvious to medical professionals, it is much harder to get staff to work in remote locations. This has been compounded by international travel restrictions in recent years – cutting off the supply of international medical professionals willing to work in remote locations.

"Workforce gaps are only being magnified by the pandemic. There is a disparity of workforce placement across Australia, with an oversupply of doctors in urban centres but not enough in rural and remote areas," Bart says.

"One really important thing that Flinders is doing is providing the infrastructure in Darwin, Alice Springs, Katherine and Gove for people across the health professions to come from around Australia to do their training. That is a really important step to start to plug gaps in all health professions and encourage people to spend time in regional and remote areas.

"Developing a strong First Nations workforce is vital and having a clear approach to growing our own health professionals in the NT is really important.

"I see a brighter future for rural and remote Australia, but people are going to have to still fight hard for funding beyond provision of basic needs.

"One of the impacts of COVID is a pivot away from urban elitism and people are moving out to rural areas, because they see the problems with bigger cities, but research funding has not changed yet, and is still concentrated in the Group of Eight universities in the capital cities. Those institutions have a footprint heavily concentrated on maybe only 5% of Australia's land mass, so pulling people together and working across disciplines and institutions outside that bubble is valuable when you can make it happen – but it's a challenge."

"For medical colleagues with young families, there is no place in Australia more interesting, exciting and safe to work in and bring up your kids than Darwin."

## Insights from a changemaker

#### **Dr Kerrie Jones** Clinical Director – Emergency, Katherine Hospital

#### You could peer into Dr Kerrie Jones' CV and see the achievements, the accolades, the conscious geographic reorientation, but it's like pointing a lamp at the night sky – the work doesn't tell you much.

Kerrie (BMBS '87, GradCertClinEd '16), the Clinical Director of of Katherine Hospital's emergency department is empowered by her achievements in medicine, but far from defined by them. With disarming honesty, she describes a rejection of injustice as a driving force behind her decision to study medicine.

"To be honest, the reason I got into medicine was that I was committed to women being represented in the workforce and having power, and I thought I wouldn't have power in a range of different roles, but I would if I studied medicine," Kerrie says.

"I did have a vague idea about wanting to help people, but I didn't know a lot about medicine really. There were no medical people in my family and when I grew up in the 60s and 70s, you didn't have a lot to do with doctors, but they had this status in the community."

After enrolling in medicine at Flinders, it was an elective in Alice Springs that changed her world.

"I spent four months on placements across the NT and that was the beginning of my long-term love affair with the Territory. It also sparked my passion for Aboriginal health" Kerrie says. "When I got to Alice Springs, I was honestly really shocked at what I saw – the discrimination and power imbalance both on the medical side and in what I was witnessing outside the medical environment.

"I felt this was a part of Australia I knew nothing about. The poverty, the way people were being treated really shocked me.

"I started to educate myself, reading some background books about colonisation and talking to people who were working in the area and began to understand the huge difference between the two cultures, as well as all those socio-economic determinants of health that needed to be challenged."

With two small daughters and a need to finish training, it took a few more years for Kerrie to move to the Territory, but before long she found herself in Darwin, becoming the first Territorian to qualify as an Emergency Specialist in the NT, the first woman to become Clinical Dean of the Northern Territory Medical Program and the first Clinical Director in Katherine Hospital's emergency department. She also managed to fit in a couple of years in Canada, working with First Nations doctors there and has earned the respect of thousands of patients, hundreds of colleagues and dozens of students, whom she mentors and teaches.

It's clearly a position of power, with the ability to drive detailed and large-scale change for the better in Indigenous health, but after decades in medicine, it is clear that Kerrie isn't motivated



by power, but rather a passion for improving the health of Territorians through ongoing pursuit of improvements to the quality of emergency care.

"You see a lot of open-hearted generosity and a willingness from Aboriginal people to keep working on health outcomes, despite the fact that colonisation of Australia caused a lot of these issues," Kerrie says.

"That's what's really humbling, and what motivates a lot of us working in Aboriginal health to keep working here.

"I'm not outspoken or unusual amongst people who work in Aboriginal health in identifying colonisation, racism and inadequate resources and support for Aboriginal people as primary causes of health issues.

"One of the strengths of Flinders is that when I went there 35 years ago to study medicine they really emphasised the social determinants of health and that is still a key part of Flinders' education now.

"That is certainly one of the strengths of the Northern Territory Medical Program – meeting people on their own terms, not trying to always impose our way of doing things. Just giving people antibiotics and sending them on their way doesn't help.

"We need a community-wide approach, and one of the great things over the past few decades is that Australians have recognised that, but I don't think we have been able to make enough change to impact upon health.

"Until we address the impacts of colonisation, the breakdown of Aboriginal society and culture, we are going to make some good changes, but some profound changes will still be unattainable.

"One of the good things we are doing is training more Aboriginal doctors through the NTMP. We clearly need more Aboriginal medical staff in the Territory, they are still very under-represented, so it is good to be a part of a program working to change that.

"The NT is an amazing place to live and work – it's both edgy and relaxing at the same time, and the opportunities are all there. It's very satisfying to be a part of building a stronger, more equitable health system here."

"One of the strengths of Flinders was that they really emphasised the social determinants of health and that is still a key part of Flinders' education now."



## **30 years of care**

#### **Dr David Brummit**

Thousands of people around Katherine may never have had the help they needed with their health and hundreds of medical students may have missed their entrée to outback medicine if Dr David Brummitt had not resisted the siren song of agriculture.

Growing up in the Adelaide Hills, David watched his father at work as a country GP, having a profound impact on the lives of people in their community and thought a career in medicine might bring similar rewards. But he also loved the idea of agriculture, and when school finished, the paddocks briefly won.

"I worked on a farm straight after leaving school, but fairly quickly realised I was better off pursuing medicine," David says.

"I realised it wasn't for me, because I'm not very good with engines."

Country life remained a top priority though and he became a Territorian immediately after graduating in 1985. He and wife Kathy have now called Katherine home for 30 years.

For more than 20 years, David and Kathy welcomed Flinders medical students not only into their practice, but often into their home, providing insights into the amazing breadth of challenges that a country GP is presented with. Well over a hundred doctors have been given insights into rural medical practice during their student years under the careful supervision of Dr Brummitt.

"I wanted to work as a doctor who did everything," David says.

"Katherine was a place with a couple of really good GPs who had been here for a really long time.

"The town was big enough to have a hospital where they did births and a bit of surgery, but small enough not to have specialists. That suited me.

"You still have general practice, but a wider scope of conditions that you look after, and in the early days there were a lot fewer specialists around, so you were forced to manage people a bit longer than you would if you were in a larger centre.

"I have always found practicing in Katherine to be enjoyable and have had access to the hospital, which made working life more interesting."

After decades of playing a critical role in medical education, David says he has tried a huge range of models to attract more young doctors to rural areas, but it remains a major challenge. "I would always prefer to live in a rural community rather than a city. People are probably a bit more friendly, I like the idea of being able to live near to work and not have to sit in traffic jams," David says.

"The advantage for students when they come to a smaller place is that they are more on the front line, they aren't in a big hospital watching, here they get hands on experience at helping out with a wide range of procedures straight away.

"Self-motivated students can learn a lot here, because you are so much more involved in patient care.

"We are now training a lot of doctors across Australia, but the challenge is attracting people to general practice, particularly in country areas.

"There is less money to be made in general practice in the NT than in hospitals, so GP clinics tend to be staffed by a fairly transient workforce – there isn't enough incentive for people to stick around.

"There are quite a lot of doctors who are interested in living here, if we can get the model right.

"We also need to change perceptions about general practice. Some people imagine it is boring and repetitive, but I have always found it to be enjoyable and the cases that you get in a place like Katherine are really diverse."

> "The advantage for students when they come to a smaller place is that they are more on the front line, they aren't in a big hospital watching, here they get hands on experience at helping out with a wide range of procedures straight away."

## Health justice

#### John Rawnsley

Co-chair, Poche SA+NT

Recently, a senior Aboriginal woman from a Northern Territory town was having ongoing issues with her health and kept returning to the health service to see a doctor. She had a medical device designed to assist with her breathing, yet she wasn't receiving the help that she needed.

After further discussions it became apparent the house she was in had a cockroach problem, and this also affected the medical device. This made her more unwell. When a lawyer started working with her, it turned out the unmet legal need that was the landlord's responsibility to address this problem directly impacted her health. The lawyer advocated on her behalf, and the problem was addressed.

Access to medical technology and expertise is vital for Aboriginal and Torres Strait Islander people, but is ultimately just one of many factors that determine an individual's health trajectory.

As a Senior Advisor for Minister Selena Uibo, John Rawnsley is positioned to be one of the legal minds at the forefront of a movement to strengthen the partnerships and collaborations of health justice – a key area of practice where unmet legal needs impact upon not only life and/or finances of people, but also their health.

Amongst six other key roles, this Larrakia and Anmatjerre man has signed up to be Poche SA+NT co-chair, helping the Aboriginal-led Flinders health centre find a path to improve Aboriginal and Torres Strait Islander health outcomes in the NT.

It's another big commitment for a busy man, but after decades working closely in the NT justice and policy setting most recently as the Manager of Law and Justice Projects at the North Australian Aboriginal Justice Agency (NAAJA), John has seen the huge impact that legal issues can have on the health of many Aboriginal people first-hand.

"Health justice is vital," John says.

"The health and justice systems are each really important to people in the NT and there are lots of opportunities for transformative change as we get a better understanding of the intersections between the two, and strengthen collaborations and partnerships based on the NT experience."

NAAJA has an established civil legal practice alongside its criminal practice and is trialling approaches to health justice collaborations and partnerships across the NT. The civil legal practice assists community members with matters such as child protection, motor vehicle accidents, employment, discrimination, tenancy issues and a host of other issues.

As an Aboriginal Community Controlled Organisation, NAAJA is trialling innovation in this space such as collaborating with

health services to combine health promotions and education with community legal education.

"A lot of people overwhelmed with a huge phone bill or not receiving the right support through housing don't even realise that there are laws in place that could assist them," John says.

"Because health centres interact with the community in a positive and trusted way, health professionals are in a strong position to identify unmet legal need and to refer people to legal services as part of an integrated approach to health care.

"There can be stigma or fear about visiting a legal service, so having lawyers and health professionals working together in one place means that you can deal with a whole range of issues that someone has all at once – and start to address the factors that are really holding back their health.

"Good health for some people starts with addressing the stress of a massive bill where a person has been taken advantage of, or an accident that has left a parent unable to work and therefore support their family. Lawyers can help people resolve those situations depending on the individual circumstances.

"Health justice has the potential to improving the lives and health of many people across the Territory."

John spent his early years in the desert, near Uluru, moving north to Kakadu National Park where at a young age his father passed away and the family moved to Darwin soon after. As he neared the end of high school, John was drawn to law through a commitment to social justice.

"There is so much complexity in the NT, even for someone who has grown up here. Understanding the stories about our history in the decades before we were born and family stories about injustice and discrimination is a starting point," John says.

"Coming across some of the issues that arose from that history from a young age and with people I love, and getting a little window into the system that caused that, made me want to try law. I wanted to influence that from a systemic level."

Around 2% of NT lawyers are Aboriginal, yet Aboriginal people are significantly over-represented across all aspects of the criminal justice system. For John, the justice system can also learn from the health sector, in that seeking to understand the drivers of mental health, wellbeing, rehabilitation, healing, restoration and the importance of investing in genuine, culturally appropriate services is essential to improving the effectiveness of the justice system itself.

In the few moments John isn't at work, serving on boards, or spending time with his family, John embraces small bouts of extraversion as part of standup comedy group Deadly Darwin.



"Stand up comedy is a good example of exercising health leadership," John says.

"You are only one person up there and the formal roles of leadership don't mean anything. It is pushing the boundaries and understanding audiences, you need courage to try it, but it's an incredible experience when you do get a good response and the audience gets bound together even for a short time with a common experience.

"There is healing and positive mental health messages from these types of interactions and you get to taste success, which is really important –social health and wellbeing through connectedness are very important alongside mental and physical success." "Health professionals are in a strong position to identify unmet legal need and to refer people to legal services as part of an integrated approach to health care."

### Wise counsel

### **Kathleen Martin**

Lecturer, Aboriginal and Torres Strait Islander Health

### It's not even morning teatime and Kathleen Martin has just introduced 600 years of history in a one hour lecture.

"They always have questions, but I ask them to hold on to them until the tutorial, when we have two hours and can start to talk in a bit more depth," Kathleen says.

Lecturing in Aboriginal and Torres Strait Islander health to students in both the paramedicine and medicine programs, Kathleen faces a daily challenge in providing enough scale in the story to provide context, but also a focus on the key events in recent history that have been critical social determinants of Aboriginal and Torres Strait Islander health.

Kathleen was appointed as a Lecturer in Indigenous Health by Flinders University in 2013, in recognition of both her wealth of local knowledge as well as her experience working across northern Australia.

After growing up in Alice Springs, working across remote communities in Western Australia and NT and now teaching from Flinders' Darwin campus, Kathleen is able to draw on a rich vein of personal experiences to engage students.

"If I can change one person's mind and get them thinking outside the box, realising Aboriginal health is not as simple as you might think it is, then I am happy. If I can do that for a whole class I am even happier!" Kathleen says.

"I love teaching. In 2019, I realised that I needed a change and a new challenge. Instead of taking a job elsewhere, I opted to stay with Flinders and transition into what is now Poche SA+NT so that I could work with Year 1 and 2 medical students in Darwin as part of the Northern Territory Medical Program. "I wanted to give medical students the opportunities to learn what Aboriginal health means from an Aboriginal perspective, taught by an Aboriginal academic whose community lives and is impacted by the health problems that we talk about.

"When the restrictions finally lifted, I was able to finally relocate to Darwin and 12 months on, I am able to deliver a combination of face-to-face and online lectures and tutorials.

"It's not an ideal teaching environment online, but it does provide access to a new audience and an opportunity to engage with more people.

"I was able to re-shape the way I taught and that meant I could engage with new audiences across Australia.

"I have found it really satisfying, taking on recently-commenced Bachelor of Paramedic Science students, as well as medical students.

"The cultural content in the course was an eye opener for them. As I was going through the course, I would tell them stories from my life, which helped to build that enthusiasm and they have fed that enthusiasm back to me continuously, even though it's online.

"I am always getting emails from students on placement, taking what we had taught and applying it on placement, so that's really satisfying.

"I recently reflected back on the fact that I enjoy working here and have developed a level of respect for my colleagues.

"They are passionate about what we do here in the Northern Territory Medical Program and like me, would not want to work in any other place." "I wanted to give medical students the opportunities to learn what Aboriginal health means from an Aboriginal perspective, taught by an Aboriginal academic whose community lives and is impacted by the health problems that we talk about."

> FLINDERS NORTHERN TERRITORY



### Everybody's favourite (student) doctor

### **Karlie James**

Student, Flinders Northern Territory Medical Program (NTMP)

#### If you were going to choose somebody out of a line up to operate on you, it would be Karlie James.

She is slicing into carrots right now, rather than people, but is multitasking with the sort of zen that can only be possessed by people who have stared into the abyss of calendar chaos and prevailed. She hastens to add there is no human slicing ahead in her future – a career as a GP beckons.

The carrots are being casually dissected while Karlie simultaneously manages to respond to interjections from her four bubbly children, negotiate dinner plans with her dad, think about the next day's medical duties and deliver thoughtful, warm answers to questions about her journey into medicine. All the while she projects calm, order and a sense that the person she addresses in each split second is, in that moment, the most important person in the room.

It is a huge privilege and/or responsibility (depending on what day it is) to be full-time parent to children aged 3 to 14 while also studying medicine full-time and tutoring in your spare hours - but with the additional stress of managing treatment for her son's acute lymphoblastic leukaemia over the past three years, Karlie's days are nothing short of heroic.

Karlie studied her undergraduate degree as a mature age student, cramming during playgroups and completing assignments late at night, driven by an unswerving dedication to change and maybe also the delight of realising a dream that she was discouraged to pursue during school.

Growing up in Darwin, Karlie's parents had always told her she could be anything she wanted to be, and after regularly topping her class, she found a particular love in the detail and discovery of science classes.

She decided that she wanted to become a doctor, building on her love of science and her passion to help Indigenous people in remote communities, but the Yorta Yorta, Kuku Djungan and Gunaikurnai woman was told by school staff that she shouldn't aim so high.

"I was told to aim for something 'more achievable' than such a hard degree and that dream was pretty much shut down for a while," Karlie says. "The teachers were authority figures for me, so I was disappointed, but I just thought they knew what was best and I just accepted that was how it was going to be."

"I felt deflated and wished I had had an opportunity to go to university, but that my life plans couldn't be realised, because I didn't finish high school.

"I become a single mother at 22, so my new focus became my son and his future."

A driven spirit, Karlie threw herself into a range of roles, working in legal aid, as a parole officer and then in government roles. She always worked full time, but only received maternity leave when her third son, Jacob arrived.

"I was on maternity leave and had just turned 30. My dream of going to university had never faded, so I decided to enrol in a Bachelor of Science, using a Certificate IV qualification," she says.

"I was at home with a two-year-old and a newborn, with a seven year-old at school and set up a study space with secondhand furniture, so I could do work during the baby's nap times and at night.

"I would study for exams at playgroup and at night and set up a huge white board next to the dining table. When I was having play time with the kids I would come up with a game to name parts of the body, to help me absorb more information about anatomy.

"My school experience had given me a 12-year gap year, but in some ways that made me even more determined to study."

As Karlie neared the end of her degree, she found a new-found level of confidence and the opportunity to fulfill her dream of becoming a doctor through Flinders University's Northern Territory Medical Program.

In February 2017, just as she was due to complete her final undergraduate year, the final prerequisite to commencing medicine, Karlie's youngest son was hospitalised with leukaemia and the family had to immediately relocate to Adelaide for cancer treatment to save his life.



"The first few weeks were a blur, as my son was diagnosed with a less common T-cell subtype which required longer treatment, involving intensive chemotherapy over 15 months," Karlie says.

"During that time in Adelaide, we met so many families who were struggling through serious childhood illness and it was definitely life-changing for all of us. It provided some perspective about all the other challenges a family might face.

"The University was really supportive and I managed to complete my science degree during this time and also get accepted into the NTMP."

The family relocated to Darwin in June 2018, just before Karlie had her fourth child and she was able to finally start her studies in 2019.

She intends to practice in rural NT, partly because she has seen the need there first-hand, and partly because she loves the warmth and lifestyle of smaller communities but mostly, "because of my passion to help my mob," Karlie says.

Having more life experience under the belt helps in communicating with patients and have confidence conducting physical examinations with people of all ages. However, the life of a mature age student also requires high-level organisational capabilities. Karlie's current rotation involves hospital placement plus afternoon classes, regular practical assessments and constant study, in amongst her other life as a tutor and parent. She gets little time to herself, apart from visits to her lovely neighbour.

"She is the absolute best. She has a pool and I go around there and tell the kids, 'this is my space'. But then when they rock up unannounced while I am there with their towels and their goggles on, she is not going to say 'no'," Karlie says with a gentle laugh.

"I encourage people that have a desire to take up tertiary education to go for it. Regardless of what stage they are at in life. I have no regrets and am grateful to be in a position that will allow me to create a secure future for my children.

"After you have studied medicine and gone through what my boys and I have been through, nothing is going to stop us."

### "I encourage people that have a desire to take up tertiary education to go for it."

# Outback introduction

### **Lilly Thomas** Student, Bachelor of Nursing

### For four weeks, Tennant Creek is giving Lilly Thomas a crash course in outback health.

The second year Adelaide nursing student chose to study at Flinders University because of its strong focus on rural and remote health and was quick to put her had up for a placement in the NT.

The administrator of Flinders University's Tennant Creek campus, Pene Curtis, arranged the placement and helped Lilly settle in. Lilly said the University's commitment to reimburse students for transport and accommodation made placements more affordable.

"It's been really good. At home I work in a big private middleclass hospital, and in contrast the population that you see are very different, the ways the nurses interact with patients is very different, and there are health issues like carbuncles that you don't see in the city," Lilly says.

"The nurses here are really good teachers too. They are mostly on rotation here, coming in for three months and then moving on, and they bring a whole range of experience with them. They know a lot about certain things and are patient in dealing with me as a student.

"In Adelaide, they might get students through every week, but there are fewer students out here, so we get invited to activities and events and get a lot of one-on-one attention. "In the first two weeks here I was doing triage, taking observations, doing wound dressings and ECGs and this week in community nursing, I am going out with one of the registered nurses and do house calls.

"I am getting real insights into the way that the Indigenous community lives and also how nurses take time to interact with them."

Lilly plans to do another rural work placement next year and is already a contender to become part of the NT workforce after graduation.

"Seeing what job openings there are here, I might come back. It's fun – there is a really good community and it's a different experience to what you would get in any other state," she says.

"With a lot of jobs, you have to will yourself to turn up each day, but nursing is one of the jobs that the community really needs. You don't just say, I'm going to work – you always feel like you have a purpose.

"I am really glad I chose to come here, it has influenced me and made me realise some of the work and lifestyle opportunities that the NT offers." "I am getting real insights into the way that the Indigenous community lives and also how nurses take time to interact with them."

Flinders Nursing



### **Healthy future**

### **Madison Ludwig**

Student, Flinders Northern Territory Medical Program (NTMP)

#### Born within sight of the Hammersley Ranges at the tiny Paraburdoo hospital, in the Pilbara, WA, Madison Ludwig seems always to have been destined for something special.

She just didn't accept it at the time.

The Kungarakan and Gurindji woman, who is a second year medical student in the Northern Territory Medical Program never thought she would be smart enough for medicine.

"School kept me busy, I worked at Target and played footy for St Marys. I did pretty well, but I was never top of the class and it didn't cross my mind that I could become a doctor," Maddy says.

Her family had moved around a succession of small communities before coming home to Darwin in the latter years of Maddy's primary schooling – so it didn't seem like such a huge jump to leave home again to study at Curtin University in Perth. After seeing so many people in her community with health issues, nursing seemed to be a good career choice.

After a year in Perth, a year on the road as a remote area nurse across WA and then two more years as a renal nurse back in Darwin, Maddy was exposed to a wide range of health environments, but progressively realised that growing her clinical knowledge to understand why health conditions occurred was the part of her job that she enjoyed most – which seemed to be pointing her in the direction of a new career in medicine.

"In the renal service we have an Indigenous doctor who the patients love, and they all want to see her. In the same way there were just two Indigenous nurses in the renal unit, but most of the patients were Indigenous and they would all ask to have us as their dialysis nurse," Maddy says.

"It was really obvious to me that we definitely needed more Indigenous doctors. In Darwin most of the patients are Indigenous and you do see patients struggle to communicate and connect with non-Indigenous doctors, so I began to think I would be of greater value if I was a doctor – but I still didn't think I would get in."

A friend from primary school was in the final years of the Northern Territory Medical Program and as COVID hit, restricting social options, he encouraged her to apply.

Maddy completed the Indigenous Entry Stream over three months and at the end of 2020, found she had been accepted into the program. Plagued with self-doubt, she only quit her nursing program two weeks before her first classes started, as she worked to convince herself that she was capable of becoming a doctor. "I was worried that I wasn't smart enough for medicine. I didn't have to do the GAMSAT test like everyone else and that led me to lots of questions about whether I was good enough. I have talked about this with some of the other students, and despite their entry pathway, this seemed to be a common feeling," she says.

"Then a few people around me said, 'Just do it, give it a go and if it's too much, you can always leave'.

"Within a few weeks I started to realise it is hard, and there is a lot of time and effort involved, but it's definitely manageable. I realised that with the Indigenous pathway program, I came into the course just as prepared as everybody else.

"Once you are in, you quickly realise that you are up to the pace, and can keep up with it.

"Having friends in med school has been really important to me. You find your little crew and we study together, keep each other on track and play games of Uno in between study to break it up.

"I am also lucky in that I have a lot of friends and family in the medical and nursing fields, who can help me keep motivated and on track.

"People say you don't have to be smart to study medicine, you just have to work hard, and I thought that was a bit of a one-liner, but it really is true.

"You don't have to be the smartest in the room. Being academically capable is essential of course, but also problemsolving skills and people skills are incredibly important as well.

"The GAMSAT test doesn't evaluate some of those crucial skills – it doesn't define you as a person, or as a doctor.

"I am confident now that I will graduate with a whole range of skills that will help me become a confident and competent doctor for all of my future patients, and in particular for my Indigenous patients."

> "Once you are in, you quickly realise that you are up to the pace, and can keep up with it."

### Aiming high

### **Ebony Hill** Student, Bachelor of Paramedic Science

#### Darwin local Ebony Hill wants to be a role model for other Indigenous people who think higher education may be out of their reach.

Ebony, a mother of four, is in her second year of her paramedic science degree, something she never thought she'd do after dropping out of school in year 11, and soon after having her first child.

The 27-year-old is thriving in the degree as a full-time student after transferring from a nursing degree to become one of the first students to study Flinders' Bachelor of Paramedic Science NT course in 2021.

She's all too aware of the need to have Aboriginal and Torres Strait Islander people in the health industry.

The shortage has spurred her on to keep studying knowing she'll be making a genuine impact on Aboriginal and Torres Strait Islander health.

"That's one of the reasons why health is something that I've always wanted to work in because I understand that there's such a massive gap in Indigenous health and education," Ebony says.

"So I want to be a part of helping bridge that gap.

"Not only just as being an Indigenous doctor or being an Indigenous paramedic, but also helping other Indigenous people in the community with their health." Ebony is aiming high with her education and hopes to, once completing her paramedicine degree, move on to study to become a doctor through the NT Medical Program.

"That was sort of a goal, like, a dream when I was younger, I guess, but I didn't think I could ever become a doctor. Then I guess I realised my potential when I started doing this degree, that I can achieve that if I actually want to study medicine. So I might as well just keep going what I'm studying now."

Being a Darwin local and being able to study in the Top End as well has meant that she's remained close to her support network.

She said her family and friends had been supportive with her career goals – helping to look after the kids aged 10, nine, five and four months when in lectures or exams.

When she does complete her studies with Flinders University, she hopes to use her skills to improve the lives of Territorians.

"I don't plan on leaving the NT anytime soon, I'd like to work all over the Territory," she says.

She wants other Aboriginal and Torres Strait Islander people to know that higher education isn't out of reach if you really want it.

"I think it's really important that other young Indigenous community members see someone like themselves and see that they can do this as well," she says.

## IERGENCY

EMERGENCY & TRAUMA CE

"It's really important that other young Indigenous community members see someone like themselves and see that they can do this as well." CY

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# A voice for allied health

### **Associate Professor Narelle Campbell**

### Associate Professor Narelle Campbell's career has come full circle.

The speech pathologist who graduated from Flinders University and worked in remote, regional and urban locations around South Australia before moving north to Darwin in 2001, is now helping to shape the future allied health workforce.

The academic has focused her research on addressing workforce shortages in rural and remote areas with a desire to help residents in those locations where access to services is not easy.

"People in remote areas, it's known that their health outcomes are poorer than people in cities and it's a reasonable thing to say, part of that problem is because they can't access the help that people in the city can," Narelle says.

She found her way back to Flinders after covering several maternity contracts with various organisations in Darwin.

She was accepted for a job to provide placement and workforce support to allied health students in the NT.

"I started working for what was the at the time the NT Clinical School and in a 0.5 academic role and I really enjoyed it," Narelle says.

"It gave me lots of opportunities to meet people who were delivering services and support those who were training students, and it was a Territory-wide position, so that started my interest in, what are the needs outside of Darwin?

"And so some travel mostly at that point, to Alice Springs to meet with people and provide training and education to clinicians who were supervising students, and that was a lot of fun, but I was the lone voice for Allied Health."

At a time when she was thinking about her next career choice Narelle was tapped on the shoulder by a colleague asking if she was interested in helping to develop a pathway for medical students to undertake general practice training.

This role allowed her to understand in greater depth the work being undertaken to ensure students were trained in areas of workforce need and exposed to locations where their skills would be most needed. "That role gave me some opportunities to learn more about the theory of health professionals' education and the academic side of things, and at the same time, I started to think about, well if I'm going to stay working for the University, I need a PhD," she says.

"I started making inquiries and talking to people and thinking about what I would want to research, and I had done some work in workforce, and I was very aware that there were not enough allied health professionals in remote areas. But I also knew that that was a really under researched area. "So, my research question, ended up investigating, what are the personality traits that make somebody be more successful working in remote as an allied health professional."

Her research involved almost 600 people and she found those who enjoyed remote work and thought they were good at it tended to have higher levels of novelty seeking traits, such as those who saw the work and move as an adventure.

She says studies also indicated people who come from rural and remote areas are more likely to return to work there and stay for longer.

So her work has now turned to completing a tracking study with colleagues, which is now in its third year, that looks at whether health students who have completed placement in the NT return to the Territory or a rural or remote location across Australia in the years following graduation.

Narelle is also working with colleagues to address health workforce shortages in remote regions by creating innovative placement programs.

"We've had two projects and we're hopeful of expanding that in the future, where we support students to learn their profession by delivering services in East Arnhem region where there aren't enough allied health professionals," she says.

Over the years the research side of Flinders Rural and Remote Health NT has grown, and Narelle says she is proud of what the team has accomplished.

"At Flinders in the Territory, I'm really proud of our commitment to the Territory. You know, we are here, we've been here for a long time, we're growing, we focus on what it is that the Territory needs, where we can fill gaps in providing services, research projects, or working on research," she says.



"I'm really proud of our commitment to the Territory. Flinders is here, we've been here for a long time, we're growing, and we focus on what the Territory needs."





