

Student Success Stories



REGIONAL STRENGTH. NATIONAL SUCCESS.



The Regional Universities Network (RUN) is delighted to share these inspiring stories from 12 students and graduates from our six RUN universities.

They range from tackling soil disease to overcoming drug addiction and empowering rural people with their finances.

RUN is a group of six regionally-based Australian universities (CQUniversity, Federation University Australia, Southern Cross University, University of New England, University of Southern Queensland, University of the Sunshine Coast) committed to delivering higher education in regional and rural Australia.

There is an increasing need for more highly skilled, university-trained professionals working in the regions to drive the innovative industries of the future. RUN is at the forefront of making this happen.

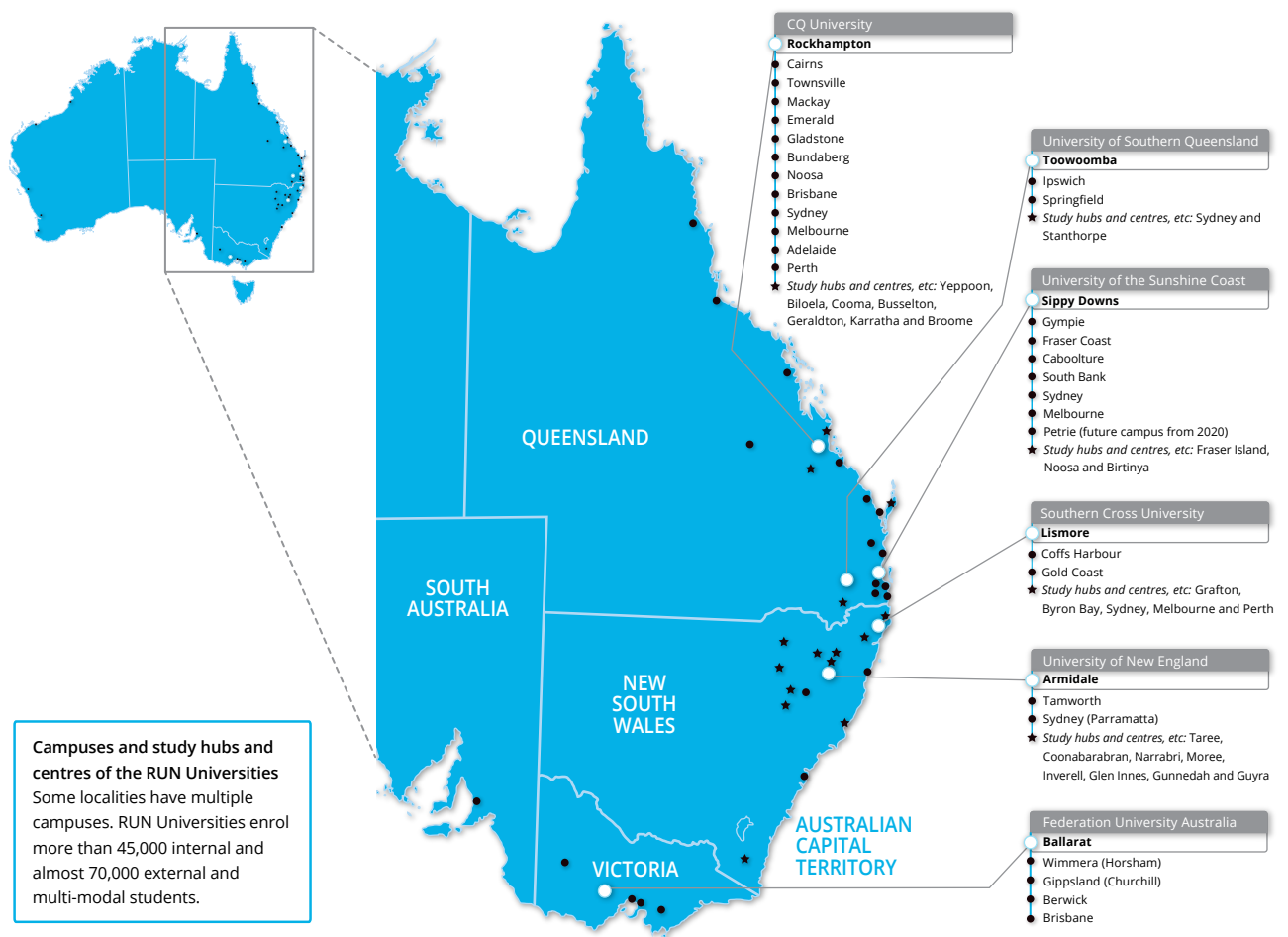
Higher education changes lives, not only for the individuals who study, but for their families and communities.

Seven out of 10 graduates from RUN universities go on to work in the regions, compared to two out of 10 graduates from other universities.

Regional Australia still has a higher education attainment rate about half or less than half that in major cities, and regional universities have a major part to play in increasing the number of people in the regions who go to university.

The majority of students at RUN universities do not come straight to university from school. Many have worked and/or undertaken post-school education prior to enrolling in undergraduate study. Many balance part-time university study with work and/or family commitments.

These are some of their stories.



Engineers responding to challenges from population growth and extreme weather



Civil engineers in Bundaberg have their work cut out for them. The coastal Queensland city is best known for two attributes: rich volcanic soil which makes Bundaberg one of the nation's most productive food bowls and its vulnerability to high-intensity rain events.

The last of these extreme weather events to impact Bundaberg was ex-Tropical Cyclone Oswald. Heavy rainfalls flooded the area so badly that people in hospitals and retirement homes had to be airlifted by the Air Force to Brisbane, thousands could not return to their homes, and Burnett River levels were so high they overtopped the Kennedy bridge.

Central Queensland University (CQUni) civil engineering graduate and masters of management student, Ben Brown, says 2013 was the last big flood. "The severity of the rainfall in the upper catchments caught a lot of people off guard. The river rose a lot, and in fact in the building we're in now, the floodwaters were up to the roof. There was a large extent of damage across Bundaberg," he says.

Ben now works full-time as a civil engineer for RMA Engineers in Bundaberg, a position he first began as a paid work placement while in the fourth year of his CQUni Bachelor of Civil Engineering Co-Op.

People may not often associate professions other than medicine and first responders with helping save lives or preventing injury but engineers are tasked with safely building the infrastructure that's taken for granted by some in the populace.

"Human safety is a huge part of what we do really. Civil engineering is broad but essentially it's about making sure people don't get flooded, reducing the risk of people crashing on roads and making sure roads don't fail."

"Structural engineering, which we did through uni, has the same concerns for human safety. It's about assessing loads and making sure buildings don't fall on top of people and that they serve the purposes they are intended."

Ben has already built up a few years' experience as a civil engineer in the region, and is working towards his Registered Practising Engineer in Queensland (RPEQ) certificate. RPEQ holders are able to certify that designs have been completed by a suitably skilled person.

In collaboration with his fellow engineers at RMA, a number of whom also came to the firm via CQUni work placements, Ben works on a range of essential infrastructure around Bundaberg.

Internal Australian migration driven by retirees and others settling in the Bundaberg region, such as those attracted by the tropical climate and low cost housing, is putting pressure on ageing infrastructure and driving demand for subdivisions. As a result, there are extra demands on public roads, intersections, stormwater drains and water treatment of run-off. Stormwater infrastructure also has to comply with codes for sea level rise, and another 20 per cent increase to account for climate change.

Ben's latest project is a modernisation of the main street of central Bundaberg.

"We do have the occasional flash flood driven by heavy rainfall. A lot of the town's infrastructure is quite old. A lot of our work is to prevent flooding and bring the existing services up to the current standards."

Ben credits the practical, industry-focus of CQUni for the seamlessness of his transition from undergraduate to civil engineer with RMA.

"I knew I wanted to do engineering when I was leaving school. I applied for CQUni, QUT and the University of Queensland. I was lucky to get into CQUni in town."

"The course was new to Bundaberg then, but once I'd started, I realised how practical it was. They incorporated a lot of work experience and research projects led by local industry into the degree. That focus helped me immensely. I haven't stopped full-time work as an engineer since I started my placement at RMA."

RMA now employs several CQUni engineering graduates who completed work placements and benefited from the ability to study locally. Ben said he could not think of anyone with whom he graduated who does not have a job now or who did not get one in the first few months after graduation.

Daughter of the soil offers fresh thinking on tough problems



Claire-Marie Pepper spends much of her time getting mucky and dusty in the black and red soils around the Burnett River of central Queensland.

The Bachelor of Science Honours student wants to help crack one of the most significant problems facing the world - how to simultaneously reduce greenhouse gas emissions from agriculture and increase food production.

Livestock, fertilizer use, rice cultivation, agricultural soils, manure management, the burning of crop residues and savannahs, contribute between 10 per cent and 12 per cent of global greenhouse emissions from methane and nitrous oxide (Fellman, et al, 2018)*.

Claire-Marie is just the sort of person to help tackle competing, complex and seemingly confounding problems. Her grandfather was a pioneer in the agriculture industry in the Proserpine region. She has completed her Bachelor's degree in Agribusiness and Food Security via Central Queensland University (CQUni) and plans to do a PhD if she does well in her Honours.

"I am passionate about climate change and my work in the agriculture industry. How can we minimise the greenhouse effect on agriculture? How can we reduce our emissions and find ways to influence others to change their practices for the better of the world? So I've always had this dream in which I want to change the world and feed the hungry nations."

Claire-Marie attended the United Nations Climate Talks conference in Bonn, Germany, in 2017, convened to write the rulebook for the subsequent Paris Agreement. The central aim of the Paris Agreement was to keep global temperature increases this century below 2 degrees Celsius above pre-industrial levels. As a result of the trip, she published a policy paper on Australian agricultural emissions and combating climate change while increasing food production.

She says fresh thinking is required on multiple fronts including land clearing, management of farm equipment, the way soils are tilled, and the types of chemicals applied.

"I feel like we've done this for 100 years but is it the most effective way? Is it the way of the future? That's what intrigues me. Is there something better out there that will increase food production and tick all the boxes of the environmental benefits?"

For example, traditional farming practices may mean generational change is required to tackle entrenched issues such as farm chemical run-off smothering the Great Barrier Reef. "This is the way we've done it for 100 years but then we have the younger generation coming in and saying, 'Hey, I don't really like that way. Let's do it differently'."

Meanwhile, Claire-Marie is part of a business-focused, graduate research project working in the Kingaroy region of the South Burnett area for an agriculture business. She is trying to increase peanut production, and thus peanut butter manufacturing, by helping farmers manage their risk of a disease attacking their crops.

Her research work is potentially generalisable to crop production because the white fungal mould Claire-Marie is studying – Sclerotinia – attacks some 400 species of vegetable, fruit and field crops.

The business Claire-Marie works for has been doing soil testing for a Black Soil Project, funded by the Burdekin Catchment Care.

"We are working with farmers and growers to make them aware of how their soils are performing, good and bad, what can we do to improve it, and fertiliser applications. But also making farmers aware of how healthy our soils are really. Soil is a very good indicator of your crops and your production. I enjoy working with soil."

The fungus can live dormant in the soil for up to five years but can become active under ideal climatic conditions, infecting random plants and thus reducing production and crop yields.

"So I'm trying to develop a risk matrix associated with the disease to better manage and pre-warn farmers about whether they've got it or where they should be planting peanuts."

Claire-Marie happily credits CQUni's supportive and highly interactive distance education course in Agribusiness and Food Security for where she is today.

"Because of CQUni I have had opportunities and experiences that have helped make me the confident person I am today."



Harnessing intellectual talent to address rural health disadvantage and stoicism



Trainee doctor Joe Dawson was born in Victoria's Latrobe Valley and is keen to return to the disadvantaged region upon completion of his studies to take up a country practice.

The region is Australia's first to be formally declared a Health Innovation Zone in recognition of what is officially described as 'a historical statistical deficit in health, well-being and longevity.'

At Federation University Australia (FedUni), Joe completed a Bachelor of Biomedical Science with such distinction that he won entry to a highly competitive Bachelor of Medicine/Bachelor of Surgery course at Deakin University. The two universities do not have a formal articulation arrangement, but FedUni's biomedical science meets the prerequisite for entry to medicine at Deakin.

The Latrobe Valley is host to three giant power stations. FedUni has partnerships with the local power industries, and infrastructure providers to help solve problems such as coal emissions, water treatment issues, airshed issues and biodiversity.

"So the regional areas, Federation and the Gippsland region, have given me the opportunity. My main aims are to help improve equitable access to healthcare for rural and regional populations, and help address the rural doctor shortage."

"It's a little way away at the moment, but I'd like to return to where I grew up and give back to the local community. I want to be a part of that to improve everybody's health."

Joe and his brother are the first in their family to earn degrees. Joe's journey to first year medicine began more than 15 years ago in secondary school when he first realised he wanted to be either a doctor or an engineer. Joe started engineering at university straight after school, but circumstances intervened and he had to quit.

Over the next 15 years, Joe worked in a series of office, technical, management, manufacturing and service jobs to

support himself and his family, including working in a mine near Darwin.

It was during his spare time in the Northern Territory that his intellectual life reasserted itself, and ultimately led him back home to country Victoria, and FedUni.

"There was something burning inside me the whole time I was working. I was always inquisitive and always thinking. It got to the point that I was losing interest in jobs a lot quicker."

"Working in the mine, I was working two weeks on and one week off. During the week off I'd fill my time by reading books, studying trivia and just gaining knowledge."

Eventually Joe realised that if he was drawn to studying so much in his spare time, he should go back and get a degree in what he always wanted to do. But much had changed. The last time Joe had been at university, the course was delivered on a combination of the blackboard and an overhead projector.

"So it was a huge adjustment to the new technology and making the change to doing everything online."

Joe credits FedUni's small lecture sizes, high quality lecturers, balance of theory and practice, and sense of belonging with support of a community, with enabling him to get the most out of his learning. So much so that he has achieved the rare feat for a recent graduate of publication of a first authored work in peer-reviewed journal, *Cell Biology International*.

"Federation biomed was a really well-developed course from start to the finish. When I started I didn't know what a bacterium was or have any real understanding of biology. I didn't study it in Year 12. The course builds from the basic knowledge all the way through to being proficient in lab work and being able to critique scientific papers."

Understanding rural realities was essential to effective health provision, he says. Medical practice in a rural setting is characterised by people tending to present later, and often having significant barriers to accessing healthcare.

"They're perhaps a little more stoic so they present with more acute problems or problems that have progressed further."

"Simply being able to commute or get time away from their work to come and see a local practitioner can be hard. Hopefully access to healthcare will change with the availability of technology, e-Health and teleconferencing. So there's an exciting future there."

Rural student helping the addicted find their place in society



Olga Torgovnikova had intended to do PhD research into why people take decisions that cause them harm, until authorities found there was an urgent need to try and rehabilitate ice (crystal methamphetamine) addicts in her local area. Now she wants to shift from research to actual counselling.

Australia's problem with methamphetamine has become acute and widespread across capital cities and regional areas and is showing no signs of decline.

To put the size of the Australian methamphetamine market into context, according to the Australian Criminal Intelligence Commission (2018, p 9)*, the total combined estimated weight of cocaine, MDMA (ecstasy) and heroin consumed each year now equals just 60 per cent of the estimated weight of methamphetamine ('ice') consumed each year.

These substances cause potential harm through addiction, health risks, and criminal and antisocial behaviour.

"Now I'm reconsidering going straight to a PhD and thinking of going on to do the clinical masters, as long as I get the marks, and then start working locally."

"What made me think about this is that my main interest is addiction in psychology and research plus the recent Ballarat budget announced that they are going to build a 30-bed rehabilitation facility for drug addicts."

Olga says she now wants to work in the new Ballarat rehabilitation centre to help address the local problem of drug addiction and then go onto a PhD on the role of emotions in addiction.

"I'm passionate about it. I enjoy helping people. I have always wanted to understand why people make decisions that cause them harm. Substances have always fascinated me."

The challenges Olga faced to get to her honours year have not just been academic. She migrated from Russia as a child and lived with her grandparents. Despite their support, Olga has experienced tough times and financial

hardship as a single mother.

"Because I don't have a lot of support with my little one, there have been times where I got him to kinder in the morning to get myself to uni for a lecture. I found I come to uni and just bawled my eyes out all day. I still come along, but I struggled."

Despite her tough personal journey, Olga wants to improve treatment for drug addicts generally and especially figure out how to prevent children from turning to drugs.

"I had a second cousin who was a heroin addict. It was quite interesting watching the family dynamics as a child; what was going on with him; and not understanding, and getting explained things."

"What I've learnt over time is that addiction doesn't come from people just wanting to be silly. It comes from them wanting to hide some sort of feelings and escape their reality. So, I think we need to make a fair bit of different changes to improve the life of people."

Underlying these aims is Olga's concern for trauma and broken families.

"I'm interested in people who, because of their environmental circumstances, have less chance in the world. So, what I want to achieve is reducing the number of people who live dysfunctionally. I want people to have their spot in the world, their place in society."

Olga's vision of wanting to help people on their journeys from addiction to recovery has been aided by the design of Federation's (Federation University Australia; FedUni) coursework for psychology.

"I didn't think of myself as a people's person. That's why I wasn't going to do counselling. That's why I wanted to go into research and learn about people, figure out the connections and patterns and what's going on."

"But this semester by doing the practical work, I'm learning that I possibly am suited to it. I'm quite non-judgemental, learning how to present empathy, which I thought I didn't really have."

For Olga, attending FedUni in face-to-face mode has been a boon.

"I really, really enjoy it. I really enjoy coming to lectures, enjoy coming to the tutorials. It's a really great opportunity to understand and be able to ask questions and clarify problems clearly in the class. I also find the lecturers extremely supportive and easy and approachable, which has been really great."

Tackling debilitating injustice at the local kitchen bench



Angela Powditch has worked hard to raise a young family and achieve the postgraduate qualifications needed to realise her dream of going to the United Nations in Geneva to advocate for women's rights.

But it wasn't until she was fund-raising to attend a highly competitive human rights law summer school at Oxford that she had the revelation that inequality and injustice knew no borders. She realised could make a significant contribution at home in the Northern Rivers.

Angela – now completing her final year of law at Southern Cross University (SCU) – recalls lobbying the former Federal member for Page, Janelle Saffin, to help her get money for Oxford.

"I explained my goal of working for the United Nations and advocating women's rights but that would mean living overseas."

"Janelle said, 'Angela, you don't have to leave the Northern Rivers to help with women's rights.' That's really stuck with me the last two years."

"That and a quote from Eleanor Roosevelt who once said 'Where after all do human rights begin? In small places close to home'. Home is where my story begins and where I intend to work for women's human rights."

Angela, a single parent with two kids, already has a first degree in Psychology and a Masters of International Health Management. But she sought to improve her circumstances during a very difficult period in her life.

"When I enrolled in law at Southern Cross, my personal circumstances had changed dramatically. Instead of looking at all the obstacles, I put everything I had into this degree as I knew it would provide a secure career and better prospects for my children and me."

It took a personal crisis to crystallize her passion and discover what she wanted to do as a career.

"It's taken an extremely difficult period in my life to work out the inner strength I have. To be honest it's given me the drive and the burning passion to help in the field of human rights, gender equality and the empowerment of women."

Angela's fourth year involves undertaking her Honours thesis on the little recognised but widespread and debilitating issue of economic abuse.

Economic abuse is a type of domestic violence with significant impacts on the health and financial wellbeing of victims, and affects 11.5% of people across their lifetimes (Kutin, Russell & Reid, 2017)*. Economic abuse is more prevalent among women of all ages (15.7%), compared to men (7%).

"This type of intimate partner abuse is under-studied, but we know it happens more to women than men. It's a form of intimidation and control of economic resources such as money, education or employment."

"The financial hardship and dependence that economic abuse causes may also play a significant role in explaining why people do not leave their abusers."

Angela aims to pursue the issue beyond her Honours year into a PhD following contacts with local domestic violence lawyers working in Magistrates' Courts.

"Economic abuse makes it very difficult to leave a relationship. It's a huge issue and a largely hidden form of domestic violence of which we need to raise awareness."

Angela praises the high quality of lecturers at SCU and says the university could not have been more supportive of her need for flexibility.

"I've done a bit of everything. I've studied face-to-face and online. I find it easier to study in the university library as opposed to home with all the distractions."

"I studied full time during the first year. Then due to studying at Oxford, I reduced my load back at Southern Cross. This year I did the same for first session as I was a delegate at the United Nations' Commission on the Status of Women (CSW62). The flexibility of study mode and load that is available at Southern Cross has been fantastic."

Protecting at risk communities and enhancing well-being and productivity



Sabrina Singh is a pathfinder whose journey of preventing violence towards vulnerable migrant and refugee women and children, and increasing their wellbeing, began from her observations as a student teacher in the Northern Rivers of NSW.

A recent demographic survey revealed that the traditionally agriculture and tourism-dominated region of the Richmond Tweed is also host to an increasingly culturally and linguistically diverse population, including former refugees.

These populations are known to be at risk of domestic and family violence, as are new migrants and those living in rural and remote areas. These groups have also been exposed to varying levels of trauma and specialist services are often required.

Sabrina - a descendant of a local pioneering farm family - is now doing her Masters of Social Work at Southern Cross University (SCU) but she began her studies as a teacher believing in the empowerment of education.

"I started a teaching degree at Southern Cross and completed a year and a half of that degree, which included two student placements. During my second teaching placement, I became aware of the home circumstances of some students."

"This was because it affected their behaviour at school. It meant we were looking for certain developmental milestones and actively modelling positive behaviours."

Her crucial second placement as a teacher revealed domestic and family violence to be a driver of student behaviours and inspired her to tackle the root causes of the problem by embracing the highly challenging field of social work.

Sabrina has taken a different journey to her family. Not only in departing from a four-generation tradition of going into the family agriculture business, or finance, but into social work, which has a deserved reputation for burn-out.

"Once I completed my two social welfare placements and was more involved in the field, my family saw it was

something I was passionate about and could emotionally manage. My parents were actually very supportive of me going down whatever field I wanted to. So, I am lucky!"

While finishing her Masters, Sabrina works for Anglicare North Coast on a new program which supports women from refugee and culturally and linguistically diverse backgrounds.

The federally-funded Department of Social Services program which focuses on education, employment and empowerment is called the 3Es to Freedom.

The 3Es to Freedom was originally piloted in the large migrant and refugee settlement area of Coffs Harbour but has been extended to the Richmond Tweed region, as well as the Gold Coast.

"The biggest part of our program is empowerment. It is developed as a preventative program to domestic and family violence. Research states that if women are equipped with education and employment and feel empowered, they are less likely to tolerate violent relationships and are more able to take control of their lives."

Sabrina and her colleague conducted a systematic listening process among local service providers and local playgroups and schools. They found significant social isolation and a 'want' from the women to connect with others, and opportunities to practice English.

"So the women come to group once or twice a week. The groups are arranged according to what the women are interested in. For example, we have partnered with local services and developed a swimming program; supported the women with gaining TAFE qualifications; and enabled healing therapies such as outdoor therapy, crystal sound baths, yoga, meditation and rainforest walks."

"The groups provide an opportunity for the women to practice their English and connect with others; building their formal and informal networks and thus gaining social capital."

Sabrina credits SCU with having the pre-existing relationships with local service providers that enabled her to work where she is now.

"About my journey. I think that the placements within the Bachelor were great for networking, gaining experience and finding my area of interest."

Family violence support services:

- 1800 Respect national helpline 1800 737 732
- Women's Crisis Line 1800 811 811
- Lifeline (24 hour crisis line) 131 114

From regional teacher's daughter to much needed country doctor



Erin Bourke, who was born in Armidale in northern NSW, is in the fourth year of her Bachelor of Medicine at the University of New England and is planning on rural practice.

As such, Erin is an exemplar of the junior medical worker Australian medical authorities say is most needed to help redress the rural doctor shortage and poorer rates of health care use.

Erin is part of a 60-strong cohort of trainee doctors at UNE's medical school, set up as part of a national strategy to redress the shortage of doctors in rural and remote Australia, and boost admissions from people already resident in the regions.

Mounting evidence shows that the strongest predictor of rural practice intention is the recruitment of rural-origin students, who undertake the Australian Rural Clinical Schools program (Walker et al, 2012, p 2)*.

"Of course, there will always be students who plan to head back to the city as soon as they finish studying in Armidale. But quite a few have enjoyed the experience here and the idea of working in a rural area appeals to them."

"Some of those students are originally from rural areas, but others have come here from a metropolitan area and have found that they really like the rural lifestyle."

Medical authorities say Australia has plenty of doctors and that the Australian health system is good by world standards, but there is an imbalance between too many specialists in city hospitals, and not enough generalist GPs, surgeons and physicians in the regions. Training doctors willing to work in the regions remains a priority.

For her part, Erin believes that working in a rural or regional area has plenty to offer.

"Based on experiences I've had on placement, the idea of working in rural general practice quite appeals to me. I've been really inspired by the doctors I've met. It is great that many of them combine GP practice work with anaesthetics or obstetrics or other work in the hospital. It is something that I would be interested in doing."

A key part of her professional training has been clinical placements in locations such as Maryborough Qld, Glen Innes, NSW, Gunnedah, NSW, Alice Springs NT and Armidale NSW. These placements have offered her extensive hands-on experience. Her placement at Alice Springs was particularly striking.

"My time in Alice Springs gave me great insight into the health inequity faced by Aboriginal people in remote Australia. I saw patients with conditions that rarely occur in other parts of the country, and a lot of the patients became very unwell before seeking the medical attention they needed."

Erin says the high quality of UNE's face-to-face teaching made all the difference to helping her succeed in a challenging course.

"We've had a lot of really great lecturers in Armidale, including lecturers based on campus, and local clinicians who come in to teach us."

Erin says her biggest struggle has been balancing her competing drives for study, research and community work.

"I love to get involved in different aspects of being a university student. I really enjoy my study and want to devote plenty of time to that. But I also want to be able to do research, and I want to be involved in the community. It's been challenging to always find the right balance."



*Walker, J. H., Dewitt, D. E., Pallant, J. F., & Cunningham, C. E. (2012). Rural origin plus a rural clinical school placement is a significant predictor of medical students' intentions to practice rurally: a multi-university study. *Rural & Remote Health*, 12(1).

Indigenous finance graduate helping people steer their financial futures



Ty Archibald recently completed a highly prized graduate program with 'Big Four' bank Westpac in Sydney, but his focus is on income inequality in regional Australia.

The University of New England (UNE) Bachelor of Business graduate, Armidale local, and Kamilaroi man, beat out most of a field of 6000 applicants for 125 places in Westpac's graduate program. He completed the program as one of 14 accepted into the wealth management arm, BT, and is now Research Associate evaluating fund managers on behalf of investors.

"The biggest thing I've noticed between the corporate world and the regional community, beyond the income gap, is this massive education gap when it comes to finance. People are missing a level of basic understanding that could enable them to steer their own financial futures."

Eighteen of the 20 electorates with the lowest household incomes are outside Australia's capital cities. Income inequality is a significant issue for the 6.7 million people in rural and remote Australia and is associated with significant challenges in accessibility to housing, education, work, health and wellbeing (Senate Rural Health submission, 2014, pages 4, 2)*.

"I would really like to get involved back in the regional community to provide some education; whether it's giving talks, writing a blog or something else. Some of what I'm working on at Westpac Group could be really effective."

A founding partner of the not-for-profit organisation Jawun, Westpac has supported hundreds of its employees

to share their expertise with the Aboriginal and Torres Strait Islander communities in Cape York, inner Sydney, and other regions.

"If I were to take part I'd be paid by Westpac or BT to work for the Indigenous community for six weeks. They can leverage my skills to help them build a sustainable income. For example, a colleague recently advised an Indigenous community on how to sustainably monetise traditional land. There are a lot of different options."

Ty chose UNE Armidale to major in Economics and Finance with his Business degree. He was attracted by the affordable regional living, especially compared to Sydney. The decision brought with it two unexpected pay-offs.

First, the money he saved allowed him to complete an international trimester in finance at UNE affiliate, Purdue University, Indiana in the United States. On his return, he self-sourced an internship with a large wealth management company headquartered in Melbourne.

Second, UNE's relatively smaller classes and stronger relationships to teaching staff meant he was able to tap into the professional expertise and links of his lecturers to access Westpac's graduate program.

Ty is the first in his family to complete a university degree and has built a path for his younger siblings to follow. His younger brother and sister are now advanced in their own Bachelors of Business and have also completed internships with large financial services corporations.

Ty views his contribution to the region in terms of the knowledge he can bring back to share. But beyond this, he's creating new career blueprints for people in the regional community.

"Talking about my career is one way of enabling regional students to pursue corporate careers because it's still quite taboo for people from regional areas, public schools, Indigenous backgrounds, to get into the corporate world."

Finding inspiration and overcoming adversity in Sunshine Coast clinics



When champion swimmer Blake Cochrane graduates from the University of the Sunshine Coast (USC) with a Bachelor of Exercise and Clinical Science later this year, he will be part of a multi-disciplinary clinical team in which he will be “prescribing exercise as medicine”.

The dual gold medal winning Paralympian plans to work in both sports and general clinics on the Sunshine Coast, serving local populations suffering common ailments ranging from diabetes, obesity, chronic pain from work, recreational injuries and general geriatrics.

Blake was originally attracted to USC by its offer of a handful of places in its high performance athletics program. Indeed, he won his highest level achievements – gold medals in breast-stroke at the London Games of 2012 – while enrolled at USC. Blake now intends to complete his studies, work in local clinics and “swim through to the Tokyo Games of 2020.”

Exercise is formally prescribed as medicine in the treatment of 26 different diseases, commonly including depression, anxiety, stress, schizophrenia, dementia, Parkinson's disease, multiple sclerosis, obesity, diabetes, hypertension, heart disease, heart failure, cerebral apoplexy, pulmonary disease, asthma, cystic fibrosis, osteoarthritis, back pain, and cancer (Pedersen & Saltin, 2015).*

“Our role works in secondary care. The patient has been discharged from hospital, and a lot of them have private health insurance so they come along to the private clinics.”

“They will generally see a physio first and then they will come to us and our role is about increasing their ability to do their day-to-day tasks, as well as increasing their general wellbeing.”

Blake's degree at USC has prepared him to alleviate the chronic pain that can accompany chronic disease, and has been informed by numerous clinical placements in the popular local area.

“A lot of the patients have chronic disease such as diabetes or obesity. We help deal with any kind of chronic pain. Whether that's from an acute injury that someone may have sustained through work or just general degrading of knee joints or backs.”

“Lower back pain is probably one of the big ones that we get coming through those clinics. So, anything that's a burden of disease we can work with. They have initial treatment to mediate those conditions and then we work with them to stabilise those parts.”

Blake originally spent two years studying at the University of Queensland where his focus was on human movement and sports science, a focus which aided his status as an elite athlete.

But it was the move to USC, which has adopted aspects of the United States-style college athletics system, which left him with a new inspiration. Blake's Paralympian background, especially the expected role model side of his vocation, frequently led him to working in schools.

“It was through meeting people and talking to people on the Sunshine Coast that I realised my passions lay more in helping people. That comes from my parents with their social work background. I have a passion in working with children. So I've done a lot of school visits through my Paralympic background about overcoming adversity and all the opportunities that can be available, that you can just get out there and get involved.”

“I feel as though children are relatively inactive in what they're doing on a day-to-day basis so I wanted to work in that background more.”

Blake's training has been necessarily face-to-face and hands-on. Exercise and Clinical Science students need to be able to engage with one another in practice sessions, especially to learn how to perform and display the exercise sessions that help manage disease.

The training at USC – which involves anatomical studies – is rigorous, and not for the faint-hearted.

“We look at the origin, the insertions of muscles and how that muscle performs a particular action.”



Building resilience among regional schoolchildren



As part of her studies, Deborah Kelsey has done five placements of up to five weeks in settings across Queensland's Sunshine Coast. Deb loves her experiences with school-age children but they have been 'eye-opening' and 'heart-breaking' at times.

Now in her final year of her Bachelor of Education - Early Childhood at the University of the Sunshine Coast (USC), Deb says her placement experiences have inspired her to tackle a Master of Education by Research next year, and perhaps even a PhD thereafter.

"I'm going to do something around language development or behaviour and learning. But I am also really interested in understanding how educators can build resilience in children."

"I want to understand more about how children cope in stressful situations and how educators can better support them when they are faced with tough times."

The Sunshine Coast region is a magnet for holiday-makers and retirees but as a long-time local, Deb observes that beneath the surface the region is a mix of socio-economic levels.

"I believe if we look deeper into the socio-economic groups in the area, the façade is not the reality. Not from what I have observed. I have had a few conversations with teachers in the area who require further support and resources to help children in their classrooms who have adversity at times."

Deb says although she is commenting on the basis of limited experience and she was not an expert, there seemed to be many children in foster care or who live with their grandparents or relatives.

"I think for those kids it's a combination of factors that contribute to their circumstances. The issues range anywhere from dealing with mental health to the extremes of losing family members to drug addiction."

"It was eye-opening for me. During one of my placements I was made aware that some of the students in my class had experienced a range of these issues. That's a lot for a kid to deal with. These issues seem to be becoming more common in and around the Sunshine Coast."

In addition to her education studies, Deb is a Student Ambassador for USC. She concedes she was no model student herself when at school but believes this helps her connect with struggling schoolchildren.

"I get to go out and visit schools and talk to kids about coming to uni. Raising aspiration and building that for kids who might feel like I did when I was a kid and didn't have any self-belief at all."

"I do a special presentation with kids who are at risk of dropping out of school. I tell them 'It is not all doom and gloom. You do not actually have to do everything straight away. I didn't start uni till I was nearly 25.'"

Indeed, Deb's journey to university education at USC – her family is from a trades background - was partly inspired by her sister, now two years out from her own USC degree and working as a kindergarten teacher on the Sunshine Coast. The sisters' university goals in turn inspired their mother who is undertaking a social work degree at USC.

Deb credits the closeness of her family, and their professional and personal relationships with their USC lecturers and tutors, with giving her the inspiration and strength to get through some tough times.

"All of my lecturers and tutors know me. They know my family. We have a learning sort of professional relationship, but we also have that personal relationship which has actually kept me going."

"I have two kids. A six-year-old and a two-year-old. I have incredible support from my family with babysitting. Half of my degree, if not more, all comes down to the people who have helped me for sure. Couldn't have done it without them."

Rebuilding regional infrastructure by keeping skills local



Civil engineering honours candidate Aidan Train is prepared to work in a big Australian city to finalise his training with an international engineering firm if he has to. But the young Queensland and proud Wailwan man is keen to return to the country to help rebuild aspects of regional infrastructure, with an agricultural focus.

"Big engineering companies prefer to train people up in their larger offices the first few years," he says. "I'm prepared to do that for a while, but ultimately, I do want to get back to either somewhere similar in size to Toowoomba or, ultimately stay regional."

Aidan rejected an offer from a Sydney sandstone university to instead study at the University of Southern Queensland, and has travelled and lived across Queensland from Darling Downs in the south, to Mount Isa and Cairns in the north.

"I want to be involved in more regional community projects because I've seen firsthand the infrastructure defects of some places. In some Indigenous communities it's really not good and I'm not sure where the fault is in that."

"There's some dodgy stuff that I've seen. For example, broken water mains at schools. I want to get into a position where I could fix some of the things I've seen that are not good from a construction perspective in regional areas."

After some struggles with his schooling, Aidan is now in his third of four years at USQ, supported by a professional careers pathway which links major firms to Indigenous students. USQ works seamlessly with CareerTrackers, a multi-year internship which provides contemporary industry experience and enhances his face-to-face learning at USQ Toowoomba.

"USQ is partnered with CareerTrackers. I have a bit of an advantage over my peers as I get to see how industry uses things like Excel. If you're doing a design assignment, you need to use some kind of tool to model it, as opposed to just doing it by hand and calculator, otherwise you take forever. Little things like that you pick up. You know you'll need to have those skills once you start working."

Aidan says civil engineering is focused on gradual improvements to important but standard processes, rather than innovation generally. However, USQ's formal relationships with big engineering firms directly benefitted the regions, even if these advantages were not readily apparent.

"We are not reinventing the wheel. We're doing stock standard processes that people would know, but we're getting good at them. At this stage it feels like I'm learning how to do what other engineers, whether they are in universities or not, would do, and then keeping those skills local. The benefit I see is in not having to hire someone from Brisbane to do the work."

Aidan says USQ has lived up to his expectations, especially with regard to better class size and the relevance of theoretical and practical work to real world problems in the regions.

Smaller class sizes suited his curious mind since he could ask industry and PhD lecturers and tutors direct questions. *"I haven't had a class with more than 20 people since first year."*

Aidan says the course was highly practical, and the content taught in the laboratories aligned neatly with general academic courses.

"Those are valuable. We've had one that goes in tandem with the course. It was the geology and geomechanics one that married (with) an academic course as it went through."

Aidan's parents are proud of him and happy for him to go anywhere with his degrees, but he feels the pull of his Wailwan heritage.

"In terms of coming back to community, it is important to do so. I've never really been in my country before. But for other people and for me in the long run, it's beneficial if I try and go back and do some good. Either in the communities I've lived in before, or in my community where my heritage comes from."



Outback nurses are the backbone of the community - in good times and bad

Small towns are under pressure as young people leave for the cities and farm incomes are stretched by years of drought, but nurses like Laura Wilson in far Western Queensland are putting others first.

Laura is a registered nurse, trained by the University of Southern Queensland (USQ). Now six years post-study, she works at Quilpie Hospital, in an outback town which bills itself as the gateway to Queensland's Channel Country.

Due to the isolation and remote setting of Quilpie, the town is unable to obtain a permanent doctor. Two agency doctors rotate every two weeks and are on call 24/7.

The local nurses are often the first person a patient sees as they walk through the hospital doors, whether the help needed is minor or life threatening.

"We stabilise them and do all we can within our scope of practice until we can get them to a tertiary hospital," Laura says. "We are very lucky to have the Royal Flying Doctor Service (RFDS) available who we use regularly and would be lost without."

Laura's daily working life typifies the greater responsibilities accorded to outback nurses and has more than prepared her for the next stage in her professional development, as a Rural and Isolation Practice Registered Nurse (RIPRN).

This enables rural and remote nurses in small towns with no doctors to do advanced training, allowing them to administer immunisations and a selection of scheduled medications.

"Here in Quilpie every day is different. No two days are ever the same and we come to work knowing anything could happen. Emergencies can be anything from cardiac arrests, snake bites, heart attacks, alcohol issues, car, horse or motorbike accidents. The list is endless."

Outback nurses double as ambulance staff, mental health staff and occasionally as midwives.

During the three years Laura worked at Cunnumulla Hospital, she helped deliver three babies while waiting for the RFDS to arrive.

Many out-patients attend Quilpie Hospital for pathology, X-rays and for tele-health conferences.

"If they have had a broken arm or a leg and been away for surgery to Toowoomba, rather than go 900 kilometres to Toowoomba for a follow up appointment we can dial in to tele-health to talk to the surgeon for a review. This saves the patient a lot of time and money, as it means the patient doesn't have to travel away for subsequent visits."



Poorer mental health is becoming more prevalent in the local rural community following continuous years of drought and attendant financial hardship.

"Out here, people have to send their children away to boarding school which is a huge financial burden on most families. Not to mention the strain of feeding cattle and sheep day in, day out. We have seen a lot more mental health presentations in the past couple of years due to the drought."

Laura credits the quality of the nursing training delivered by the University of Southern Queensland in preparing her for one of the toughest but most rewarding of medical workforce roles, that of an outback nurse.

"I loved doing my university degree through USQ. I love that the lectures and tutorials are made up of relatively small classes, so the tutors and lecturers know you by name. It was also very hands on and I had great placements. They tried as hard as they could, within reason, to push for rural placements if that's what you wanted."

The cons of rural nursing – the limited resources, being on call regularly, the double shifts, the high staff turnover – are outweighed by the pros, she says.

"It's a great opportunity to broaden your knowledge and to see a lot of different aspects of nursing. As a rural nurse, you're part of a community. You're part of a strong network of staff from nurses, doctors, to visiting dietitians, physiotherapists, speech pathologists and occupational therapists."

"Rural nurses can be a real advocate for patients and for patient care which you don't always get in the city."





REGIONAL STRENGTH. NATIONAL SUCCESS.

**Your partners in delivering
regional solutions**

Executive Director
execdir@run.edu.au

Chair
chair@run.edu.au

