

Southern Cross University

Transforming Tomorrow

Stories of impact for a changing world



Volume 1 - 2022

Transforming Tomorrow is a collection of stories of impact for a changing world. Stories that celebrate the tenacious, caring and committed people who make up the Southern Cross University community.

scu.edu.au/transforming-tomorrow

Cover image

Grayson Cooke false-colour rendering of clouds over the Taklamakan Desert in China. Within the image you can see sand dunes, a river system and a city underneath the clouds. It was produced using data from the USGS Landsat 8 satellite, accessed via Earth Explorer earthexplorer.usgs.gov

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**Southern Cross
University**

Transforming > Tomorrow

Stories of impact for a changing world.



Southern Cross University acknowledges and pays respect to the ancestors, Elders and descendants of the Lands upon which we meet and study. We are mindful that within and without the buildings, these Lands always were and always will be Aboriginal Land.

This collection of Southern Cross University stories celebrates changing lives through revolutionary learning and research with real impact. These stories look to the future with a sense of optimism and confidence, knowing that our graduates, students, teachers and researchers are some of the most caring, ambitious and driven humans in the world. These stories showcase a University full of inspiring people, unafraid of challenges.

From significant research that is restoring the precious Great Barrier Reef, to health graduates who are saving lives, to Indigenous scholars forging new paths, to educators creating innovative ways to teach and learn. This is an anthology of passion and impact, with each story speaking to the many ways that Southern Cross University, these individuals and their communities are Transforming Tomorrow.

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Imagine the best tomorrow.

One that comes about as a result of our collective efforts – in science, business, humanities, health, technology and education. One that entwines humanity with technology, the environment with wellbeing. One that makes justice and equity a priority.

Think for a moment about that future.
What does our best tomorrow look like?

Lee Adendorff writes



It's 2050. An electric research vessel bobs in the shallow crystal blue water, its solar-panelled skin glinting in the sunlight. The day is warm and ocean still as scuba divers ready themselves to dive. The scientist dips a probe into the water and grunts with satisfaction. There hasn't been a mass bleaching event for the past five years and the reef is starting to thrive, a wild array of creatures crawl, swim and slide over a brilliantly coloured, biodiverse underwater garden. A second vessel cruises up silently and docks. The citizen-scientists wave, cameras already fitted to their diving head caps. They've paid their weight in Ethereum to be here but are glad to do it. Their recordings will be sent in real time to a data bank on the mainland where geomaps are tracking progress as the reef reforms. The scientist smiles, thinking of the projections the reef is returning to where it was 100 years ago. And it all started with something so small.

Distinguished Professor Peter Harrison is one of the world's leading science communicators and marine ecologists.

He first observed coral spawning 40 years ago and has pioneered one of the most innovative techniques in modern reef science: engineering and seeding coral 'babies' to restore degraded reefs. Many Southern Cross students have had the privilege of working with him in the field, describing the experience as life-changing and career-shaping.

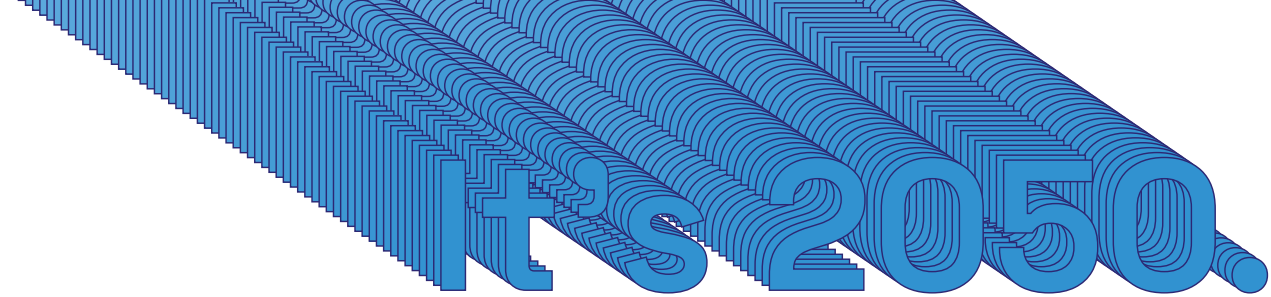
Not surprisingly, his vision of the future is far-sighted. "We're going to see more and more technology integrated with this science. It's quite feasible we'll have robots scanning the reef, frequently evaluating what's going on at a micro through to larger reef-scape levels. Looking towards the future, we all dream of cleaner oceans and healthier reefs but what counts is what we are doing today regarding climate change. We've just seen another mass bleaching event occur and these will only get more frequent unless we do something to drastically reduce carbon emissions and mitigate climate change," he said.

It's 2050.

“Looking towards the future, we all dream of cleaner oceans and healthier reefs but what counts is what we are doing today regarding climate change.”

The work of Southern Cross researchers is contributing to significant global understanding of the carbon cycle. Research into 'blue' or stored carbon by Professors Damien Maher, Dirk Erler and Bradley Eyre (who is also a member of the Australian Research Council College of Experts) and Dr Rachel Murray supported the United Nations' most recent and influential Intergovernmental Panel on Climate Change (IPCC). Dr Luke Jeffrey, whose work was also cited by the IPCC, leads ground-breaking research on the role trees play in methane emissions; while Professor Andrew Rose and Professor Erler are developing models for true circular economies in manufacturing, agriculture and food production as part of the Recirculator project.

It's not only scientists working to combat climate change. The University is home to a lively community of Education researchers who work on projects like Climate Change + Me. The platform is an opportunity for children to act as co-researchers, expressing their ideas about climate change and climate action and – who knows – honing their skills as climate activists of the future.



It's 2050. Sunrise. A farmer stands at the river's edge and enters the monthly measurements of her mangrove forest into a data tablet, connecting in real-time to COfarm, the carbon farming app that calculates the amount of carbon storage she has accumulated and the amount of credit she is due. She looks at the rows of dhunbarr heads swaying in the early morning breeze, and thinks of the encounter all those years ago that inspired her to plant native millet here. She had paid such careful attention to the soil but who would have thought they could get these yields?

The future of agriculture has already begun, says Southern Cross Regenerative Agriculture Course Coordinator Dr Hanabeth Luke.

"Time in agriculture is measured more in decades than years. The decisions we are making today will affect agriculture for a long time to come, no one understands this better than intergenerational farmers. We're already seeing an increase in local food systems like farmers markets, and like our hypothetical future farmer, I can see us working more with Aboriginal farmers to plant the right crops in the right places. Reinforcing community connections is key to our shared understanding of food production and how that can support healthy and productive farming systems.

"Precision farming with drones is already happening but we may see this diversify even further and integrate with carbon farming on a large scale. They say the best time to plant a tree was 20 years ago – today's seedlings will provide the hardwood forests and resources of tomorrow."

Introduced in 2020, the University's suite of regenerative agriculture degrees is exposing students to cutting-edge agricultural practice. It draws on the considerable expertise of scientists like Professor Terry Rose, who specialises in sustainable cropping systems and investigates ways to extract phosphorus – an essential ingredient in fertiliser – from waste products. It also draws on

the significant collective expertise of Southern Cross plant scientists, who have contributed decades of research and knowledge to developing more resilient, more productive and more sustainable plants for agriculture, forestry and industrial products. Associate Professor Tobias Kretzschmar, for example, is investigating better ways to grow high-value crops like black rice in subtropical and northern Australia. Other critical projects investigating the drivers of farmer decision-making, integrated pest management for macadamia farms, tea-tree innovation and expertise in soil testing and soil fertility have attracted multi-million-dollar research grants. Faced with mounting climate challenges, this research is building a brighter, more resilient tomorrow for our future farmers and for our critical agricultural industries.

"Precision farming with drones is already happening but we may see this diversify even further and integrate with carbon farming on a large scale."





Our researchers helped develop Rapid Repair wound-healing technology which will be catapulted into space to treat astronauts, repairing wounds in days rather than weeks.



It's 2050. The man swings his legs out of bed and wiggles his toes on the polished floorboards. Today is going to be a good day. Twenty years ago he would have been having coffee with a dozen different pills. Today it's a different story. Food is a medicine now. He has his six-monthly appointment this afternoon with his MUST, or, as they are more formally known, the multidisciplinary healthcare support team. The phone app and his body sensors help the team tailor prescriptions when he needs them. There are a lot less these days, now he's one of the two million Australians who managed to turn their diabetes around and go into remission. The depression he suffered all those years ago is a distant memory. He feels confident and happy, almost looking forward to their check-in. First though, it's his daughter's thirtieth birthday today and he feels grateful they can celebrate it together with her children. It's been so good to help out with the kids and feel part of their lives. He knows it's also contributing to his health. Who would have thought he'd make it this far and feel so great?

The COVID pandemic threw into sharp relief the fragility of our healthcare systems. Significant healthcare research at the University aims to bolster general population health in the future and make our hospitals and health clinics more resilient and functional.

Professor Jon Wardle is leading research at the National Centre for Naturopathic Medicine and says placing the patient at the centre of healthcare is key. "The philosophy of naturopathic medicine is about supporting the body's own ability to heal itself, and empowering patients to be an active part of their healthcare journey. It also offers potential solutions for addressing major healthcare problems now and in the future, through practices that integrate self-management and self-care.

"We have a powerful opportunity to change the dialogue around healthcare and the role it can play in achieving better outcomes for people's health. Naturopathic medicine will be part

of that, but there are so many opportunities to improve healthcare across the board. We could feasibly see a future where decreased levels of chronic disease mean hospitals are not constantly stretched and nurses burnt out too soon. Where people are more empowered to take charge of their own health. Perhaps even where the role of healthcare workers is flipped towards doing more preventive monitoring and maintenance to enhance wellness rather than responsive acute care. We can shift the focus to building better health and wellness, rather than just trying to fix problems when they become too serious to ignore."

Person-centred healthcare research has seen extraordinary results at the University. Associate Professor Gail Moloney's ground-breaking team is using psychology smarts to increase organ donor registrations. Dr Kirstine Shrubsole's research has seen drastic improvements in the treatment for aphasia (inability to communicate with speech) following a stroke. Associate Professor Christian Swann has contributed his expertise on mind and body to global sport through a collaborative mental health program for teenage athletes delivered at the Rugby League World Cup. Transformative research for the health landscape of the future.

"We have a powerful opportunity to change the dialogue around healthcare and the role it can play in achieving better outcomes for people's health."

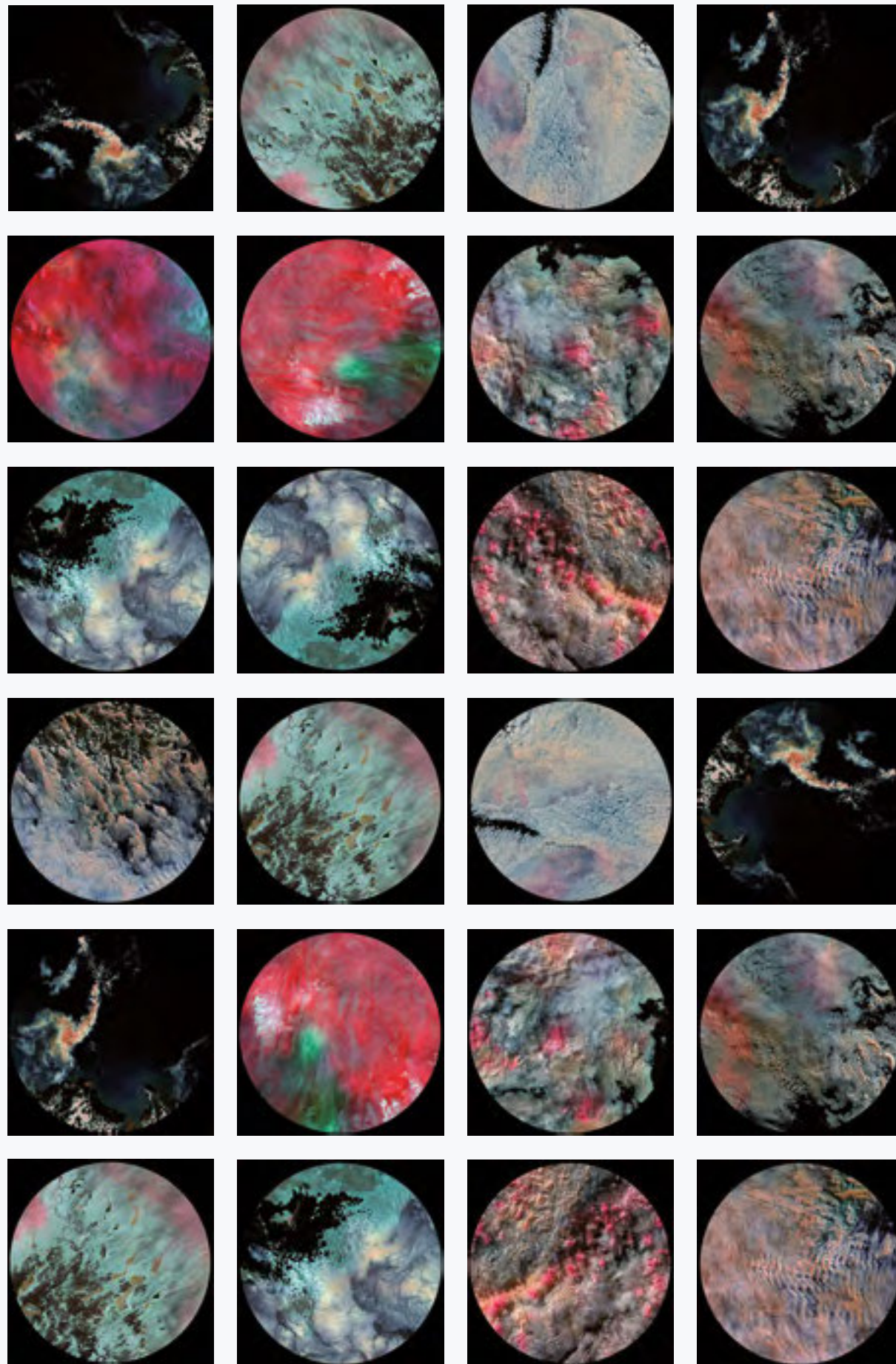
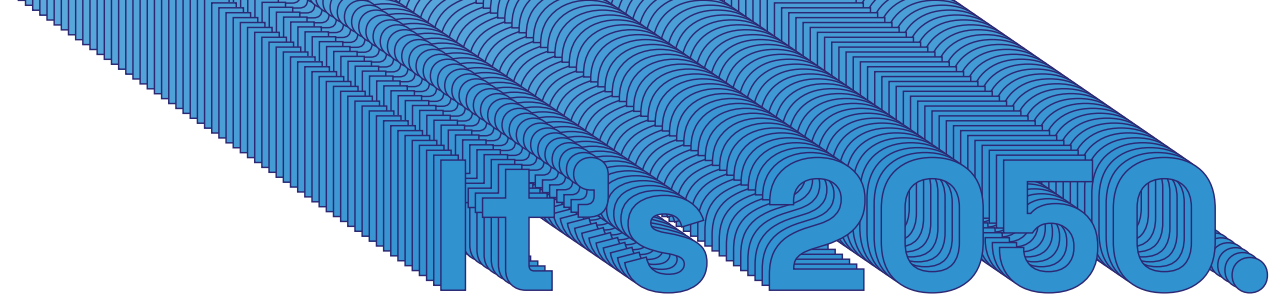


Image: Professor Grayson Cooke - Path 99, 2022 uses satellite images of clouds to highlight the importance of clouds to climate.



It's 2050. The evening has produced a magnificent sunset and the crickets erupt in a chorus. The designer takes a quick 3R with her audicam. It'll make a good addition to the sound that the car plays when it's about to turn on the headlights. She loves designing audio for cars. Since petrol vehicles were banned ten years ago, the streets are so quiet. So quiet in fact she needs to keep coming up with noise to make humans aware of danger or movement associated with all the driverless EVs on the road. It's so interesting how different brains interpret sound differently, she thinks. But some sounds are universal. Funny it was a musician and poet who worked that out and collaborated on the first car soundscapes they produced all those years ago. Although not so funny really; artists have always been observing and recording the human condition. They were the ones who first understood the nuances of the technology. The psychologists also took it to another level.

Art, science and technology have always been intrinsically linked says Associate Professor Grayson Cooke, and our best future sees them working together seamlessly.

"If we look forward 30 years into the future of this relationship, what do we see? Our future audio artist (in the paragraph above), using acoustic recordings to design soundscapes for EVs, lays out the ground rules; that art and technology must work together in the service of new and sustainable energy systems, that we exist as part of complex ecosystems, and that there is always more to learn from the more-than-human world.

Professor Cooke pushes the boundaries of science and art. His work has combined NASA Landsat and Japanese Himawari satellite data to map Australia's cloud layer and the elemental forces that shape the earth over time. "The combination of art and technology means we have a constantly growing set of possibilities for sensing the world. Developments in machine learning, big data and sensing and camera technologies already expand our knowledge and capacities in the commercial and public sectors, and give us amazing new artistic expressions. But the crucial question for the future is balancing these forces – my hope as always is that creative enquiry can mediate, moderate and influence for the better how we choose to live our lives."

An interdisciplinary approach to technology can take innovation to the next level. Take the game-changing marine surveys and habitat mapping using drones by Professor Brendan Kelaher or the AI software to identify potentially dangerous shark species being refined by alumnus Dr Andrew Colefax.

Southern Cross students, our digital creators of the future, are active participants in innovation, bringing concepts to life such as a VR job orientation app for people with disability.

"Art and technology must work together in the service of new and sustainable energy systems. We exist as part of complex ecosystems, and there is always more to learn from the more-than-human world."



“We need so many things to make a better world, but nothing else will matter if we fail to protect our oceans.”



Jordan Ivey

Devotion to the ocean

There was a time when Jordan Ivey’s life was treading water. Today, thanks to Southern Cross University, he is pursuing a rewarding and important career in marine science and hopes his experience can inspire other Indigenous students, Michael Jacobson writes.

Diving deep, Jordan Ivey is in his element. To one side, across the Pacific, lies Vanuatu, land of his ancestors. On the other side is Australia, land of his Bundjalung paternal heritage. Yet it is under the water, with the ocean as a bridge between cultures, where Jordan feels most at home.

“No matter where you live on our planet, we are all connected to the sea,” says the Southern Cross University marine researcher. “For me, that means the Pacific, from

the NSW Northern Rivers to the Great Barrier Reef and across the South Seas. My cultural heritage gives me a unique perspective on this area. I am part of it and it is part of me.”

Jordan was just eight years old when he discovered his element. He remembers diving beneath the clear blue waters off Vanuatu, with colourful and curious fish swimming all around and the coral like a living Impressionist painting. All was in harmony, which

was also in stark contrast to what was happening in his life on the land. “My parents separated after that trip. It was tough. I was eight. Eight was hard. So, I went swimming. Under the water, everything made sense. I felt safe. I felt alive and hopeful. I felt at home.”

Move forward a couple of decades and, as Jordan speaks, it is easy to envisage a seamless transition from a young boy seeking solace under the water to a young man practising marine science. Glance through Jordan’s credentials – including several scholarships, awards and projects – and the assumption becomes even more compelling.

Except Jordan’s journey has been far from seamless. One of the reasons his scientific dedication is so pronounced, and his environmental passion so real, is because the life he now leads almost never happened at all.

Thinking back to school days, Jordan recalls trouble in class, anger, trips to the counsellor and difficulty with learning. The lowest point came when a careers advisor told him he was not smart enough to achieve his dream of working with animals. Already struggling with everyday life, this was a telling blow: “Yeah, knocked me around, that one,” he says. “Knocked me back a fair bit.”

Jordan barely graduated from high school and his options were limited. At home in Lismore, he worked as a pizza cook, supermarket employee and mechanic, paying the bills and making his way, though without the fulfilment he craved or any real idea of how to change things.

Then came the impetus he needed, via entry to Southern Cross University through a new education pathway program called Preparing For Success. Scholastically inspired for the first time, Jordan leapt at the opportunity and was accepted into a Bachelor of Marine Science and Management.

A scholarship enabled him to study full-time and more opportunities arrived when he was awarded a prestigious New Colombo Plan scholarship in 2018. This took Jordan to the University of the South Pacific in Fiji, where he implemented his own research program to help Indigenous communities protect against the decline of coral reef ecosystems. He also completed an internship with the educational research centre, Reef Explorer Fiji Inc, working on coral restoration, temperature studies and other marine research.

“Reef Explorer taught me a lot about setting up marine protection areas. I spoke with village elders about coral restoration, about fish stocks, about the need for species richness to ensure the health of the food chain,” says Jordan.

This engagement with local Indigenous groups continues. In November 2021, Jordan mentored and learned from the traditional owners of Lizard Island, opening communications and receiving their input into reef care, island history, fishing and ecological knowledge. He is also heavily involved with the Australian Institute of Marine Science (AIMS) as a member of its Indigenous Partnerships Team and as an Indigenous Training and Capacity Officer.

“We are looking at things like consent to research on Country, engaging traditional owners’ involvement, fostering a coming together of culture, history and science for the betterment of the marine environment,” he says. “It includes enabling training and personal/career development opportunities in marine science and the marine sector.”

Reef care is one of the biggest priorities, driven by the increasing vulnerability of the Great Barrier Reef via factors such as rising water temperatures and coral bleaching. Southern Cross University is a leader in reef research.

Recently, Jordan was back on the Reef as part of the Coral Larval Restoration Project team led by Distinguished Professor Peter Harrison. The project aims to enhance the rate of recovery of depleted coral populations by culturing and supplying millions of coral larvae and then settling them on damaged coral reefs.

“We need so many things to make a better world, but nothing else will matter if we fail to protect our oceans,” says Jordan. “They drive our climate, provide our oxygen and shape our Earth’s chemistry.”

He wants others to join him, particularly Indigenous students, using his example as proof that doors that once seemed closed can open to reveal a new future. He wants to help others pursue their passions, just as he was helped to pursue his own.

Much has changed from that eight-year-old boy discovering the ocean to a marine scientist striving to protect it. Jordan agrees, noting in his quiet way that it is something to think about.

And he will, although not right now. There is a dive trip planned for the afternoon and he is leading it.

Soon he will be in his element again – under the water, between cultures, and right at home.

- Michael Jacobson

[Learn more about Transforming Tomorrow](#) ➤



“We are looking at things like consent to research on Country, engaging traditional owners’ involvement, fostering a coming together of culture, history and science for the betterment of the marine environment.”

“Under the water, everything made sense. I felt safe. I felt alive and hopeful. I felt at home.”





Lisa Blair

Sailing for climate action

Lisa Blair is a four-time sailing world record holder and citizen scientist on a mission to take community action on climate change around the world with her. In 2022 she circumnavigated Antarctica solo and unassisted, setting a new speed record and collecting important data on ocean health and climate change along the way.

A life spent on the open ocean means Lisa Blair is at home amongst turbulent seas, wind, storms and swell just as she is with a calm, glassy horizon and a light wind in the sails. While powerful, ever-changing and deadly strong, she understands that the ocean still needs nurturing and protecting. That's why she sees sailing and fighting for climate action as something that goes hand in hand.

Her boat, vibrantly coloured and aptly named 'Climate Action Now' is hard to ignore. She describes herself as an

ocean sailor, adventurer, keynote speaker, sailing teacher and published writer. In 2021, she was named Southern Cross University's Alumnus of the Year for her inspiring story as a sailor, educator and environmental activist.

"Sailing for me is all about just testing myself and overcoming these challenges. You have to harness the wind to get from point A to point B and you've got to figure it out and make these repairs and make the boat get across an ocean all on your own and I just love that

challenge. The more I sail the more I want to sail,” she said. “I’m really aware that there’s this incredible platform I’ve been able to create to amplify this climate action message. I sailed through the Southern Ocean which is a relatively uncharted part of our planet.”

Lisa set her first world record in 2017 when she sailed solo around Antarctica with one stop, but she nearly didn’t live to tell the tale. As she circumnavigated the icy continent, 1,000 nautical miles from land amidst a ferocious storm, the mast of her boat came crashing down.

“It put me in a big survival situation where I was up against massive waves and gale-force winds. Throughout the night I was trying to save my boat and my own life. I was forced to take to land, which meant I wasn’t able to break the overall speed record,” she said.

After her Antarctic adventure, Lisa continued to set new records when she sailed solo, non-stop and unassisted around Australia, becoming the fastest monohull to do the trip and the first woman in history to complete the voyage.

Not one to back away from a challenge, Lisa once again set her sights on breaking the overall speed record for sailing around Antarctica. In February 2022, she left Australian shores once again, heading south to Antarctica. Arriving back in Albany, Western Australia, after three months at sea, Lisa broke the world record by an incredible 10 days.

“I sailed solo, nonstop and unassisted around Antarctica. This voyage was to repeat the first world record that I established in 2017, but this time I did it without stopping and broke the overall speed record.”

She sailed not just to break world records and challenge herself, but to raise awareness on a global stage about the need to act on climate change and collect important environmental data along the way.

“I love sailing and I love just exploring our oceans and testing myself, but also I’m really aware that there’s this incredible platform I’ve been able to create to amplify this climate action message,” she said.

“I’ve put my hand up to the scientific communities around the world and we’re going to be doing general ocean health readings, looking at salinity levels, the dissolved carbon dioxide levels and acidity levels,” Lisa shared to her online community before setting sail in February this year. “I’m also going to be taking samples of micro plastic along the way that we’re going to process in Australia and I’m looking to put a mobile weather station on board the boat so that we can link that back in to the global weather modelling system.”

She also committed to six months of free talks at schools around the world to share her adventure narrative of solo-sailing, citizen scientist research, and climate education. “I want to provide some education around ways they can improve their commitment to our climate

and our environment through their own households and communities and that’s where the post-it note campaign comes in,” she said.

‘Climate Action Now’ is wrapped in a colourful design of post-it note messages from the community about environmental action. Messages such as ‘I never give up and encourage others to do the same’, ‘I protect our trees’, ‘I don’t eat meat’ and ‘I teach my family to recycle’ are just some of the many messages contributed by people from all over the world which decorate Lisa’s boat, or are shared on her digital platforms. “I studied visual art and education at Southern Cross so I want to make sure that everything I do in life is still fun, playful and colourful. When I first purchased my yacht, I changed the name to Climate Action Now, and worked with my sister Shelley to design this post-it note campaign which includes messages from people in the community about things they’re doing for the environment to work towards a better future. I collated all of these and we turned it into this colourful design, so behind me is actually the community’s voice,” Lisa said.

“I love sailing and I love just exploring our oceans and testing myself, but also I’m really aware that there’s this incredible platform I’ve been able to create to amplify this climate action message.”

“The goal is to inspire individuals that we have the power to create change, it just starts with one small action. For me now my sailing is less about just being a single girl on a boat sailing around Antarctica or anywhere else. It’s about carrying this community voice with me and inspiring positive change.”

- Caitlin Lea

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Photographs by Dean Koopman



**CLIMATE ACTION
NOW**

security for up to eight people and is easily expanded to accommodate more. Bathroom facilities, along with social, storage and utilities spaces, are all features of this versatile product that has a lifespan of 20 years.

Its humanitarian value is not so easily calculated. Best just to say that Humanihut provides a refuge for refugees; a place for the displaced; and is a multi-faceted and superior solution literally under one roof.

Speaking from his home in Adelaide, Neale describes Humanihut as breathing space: “It enables people in need and the authorities charged with their care to take a breath, to be safe and comfortable, and to have the space and time required for more permanent arrangements to be made. It is rapid response with a deep impact.”

The catalyst for Humanihut came from Neale’s experience in 1999-2000 in East Timor, where he was deployed as a Military Observer to the UN Transitional Authority that was controlling the repatriation of refugees from West to East Timor.

“About 3500 people a day were coming back, transported in columns of open trucks across a border that was just a Bailey bridge and a customs hut,” he says. “It was a poorly established site and when it started to rain, the refugees were suddenly freezing and there was nowhere for them to go for shelter. Many went down with exposure.

“We learned there was an abandoned school about 20km away, but there were difficulties in gaining permission to accommodate the refugees there, as well as in convincing the nervous drivers to transport them. The refugees continued to suffer. I just thought we could do better.”

Though Humanihut’s seed had been planted, it was not until 2013-14 that the concept really developed, this time via another humanitarian crisis as tens of thousands of

refugees of the Syrian War crossed into Jordan and Lebanon.

“People were being housed in poor quality tents and sheds. They were on dirt floors. They were in facilities that were dreadfully hot during the day, freezing at night and makeshift at best. Every six months the tents would need to be replaced, in the hundreds,” says Neale.

“I saw a video of one family that had been given a new tent and the mother was saying how grateful they all were. Then she pointed out the leaks, the draughts, the defects and so on. It was clear that this structure, despite being new, was not going to last either.”

“It was then that I started thinking in greater detail about the need for a superior form of temporary accommodation; something that could be rapidly deployed to provide shelter, comfort, cleanliness, security and dignity for people in need.”

“Power, clean water and sewerage were fundamental, and I wanted something quick to transport, install and maintain. And I wanted durability. Something that would last not just a few months, but years, because tragically the fate of refugees can be to live in these camps for many years.”

“Eventually I also began to consider applications outside of the refugee crisis. Emergency shelter and administration, for example, and remote mining and construction scenarios. Even military accommodation. As my design evolved, what took shape was an accommodation option enabling a high standard of living conditions and which was easily transported, deployed, dismantled, stored and accessed again when required.”

Accolades have followed. Humanihut was shortlisted from more than one million global start-up and corporate

venture nominations to be listed 63rd in the 2016 Disrupt100 list of businesses with the most potential to influence, change or create new global markets.

Two years later, Humanihut received the Good Design Award for Best in Class for Engineering Design. In 2019, Humanihut was the Overall Winner in the Design Strategy category at the Business SA Export Awards, followed by being named Estate and Infrastructure Business of the Year at the Defence Industry Awards 2020.

As Humanihut adapts and evolves, Neale continues to access the knowledge gained during his study with Southern Cross University. He graduated with a Master of Professional Management in 2005, the degree completed online while he was travelling the world for Minelab, a leader in metal detecting technology. In this role, Neale advised the United Nations and many countries on the eradication of land mines and unexploded ordnance.

“It was a challenge, but I came to understand that what I was doing through Southern Cross University was also shaping the work I was doing for Minelab,” says Neale. “Today, my home office still has all my material from my Masters. I use that material today in relation to Humanihut.”

With offices in Australia, Europe, Saudi Arabia, North and South America, Humanihut’s growth reflects both quality of product and urgency of need. Meanwhile, the accommodation and field infrastructure applications of Humanihut are expanding to include temporary hospitals, immigration centres and even penitentiaries.

Admittedly, there are hurdles ahead, particularly in relation to government and corporate discretionary spending post-pandemic. But if anyone is more than ready and equipped to convince potential clients of the enduring value of the temporary, it is Neale.

Such determination is part of his human nature.

- Michael Jacobson

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Photographs supplied by Humanihut



Since Neale Sutton launched Humanihut in 2013, accolades have followed.

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Professor Anne Graham



Seen and heard

In 2018, Southern Cross University's Professor Anne Graham was made an Officer of the Order of Australia (AO) for her contribution to childhood studies and children's research. In light of devastating recent events, her dedication to young people is stronger than ever.

In terms of age, the United Nations Convention on the Rights of the Child is now well into adulthood. Born in 1989 as a global commitment to the civil, political, economic, social and cultural rights of every child without discrimination, Australia ratified the treaty in 1990. All other countries bar one – the US – have done so too.

At Southern Cross University, the treaty is fundamental to the mission and vision of the Centre for Children and Young People (CCYP). Led by its Founding Director,

Professor Anne Graham AO, the CCYP has achieved plenty in relation to children's rights, wellbeing and safety. Yet as recent events demonstrate, there is always much to do.

"Australia has been rocked by three massive recent crises – the bushfires of 2019-20, the floods of 2022 and, of course, the global pandemic," says Anne. "Their impact has been seen vividly in the grief of lives lost, thousands of homes and businesses destroyed, schools closed and public spaces unusable, all contrasted by extraordinary

courage, kindness, generosity and resilience as people united in the task of recovery." Anne points out that the impact of such events demands constant vigilance to ensure that young people – especially the most vulnerable among them – are well supported.

"Many children and young people have experienced loss too. Much that was familiar to them has changed. While many disaster-affected children ultimately cope and demonstrate resilience, they are nevertheless at higher risk of mental health symptoms compared with unexposed peers. This is why it is important for them to have opportunities to share what they know, need and can contribute in adapting to adverse life experiences. They do have important things to say and they do have agency."

"If young people are to feel known, cared about and respected, they must be given opportunities to participate in decision-making that impacts their lives. This means we need to hear from them, listen to them, respond to their questions and concerns. These are the ones who will be faced with the world's biggest issues, like climate change and world peace, in years to come."

"We need to ensure they are well resourced to create this better world. Out of the recent crises they have seen and experienced the hope that comes from communities working together. In the case of Southern Cross, they have seen their university step up as a place of refuge and support."

An ideal choice

A sociologist and Professor of Childhood Studies, whose background is in primary teaching and teacher education, Anne has spent years working for children's rights and was an ideal choice to lead the CCYP.

Launched in 2004, it began as a collaboration between the former School of Education and former School of

Law and Justice and was a bold move by a small, regional university trying to build credibility around social science research. As the university has continued to grow, so has the scope of the CCYP.

"Our goal from the start was to be consistent with the UN Convention on the Rights of the Child," says Anne. "We were interested in exploring and observing those rights through the participation of children and young people in research. This was a vastly different approach because previously the tendency had been to conduct research on or about children, not with them."

"However, conceptions about children and youth were beginning to change and in recognising and respecting that, I believed the CCYP could provide a distinctive contribution. Accordingly, we have focused on research that is ethical, robust, relevant and, most of all, participatory. Furthermore, by also listening to the perspectives of young people and adults together, we can better understand challenges and work more collaboratively towards strategies and solutions."

Under the auspices of the CCYP, Anne has led more than seventy research projects – most focusing on children's rights, wellbeing and safety – and she continues to work closely with the education sector, other state and Commonwealth government departments, key statutory bodies, national and international NGOs, and regionally based organisations.

"We are unashamedly about impacting policy and practice in relation to children's lives," she says.

"This is so important in the way children adapt to change manifested by major events in their lives – loss, grief, suicide, separation, natural disaster, forced migration and other issues. By gathering evidence from young people about their experiences,





and what works, what does not and what could, we can develop policies, programs and resources that help to equip them when those big events occur. Again, you need only look at the past three years in Australia to see how quickly this can happen.”

The global pandemic has provided clear evidence of this. Anne says that when COVID struck out of the blue in 2020, the CCYP had to think and work quickly to capture, analyse and implement ideas and strategies to help young people and schools with ways to negotiate lockdowns, cope with isolation, manage remote learning, transition back to school and adapt to rapidly changing circumstances.

The role of technology is another example, because it has changed the way young people relate, learn, socialise, see themselves and more.

“Young people have different ways to express themselves, project themselves, and sometimes this can be damaging. We talk to them about vulnerability, challenges and rights. What we don’t do in our research is treat them as broken or less than.”

“If young people are to feel known, cared about and respected, they must be given opportunities to participate in decision-making that impacts their lives. This means we need to hear from them, listen to them, respond to their questions and concerns.”



Seasons of change

Two programs in particular – Seasons for Growth and Stormbirds – demonstrate the merit of the CCYP’s approach to research and impact.

Seasons for Growth provides children, young people and adults with knowledge and skills to adapt to significant change in family life following death, separation, divorce and other loss experiences. Stormbirds is a small-group psychosocial education program that provides an opportunity for children impacted by natural disaster. Both have driven programs that embrace a range of contexts and are highly reputed. More than 300,000 participants have engaged in programs in Australia, New Zealand, England, Scotland and Wales, in schools and community-based organisations, as well as in detention and prisons.

“We are providing opportunities for young people to learn knowledge and skills for life – naming and managing feelings, making good decisions, setting goals, knowing who and where they can reach out to for support,” says Anne. “Guiding them to deal with change, adversity, uncertainty and grief is at the essence of this work – helping them to understand their reactions are normal and that ‘I am not the only one’.”

Anne says there is never any trouble in getting children and young people involved. The CCYP is diligent in creating a safe and creative learning opportunity for them to be heard, connected and able to engage in problem-solving. In this way, they are affirmed as experts in their own lives.

Unfailingly optimistic, Anne says the world is in good hands with today’s young.

“Young people do want to change the world for the better. From the viewpoint of transforming tomorrow, they are the ones who will be the agents of that transformation. They have the right to participate in the making of that tomorrow. That is why we need to hear from them, listen to them and work with them. If we do, that will be a momentous shift for good.”

- Michael Jacobson

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Distinguished Professor Peter Harrison

Restoring the reef

For marine scientists such as Southern Cross University's Distinguished Professor Peter Harrison, protecting the Great Barrier Reef is a mission to prevent a precious asset from becoming a precious memory.

For 500,000 years, the Great Barrier Reef has been one of our planet's most precious assets. The largest living system on Earth, its rich corals span an area visible from space.

If only majesty meant immunity.

However, because it does not, the Great Barrier Reef is a treasure under pressure due to factors such as global warming, mass coral bleaching, the crown of thorns starfish and terrestrial run-off. Its plight is real, rapid and sadly symptomatic of other losses of species and systems throughout the natural world.

It is also why scientists like Southern Cross University's Distinguished Professor Peter Harrison are working tirelessly to prevent this precious asset from becoming a precious memory.

Peter's commitment covers more than 40 years of research, teaching, initiative and influence in better understanding the Great Barrier Reef and other reef regions throughout the world.

A globally acknowledged scientist, Peter would never underplay the gravity of the situation on the Reef. Then again, spend a little time with him and what comes across is a sense of hope and even optimism. As Peter quips in typical laconic style: "The good news is that it's not all bad news."

The latest good news comes via history-making developments off Heron Island. It was here in 2016 that Peter and other Southern Cross University students conducted the first Coral IVF Trial on the Great Barrier Reef.

Coral IVF, or larval reseedling, involves re-establishing coral on damaged reefs by collecting millions of coral eggs and sperm during the spawning season, growing them into baby corals, then releasing them directly on to degraded areas of the Reef.

Five years later at the end of 2021, the first coral babies from that 2016 trial produced the next generation as part of the annual mass coral spawning event. Researchers found 22 large coral colonies had survived a bleaching event, grown to maturity, and the coral polyps were filled with eggs and sperm ready to spawn. Other smaller colonies should be breeding during 2022.

“The larvae generated from these spawning corals have dispersed within the Heron Island lagoon and may settle on patches of reef nearby, helping to further restore other reef areas that have been impacted by climate change,” says Peter.

“The ultimate aim of this process is to produce new breeding populations of corals in areas of the Great Barrier Reef that no longer have enough live corals present due to being damaged by the effects of climate change.”

Peter’s delight is clear, especially given a year earlier in 2020 he had led a research expedition to the Whitsunday Islands where, due to another coral bleaching event, a mere 10 per cent of corals were found to contain eggs and sperm.

“I know how long coral takes to recover and how that affects so many other forms of life for which the coral is their primary habitat,” says Peter. “Also, some corals are not fast growing and face harder battles to survive. That is why we are striving to better understand the recovery stages of reefs so we can continue to enhance and apply this knowledge to coral larval restoration.”

The first time Peter dived the Great Barrier Reef, his biggest task was to keep breathing as what he saw took his breath away.

“It was the late 1970s and I travelled up to Townsville to do my marine biology degree at James Cook University. I joined the dive club and we went out to the Palm Islands,” he recalls.

“Once in the water, I saw things that I had previously only seen in pictures – only this was better. I was enthralled by the sights of the Reef, the shapes, the sounds, the corals, the fish and everything that was part of the system. It still inspires me today.”

Back then, the sexual reproduction of coral was a mystery, the prevailing view being that fertilisation happened within the coral itself, with fully formed coral larvae being released.

It was not until an October night in 1981 that a bunch of marine biology PhD students – Peter among them – discovered otherwise.

Diving by torchlight, they watched in wonder at an “underwater snowstorm”, the effect of millions of microscopic eggs and sperm filling the water in a mass mating ritual. The discovery immediately broadened scientific understanding. It also launched Peter’s career.

A few months later, Peter was shocked to see many of the corals he was studying turn white and die as a result of the first major coral bleaching event on the Great Barrier Reef. Catalysed into thinking about coral restoration, his innovative idea was to capture some of the coral spawn that would otherwise have drifted away – to become fish food or simply to disintegrate – without the larvae settling on or renewing the damaged reefs.

Today, science and technology have come so far as to enable Peter and his teams to collect large quantities of coral spawn from heat-tolerant corals – having themselves survived bleaching – and to rear millions of baby corals in specially designed coral nursery pools on the Reef itself. When the time is right, they are delivered on to target areas to restore and repopulate damaged reefs. The potential is there to make a difference to reef recovery on a global scale.

In 2021, Southern Cross University honoured Professor Peter Harrison as the inaugural recipient of a Distinguished Professorship, the University’s highest academic honour.

While humbled by such recognition of the contribution he has made, Peter spoke about the contributions to come and of an enduring legacy: “There are a lot of new and exciting projects and important research by research students and staff in my team, and we are constantly evolving the restoration techniques to be more successful for future larger scale reef trials.”

This is the challenge of tomorrow, one to be tackled by the next wave of young marine scientists.

“I am so energised by their passion and conviction,” says Peter. “We are making strong progress in smaller scale larval restoration, but we must build a consortium of people and organisations willing to drive our knowledge processes forward.

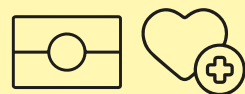
“Yes, the challenge to save corals and reefs is great, but think about how much greater the potential loss will be if we don’t succeed. The Reef is simply too important.”

“I saw things I had only seen in pictures. I was enthralled by the sights of the Reef, the shapes, the sounds, the corals, the fish and everything that was part of the system. It still inspires me today.”

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Both our Speech Pathology and Occupational Therapy degrees have an optional major in Indigenous Health.



More than 80 per cent of Southern Cross health students are women; in some disciplines, such as Nursing, this figure is closer to 90 per cent.



Sally Smith

Behind the mask

Sally Smith was 37 and the mother of two growing boys when she enrolled as a mature age nursing student at Southern Cross University in 2015. Today, she is a leader in her profession, a role model for young nurses and a shining light for her patients.

On a warm evening back in March 2020, Sally Smith headed home after her shift at The Tweed Hospital's Surgical 1 Unit – a busy, 30-bed, post-theatre recovery ward. Next morning, she returned to find a state of total transformation. Overnight, Unit 1 had become a 15-bed COVID isolation ward.

Flash forward two years and Sally recalls both the speed of that transition and how, amid the uncertainty of what COVID-19 was and might mean, the certainty of the hospital was as impressive as it was necessary. And nurses like Sally were immediately on the frontline.

“In those few hours, we went from providing nursing care in our normal scrubs to wearing the full COVID protective gear and adhering to entirely new protocols,” says Sally.

“Situations changed quickly, sometimes during shifts. When visitor hours had to be stopped, you could see the effect it had on patients’ mental and spiritual health. For me and my nursing colleagues, it reinforced our resolve to be much more than a clinical presence. We are the ones most in contact with the patients. You are close to them, actually and emotionally. You hear their stories and situations. You are by their bedsides.

“The thing is, for all that we were learning as we went along, I felt we were in control the whole time. There was never any sense of panic and that was especially important for our patients. Care and calm were always key.”



Care and calm ... two qualities that embody Sally's approach to a career that is still relatively new and yet has progressed rapidly since she graduated from Southern Cross University with a Bachelor of Nursing in 2018.

The first of many accolades was a NSW Health Excellence in Nursing and Midwifery Award for her Surgical 1 Superhero Awards program, initiated during her first year as a fully credentialled nurse as part of The Tweed Hospital's graduate program. "Every month we focused on different superhero qualities as they applied to care. Qualities like most passionate, hardest working, most reliable and so on," says Sally. "Nominations came in and we celebrated the monthly winner with an award presentation and dress-up day. The winners received a badge and a cape. It was a lot of fun, a light touch, because we do deal with difficult and sad situations in our working days. Taking the time to acknowledge each other is important."

“When COVID-19 struck, it reinforced our resolve to be more than a clinical presence. Sometimes just a smile was enough, even if it was a smile behind a mask. Sometimes, the small things you do as a nurse have the greatest impact.”

Further acknowledgement came in November 2020 when Sally was awarded the position of Clinical Nurse Specialist 1, a major achievement for a 3rd year Registered Nurse. This was followed in February 2022 with her elevation to Quality and Safety Manager for The Tweed Hospital.

This new role involves overseeing quality of clinical practice, auditing practice and collating reports to deliver the highest standard of patient care. It is important work given the impending move of all operations to the new \$723.3 million Tweed Valley Hospital at Kingscliff, scheduled to welcome its first patients in 2023.

The spinning plate days

Not bad progress for someone who remembers her first days on the ward as “like spinning plates while trying to keep your head above water”.

“Yep, after graduating, the first three months was like that,” recalls Sally. “It was such a rush and I mean that in both senses of the word. It was a rush in terms of how busy it was, but also in how satisfying it was. It was hard, sure, but maybe I had an advantage because I was older.”

Sally was 37 and a mother of two boys when she enrolled as a mature age nursing student at Southern Cross University in 2015. The preceding 10 years had been spent in remote Karratha (WA), where husband Gavin worked in the mining industry and Sally in administration.

“Karratha is very much a working town. It has about 7000 people, it's hotter than hell, the air-conditioning is a blessing and it's easy to get locked into a routine of go to work, come home, go to work, come home,” says Sally.

Keen to avoid that trap, she sought diversion in a pursuit that is anything but routine – mountain-biking – culminating in the carving of 30km of track over red rock and spinifex behind the Outback town. Mountain biking is still one of Sally's favourite things in the world and she has continued with it since the family returned to the east coast. “I coached some women mountain bikers in Karratha and we had such fun,” she says. “When we came back to Northern NSW, I started coaching teenage girls and taking part in mountain biking weekends with older women. I even started a new group, MTBher, to encourage women to join the mountain biking community.”

In the past year, the demands of work meant Sally was not able to devote as much time to coaching, but where possible she still finds the time for the bike and the bush trails.

“It's the adrenaline rush that I love. Rush, that word again. There is a real sense of achievement. Once you start, you build step by step and every step has you asking yourself: How good was that? What can I do next?”

“I want others to enjoy that feeling too. Faster. Higher. Sometimes in life, we lose the desire to do cartwheels. I don't want that to happen. Mountain biking is my cartwheel. It lets me be a little bit scared again and I love it.”

It is patients who remain at the forefront of Sally's motivation, which is why she is combining her new post with an ongoing ward presence. She firmly believes that clinical interaction with patients, nurses, doctors and other hospital staff will better inform her administrative decision-making. Plus, she just loves nursing.

“We need more young nurses and studying nursing at Southern Cross University is an amazing opportunity,” she says. “Sure, it is demanding, but it is so worth it.

“I remember, six months in, when I was no longer spinning plates, I took some time to reflect on nursing and it struck me just what an incredible job it is. That feeling hasn't changed. It is phenomenal. It is knowledge. It is caring. It is emotion.”

“It is me.”

- Michael Jacobson

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Dr Cooper Schouten

Sweet success



The Bees for Sustainable Livelihoods research group led by Southern Cross University's Dr Cooper Schouten is bringing economic and community benefits to the people of the Indo-Pacific, where partnerships and opportunity are more than just a buzzword.

When the talk turns to bees, the conversation heats up and the tea goes cold. Dr Cooper Schouten's story rises from Southern Cross University's research apiary and travels on the air, north-west for almost 4500km, before settling in the steaming forests of the Indonesian island of Sumbawa. Here is the home of the honey hunters.

The story Cooper tells is an epic par excellence. Of transporting precious honey on horseback down precarious mountainsides, across roiling rivers and through dense forests. Of watching amazed as young honey hunters pray to the spirit of the trees before scaling

them to harvest the wild honey, 30m up, at night and without ropes. Of hearing old village shamans speak of an ancient earth-lunar thread sewn between bees, honey and the full moon. Of unlikely friendships made in isolated communities in remote places. Of lives changed by bees. And of Cooper's own life, also changed.

"When people ask me how I got into bees, I say it was the bees that chose me," says Cooper, before he turns to the older man seated opposite. "The bees and David."

David is esteemed scientist and former Southern Cross University Professor David Lloyd. Now happily retired,



he has dropped by the apiary to catch up with Cooper over a cuppa.

It was David who nine years ago took burgeoning environmental scientist Cooper to Timor-Leste as part of a DFAT-funded New Colombo Plan Scholarship around opportunities and strategies for improving tertiary science education in rural communities. It was there in the Timorese highlands that Cooper realised he could combine his passion for the environment, bees and community development.

With David's recent retirement, Cooper now leads Southern Cross University's Bees for Sustainable Livelihoods research group. Funded by the Australian Centre for International Agricultural Research (ACIAR), the project team is seeking to increase the profitability and resilience of smallholder beekeeping enterprises in Papua New Guinea and Fiji.

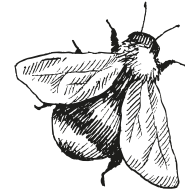
"When people ask me how I got into bees, I say it was the bees that chose me."

"There are so many great outcomes," says David. "For me, the biggest thrill is when people realise that a better life is within their grasp. It is buzzing away, all around them. It means their children get to school, that people are safer, healthier and happier. They're earning money – an extra \$1k per year can quadruple smallholder farming family earnings – so they can repair their homes, expand their gardens, and afford what they need to make their lives and livelihoods much easier."

Adds Cooper: "As a beekeeper I may be – or should I say 'bee' – a little biased here but identifying strategies to generate income without damaging the environment is critical to sustainable development both in Australia and overseas.

"And bees are a pretty great way of doing this. We're not just working to do more beekeeping, but to learn how we can improve the effectiveness of beekeeping interventions. Of course, not everything is as smooth or as sweet as honey. The global pandemic certainly brought challenges for international agricultural research for development during 2021 and it continues to be influential.

However, while COVID-19 prevented travel, Cooper says Bees for Sustainable Livelihoods' partnerships in the Indo-Pacific have provided excellent grounding and ongoing capability around working with local communities to continue research and capacity-building for partner countries and Australia.



This is particularly encouraging in terms of the understandable urgency around honey bee biosecurity and food security. Currently, concern continues to surround the fatal honey bee disease American foulbrood, in Fiji; the Small Asian Honey Bee (*Apis cerana*); and the spread of honey bee mites (*Tropilaelaps mercedesae* and *Varroa jacobsoni*) in Papua New Guinea.

"Australia is one of the last countries globally where *Varroa* and *Tropilaelaps* mites are not found and we do not want them here," says Cooper. "This mite is a parasitic vector for disease and it has been estimated that the potential impact of an unhindered incursion of *Varroa* could be as high as \$1.31b over 30 years.

"If these mites were to take a hold in Australia, it would have significant implications for the beekeeping industry and pollination-dependent horticultural crops."

As beekeeping research capacity and knowledge continues to build around honey in Pacific Island

countries, the leadership of Bees for Sustainable Livelihoods remains crucial and ongoing for a number of initiatives in Australia and overseas. In Cooper, it is clear that David has left the enterprise in very capable hands.

And with that, David and Cooper finish their tea, put their veils back on and light their bee smokers, just like not so old times together. On the early summer breeze, the bees flit between flowers.

- Michael Jacobson

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Inkah Fischer

State of mind

Southern Cross University graduate Inkah Fischer was on a different path in life before finding her vocation in nursing. Now she is a leader in one of the most demanding areas of care – mental health.

Before nursing, her first calling was music.

“I grew up in an artistic household surrounded by music and arts. I studied jazz vocals and was a big fan of Ella Fitzgerald and Bjork,” says Inkah.

Interesting choices. Think of Fitzgerald’s scat-singing and Bjork’s often surreal experimentalism and they are not always easy to grasp. The human mind can be like that too, though never more so than when troubled.

The change from music to nursing was initiated when Inkah was admitted to Lismore Base Hospital for the birth of her first child.

“The nursing staff went above and beyond to meet my needs and I thought, what an amazing job that would be,” says Inkah.

“Sometimes you just need to take the leap and have a little faith and it wasn’t long after that I enrolled in a Bachelor of Nursing at Southern Cross University.

“I began studying nursing with the idea of transitioning to midwifery.

“I had lots of great opportunities for placements throughout the degree and the experience that stood out was in Justice Mental Health, working with the Psychiatric Clinical Liaison Nurse in the cells of the Lismore Courthouse. That really opened my eyes to an area of nursing I hadn’t even considered.”

Following her studies, Inkah gained a place in the Northern NSW Graduate Nursing Program where she experienced rural nursing, acute cardiac care and her first taste of acute psychiatric nursing.

“My positive experiences in mental health inspired me to apply for the specialty learning line for Mental Health Nursing,” she says. “I completed rotations in community mental health, child and adolescent care, acute care and older persons mental health care.”

“Nursing is an incredibly rewarding career because you have an opportunity to be in true service to humanity and to show people what true care looks like.”

Meanwhile, Inkah also added Masters degrees in Mental Health Nursing and Healthcare Leadership through Southern Cross University.

“The collaborative relationship between Southern Cross University and NSW Health made it possible for me to get the most from my degrees and immediately apply my learnings in my work,” says Inkah, whose abilities and application have been well recognised.

A recipient of the Edith Cavell Undergraduate Nursing Scholarship, the Susan Law Memorial Prize for Academic and Clinical Excellence and a NSW Health Postgraduate Scholarship, Inkah was also named the Nursing and Midwifery Manager of the Year for 2020 in the Northern NSW Local Health District. Gratifying as such accolades may be, Inkah’s motivation remains the mental health needs of the people of the Northern Rivers. Those needs are considerable and were brought into vivid focus during the global pandemic and the recent devastating floods at Lismore.

“We had done some systems modelling in preparation for the pandemic and that served us quite well, although as the situation escalated we had to adapt quickly and think on our feet,” she says.

“The mental health impact emanated in a couple of ways, both for our cohort of patients and our staff. Lockdowns, isolation, the impact on local businesses and livelihoods, all of these were influential.

“I was conscious of what the staff were going through outside of their roles at the hospital. We were in crisis mode for a good while, yet always had the sense that we were in this together. That was the support we needed to continue bringing our best for the patients and each other.”

Regarding the 2022 floods, Inkah is expecting the mental health impact to be felt for some time. But she is ready for it.

“I learned that as much planning as you do, what actually unfolds during a crisis is always unpredictable, so it pays to be able to adapt. It also pays to be calm, to take stop moments, to have faith in your colleagues and not be afraid to draw on your resources. Taking a step back to observe a situation can be much more effective than simply rushing in.”

Testing as recent times have been, Inkah has emerged with a reinforced commitment to nursing and management.

“Nursing is an incredibly rewarding career because you have an opportunity to be in true service to humanity and to show people what true care looks like,” she says.

“With regard to mental health, we have a high incidence of vulnerable people in this area and it can be challenging for them to recover in their own terms. Good leadership is essential and relationships are at the core of what we do. If the system does not work, it is the patients who suffer.

“Mental health nursing is the whole kit and kaboodle. You meet a variety of people who have such diverse life experiences, and the connections you make can be beautiful. They can be transforming. As the Nurse Unit Manager, I see myself as a bridge between the business of health and the priority of patient care.”

For Inkah, it all comes back to relationships, to working clearly and calmly as an authentic leader, and to setting a standard in her everyday demeanor and performance that creates trust and stability for others.

- Michael Jacobson

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Michael Metcalfe

A new Kynd of care

Community need, family experience, and the willingness to take a risk have all contributed to the success and growth of Kynd, the platform for NDIS and disability support founded by Southern Cross University graduate Michael Metcalfe.

Michael Metcalfe describes Kynd as the pebble in the pond. And he remembers vividly the moment he knew that its ripple effect could, and would, change people’s lives for the better.

A graduate of Southern Cross University’s MBA program, Michael is Founder and CEO of Kynd, the award-winning, Gold Coast-based online platform that matches National Disability Insurance Scheme (NDIS) participants with the right disability support workers. Launched in 2017, Kynd is an empathetic service, individually bespoke, which gives people greater choice, freedom and control.

“Kynd’s first NDIS participant was from Boonah and she

desperately wanted a disability support worker who shared her love of horses,” recalls Michael. “She found the right person on our just released app and we helped bring them together. That was the start. We immediately saw it could work. It showed us that by truly focusing on an individual – holistically, not just their physical needs – you can make an incredibly positive difference in someone’s life.

“That type of thinking was also very much part of my Masters at Southern Cross University. I graduated with an MBA in Hotel and Tourism and Management in 2006 and one of the biggest things I took from it was the notion that this was more than just a qualification enabling me



to pursue my own aspirations. It also conveyed a belief in the broader good that business can do for people. I like to think Kynd reflects that reality.”

It was the alarming reality of the disability support system in Australia that inspired Kynd.

“Through the experiences of my own family, friends and their families, I saw the traditional aged care and disability sectors in action – with all their crazy complexities, confusions and frustrations,” says Michael.

“It was like a punch in the face. Too often, daily life was a bitter grind for support workers and the people needing support services. I talked to hundreds of people, families and support workers and I couldn’t believe how most services worked. I didn’t want that for my family or anyone’s family.

“The system was broken, and in many ways it still is. That touches every family. The more I heard, the more the need for a better way became clear. Kynd was born there.”

From a purely pragmatic business perspective, Michael knew he was taking a risk. Still, it’s not as if that was anything new. Risk has informed so much of what he has done in life.

It was risk that in 2000 took Michael to the ski slopes of Colorado where, with just three days of experience he landed a job as a snowboard instructor – making downhill runs by day, running events by night, and finding time where he could to complete a Queensland University of Technology business degree.

Risk, too, that six years later saw him grasp an opportunity that surely does not come the way of many 24-year-olds – to become Shipboard HR Manager for an international cruise company. Based in Florida, the ensuing 15 months found Michael sailing to Alaska, the Caribbean and South America in a role he says was

“I saw the traditional aged care and disability sectors in action – with all their crazy complexities, confusions and frustration. It was like a punch in the face ... the system was broken, and in many ways it still is.”



like managing a United Nations debate with 50 crew nationalities every day.

When the time came to trade blue ocean for blue sky, Michael returned to Australia in 2008 as a Service Brand Specialist for Virgin Blue, then readying to launch Virgin Australia internationally.

“I was on the inaugural BNE to LAX Virgin flight with Sir Richard Branson – a once in a lifetime experience,” he recalls. “Risk and reward in one bloke. I gained a lot from his take on using energy to turn belief into reality, team habits into culture, and inspiring people to join the journey.”

Michael’s next venture really put his MBA to work, as well as his own capital: “Because of my interest and experience on the ski slopes and in alpine hospitality, I knew there was an opportunity in the highly fragmented, independent European winter hotel sector.”

Indeed there was. Despite launching Snotels Alpine Hotels slap-bang in the middle of the Global Financial Crisis, the next four years saw Snotels grow into a network collection of 30 hotels in 21 ski resorts in six countries. It was a truly wild entrepreneurial ride that eventually succumbed to seasonality. When it did, it was time for Michael and his wife Hayley to head home to Australia.

A big believer in the adage ‘nothing ventured, nothing gained’, Michael’s next move was as a globetrotting freelance management consultant for hotel and resort investors and developers.

“I loved the adventure of it,” he says. “I was living in Burleigh, travelling the world, building concepts and experiences for different people and cultures. Saudi Arabia, Thailand, Switzerland, Croatia, Belarus, USA, England, the UAE and more. While I loved it, I felt something changing.

“The thing I love most is creating experiences and memories for people. I wanted something more personal, more fulfilling, something with an impact that was human, needed and also scalable.”

Support during COVID

Since launching in 2017, the kynd.com.au platform has addressed human needs and created a growing community across Australia. Solely focused on the NDIS space, Kynd has won several industry and business awards – including 2018 Optus Future Maker for social impact – and has secured numerous NDIS, Queensland and Australian Government innovation grants. Add significant investment rounds during 2019 and again in 2021 and Kynd has been able to grow its team, platform and capability – all despite the global pandemic.

“For the NDIS, COVID-19 brought major challenges for people living with disability and support workers,” says Michael. “This impacted what we focused on at Kynd as vaccination mandates, sudden lockdowns, border controls, remote work, isolation and constant ambiguity made it extra challenging for the industry to find and maintain the disability support workers for NDIS clients.

“But it’s the belief in something that drives you. Struggle and challenge inform success. We learn more when things are difficult because you must be even more committed. It is why I am so proud of our team, who stepped up to challenges and never lost sight of what we do or why we do it.

“I’ve always loved challenges,” he concludes. “I’ve always known that I’ll only have one life and I have to make each chapter count. And luckily, I’ve always been supported by mentors and family.”



- Michael Jacobson

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We are the first university in the world to offer a degree in regenerative agriculture.



We are ranked in the top 4% of universities globally for Agriculture and Forestry (QS Subject Rankings)







Dr Hanabeth Luke

Down to earth

The spirit of transformation runs deep in Dr Hanabeth Luke. As Australian agriculture grapples with its future, she is an inspired scientist and educator. More personally, her understanding of transformation is ingrained in personal experience.

If anyone understands transformation, it is Dr Hanabeth Luke. Coordinator for Southern Cross University's Regenerative Agriculture program, Hanabeth has spent years working with Australia's farmers, policymakers, environmental and industry groups to amass a store of data that offers "big picture" possibility to a sector long beset by challenges.

Put simply, Regenerative Agriculture (RA) is an holistic

approach to farming. Based on agroecological principles, RA supports natural processes to improve the health of soils, landscapes and people. Southern Cross University has identified RA as a key to sustaining Australia's farming in the era of climate change, soil degradation and ecosystem loss. It is also leading the education imperative to ensure that coming generations of land managers know how and why to regenerate soil and build farm resilience.

"Half of the usable land surface of the Earth, and half of Australia, is covered by farms," says Hanabeth. "Inappropriate extractive industries like coal seam gas (CSG), with their potential to severely alter the social and economic structures of a place, are more likely to be stopped in their tracks if rural communities are flourishing. That is what I want to support – the regeneration of our soils, landscapes and rural communities."

"More than ever there is a need to equip graduates with the skills and knowledge to help farmers lead the way in building resilience across our farming systems."

Since launching the world-first Bachelor of Science (Regenerative Agriculture) in 2020, Southern Cross University has steadily progressed its RA agenda. A Graduate Certificate introduced in 2021 attracted around 350 students. It is now accompanied by a Graduate Diploma.

"These students are among the most engaged and inspiring students I have ever taught," says Hanabeth. "The mix is about two-thirds farmers, who are living and working in agriculture, while the rest are mostly young students who do not have an agricultural background at all, but who are enlivened by it."

All benefit from Hanabeth's experience in merging science and rural sociology through research that seeks to understand landholder decision-making in Australian farming systems.

"More than ever there is a need to equip graduates with the skills and knowledge to help farmers lead the way in building resilience across our farming systems," she says. "Not that Regenerative Agriculture should be seen as a silver bullet to fix climate change, but it can have an enormous impact."

Hanabeth knows plenty about impact. And it is here that the conversation turns.

The Bali Bombings – 20 years on

October 2022 marked the 20th anniversary of the Bali Bombings, an event from which Hanabeth would emerge as a survivor and much more: as a beacon. Though she would never apply such a description to herself, the fact remains that when people looked for hope and clarity amid the senselessness of Bali, they found Hanabeth.

"That's Marc's longboard," says Hanabeth, a life-long surfer whose first waves were caught as a child off the cold and character-building coast of her native Cornwall in the UK. Today, on a balmy Northern NSW late summer day, she points to the board she rides once a year – every October – to honour her then-boyfriend, Marc Gajardo, who that night 20 years ago refused to dance to Cher and instead walked outside the Sari Club and right into the blast.

Amid the ensuing chaos, a hastily snapped photograph showed Hanabeth leading 17-year-old Australian Tom Singer out of the flames. The media promptly christened her "The Angel of Bali". Hanabeth went viral before it was a thing. Tom Singer passed away a month later.

The bombings occurred midway through Hanabeth's undergraduate studies in Applied Science at Southern Cross University. Coming back was brave and challenging.

"The support I received was amazing. I forged such strong friendships, although it was clear to many – if not to me – that I was suffering Post-Traumatic Stress Disorder. I was just getting through each day."

And get through she did, graduating in 2005. The following year Hanabeth returned to the UK and gained a

Professional Graduate Certificate in Education from the University of Plymouth.

“My grandmother became unwell, so to get through the Cornish winter I accepted a teaching training bursary and fell in love with teaching. Even so, I kept thinking about Southern Cross University and the Northern Rivers. I knew that here was where I wanted to be.”

Accepted into Honours and then a PhD, Hanabeth’s studies focused on social dynamics within the growing social movement around CSG in eastern Australia. She worked with the community and industry to develop the question on CSG for the 2012 Lismore City Council poll. She also ran an exit-survey, with results demonstrating the strength of community opposition to the industry. Then in 2013, she conducted a comparative survey in the neighbouring Richmond Valley, interviewing residents of the Queensland gasfields over the boom-bust cycle.

Yet despite all this work and time, Bali was still with her.

“It always will be,” she says. “I specifically remember the tenth anniversary of the bombings in 2012. I knew I needed to do something. So, in between my research, I wrote and published my book, Shock Waves. It helped me to move on. Returning to Bali for that anniversary helped too. Afterwards, I felt I could go on without being defined by the bombings. I could look ahead with renewed vision. I also met my husband that year.”

A future from the ground up

Call it transformed, call it regenerated, but Hanabeth embraced it with gusto – especially through her research.

She worked with Dr Kerrie Stimpson and Dr David Lloyd on a study that informed the Australian Macadamia Society’s five-year strategic plan, before next undertaking a project related to regenerating drained acid sulfate soils at East Trinity, off Cairns. This was followed by a farmer survey project in conjunction with the Soil CRC, Charles Sturt University and local agricultural groups. Conducted

“It’s about the whole connectivity of the system, about the crucial aim to build the soil, not mine it.”

across six regions, farmers were asked about why they farm and their challenges and aspirations – the aim being to better understand current and future issues.

Each project speaks to the concept of transformation and the theme continues to describe Hanabeth personally and professionally. Connectivity is important to her, bringing the conversation back to RA, where connectivity is everything.

“At its heart, RA needs a more holistic view across the entire farm, from grasses and crops to insects and pests and ground cover and grazing management,” says Hanabeth. “It’s about the whole connectivity of the system, about the crucial aim to build the soil, not mine it.

“After all, if there is a place to improve practices, to work better with nature, and to holistically improve the health and wellbeing of Australian landscapes, farmers and communities, then surely it is agriculture.”

- Michael Jacobson

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Associate Professor Tobias Kretzschmar

A novel harvest

Amid growing global demand for crops that provide better nutrition, greater diversity and sustainability, the research of Associate Professor Tobias Kretzschmar holds promise for the growers of the Northern Rivers.

There is something distinctly compelling about watching Associate Professor Tobias Kretzschmar roll grains, seeds and beans in the palm of his hand. Tiny though the particles may be, he clearly sees something bigger – a vision splendid and possible.

Hempseed, for example. As Tobias guides visitors through the Southern Cross Plant Science laboratory at Lismore – a space providing welcome artificial warmth on a chillingly real Lismore winter’s day – he sifts through some seeds and describes what he sees as ... wait for it ... a Swiss Army knife.

“Hemp is a plant of a hundred uses. It is the Swiss Army knife of products and an ideal crop for Australia,” he says.

“Hemp seeds are a rich source of essential Omega fatty acids with similar health benefits as fish oil, except they are vegan and come without the ethical concerns associated with animal-sourced products. They contain high amounts of essential amino acids as well. Also, like soy, hemp can be used as a protein crop. Like canola, it can be used as an oil crop. And its flowers are rich in nutraceutical and medical compounds.”

The benefits do not end there.



“Hemp also produces high-quality fibres that can serve as fabric for clothing, or it can be used in composite materials to replace single-use plastic. As Hempcrete, it can replace concrete or other non-renewables in certain building applications. Developed correctly, hemp can help us reach zero waste goals and implement circular and sustainable economies.”

So, strange as the Swiss army knife comparison may first have seemed, Tobias’s explanation makes perfect sense. And with Southern Cross University supporting Australia’s emerging hempseed food industry to develop varieties of high nutritional value best suited to local conditions, that is promising news for the agricultural producers of the Northern Rivers.

Currently, a substantial Australian Research Council Linkage Project grant is driving research led by Tobias and a team of scientists in collaboration with industry partner Kavasil Pty Ltd, a regional hemp research and development and consulting company based at Nimbin in the Northern Rivers. Another example is a Cooperative Research Centres project investigating the medicinal cannabis industry – from precision farming to pharmaceuticals.

Both speak to a softening stance around hemp and cannabis after many decades of stigma, misconception and over-regulation. They also bolster three decades of Southern Cross University research with hemp and cannabis and reflect the priority of engagement with local and regional partners and stakeholders.

Part of the University’s new Harvest to Health research cluster, hemp is not the only niche crop flourishing on the SCU farm and field sites. Black rice is another, with food and health benefits adding new perspective to the world’s largest food staple.



What the world grows

Of all the calories consumed by the world’s population every year, more than half come from rice, wheat and maize. However, as much as quantity remains a crucial factor in feeding the world today, tomorrow looms large and with it a growing demand for improved nutritional value, greater diversity and environmental sustainability.

This challenge represents the latest phase in Tobias Kretzschmar’s scientific career, one that has grown based on what the world itself grows.

A German-born plant geneticist and plant physiologist, Tobias did his undergraduate studies from 1999-2002 at the Technical University of Kaiserslautern, before undertaking a scientific internship at Townsville’s James Cook University. He received his Doctorate of Science from the University of Zurich in 2009. In a varied career, he has studied pineapples in Townsville, petunias in Switzerland, rice in the Philippines and – since joining Southern Cross University in 2018 – passionfruit, coffee, mustard, tea tree, hemp and rice.

The motivation for his research is both scientific and philosophical.

“After I did my PhD in plant molecular physiology in Switzerland, I wanted to apply my research background to something with a positive impact for people,” he says. “So, in 2011 I joined the International Rice Research Institute in the Philippines. As a molecular geneticist the mandate was clear – make better rice for people in developing countries across the world.”

Moving to the Northern Rivers has not altered the objective. With positive ramifications around heart and gut health, diabetes, cholesterol, weight loss and more – and coinciding with shifting trends around work, lifestyle and population – little wonder black rice has found prominence in a global health imperative.

“I wanted to apply my research background to something with a positive impact for people”

Coffee is another area of Tobias’s research. AgriFutures Australia – established by the Australian Government in 1990 to help fund research and development in Australian rural industries – has identified and invested in the growth potential of the Australian coffee industry.

One such project is a partnership between Southern Cross University and the Australian Subtropical Coffee Association that is testing the performance of global coffee cultivars under local conditions. The results could play a key role in improving crop suitability, increasing demand and investment, enabling new growing opportunities in regions such as the Northern Rivers – and, of course, pouring a better cup of coffee.

In Australia, crops such as hemp, black rice and coffee may be considered novel, but their potential is hardly a novelty. Those seeds, beans and grains in Associate Professor Tobias Kretzschmar’s hand represent science as the ultimate growth product and tomorrow as the ultimate beneficiary.

- Michael Jacobson

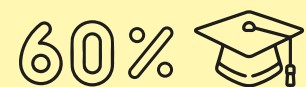
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About 18% of our student body is international students and about 20% of students have a different language than English as their first language.



60% of our students are aged under 30.



5% of our student body identify as Aboriginal or Torres Strait Islander – that's about double the national average.



Dr Kathomi Gatwiri

A seat at the table

A sense of belonging is a fundamental human need, which is why Southern Cross University's Dr Kathomi Gatwiri is determined to bridge the multicultural gap in Australian society.

Any conversation with Dr Kathomi Gatwiri is imbued with moments of deep reflection and steely commitment. She is an eclectic academic with a diverse array of interests, experiences and goals.

These become clear when she focuses the struggles of being a Black woman researching the complex topic of race in Australia. And again, in the social, cultural and health challenges of women in her native country, Kenya. And again, in the response to her Healing Together psychotherapy practice that provides mental health support to hundreds of Black people and other people of colour across Australia.

For one who works so intimately on such urgent issues, Kathomi's sense of humour is never far away. It emerges in brighter, bubblier things, like her love of salsa dancing, gardening and watching detective and legal TV shows –

the latest being a repeat viewing of the Australian series Rake.

"I am learning a lot of Aussie slang in the process," she says, with a smile that lights up the room and by extension must also shine for those who, through Kathomi's work and relationship-building skills, feel seen, heard and understood.

Everything she does is passionate and with a boundless energy – full of heart and full of light.

A Senior Lecturer at Southern Cross University's Faculty of Health, Kathomi's life and career span social work, cultural studies, counselling and psychotherapy. She brings invaluable expertise and depth to teaching and research that homes in on processes of minoritisation and marginalisation.

Of course, marginalisation has been an issue in Australia since the arrival of the First Fleet in 1788.

Beginning with the nation's First Peoples, it has continued via waves of migrants and, more recently, refugees to these shores.

And while statistics may present Australia as one of the world's most multicultural countries, Kathomi points out that the spirit of multiculturalism is not always reflected in the experiences of those who feel least included in Australia's mainstream culture. She adds that this has implications for mental health and wellbeing.

"Inclusion efforts should aim to produce experiences of positive recognition and belonging for all new Australians," she says. "Belonging is a fundamental human need. We are all wired for it. That means having a sense of being safe and being at home is important for all those who have the privilege of calling Australia home."

Born in Kenya, Kathomi enrolled in university at just 17 and a decade later became one of the youngest Kenyan women awarded a PhD. Her work expounds ongoing activism, first seen in Kenya through her campaign advocating for women living with obstetric vaginal fistulas to receive better and more dignified maternal care. It continued in campaigns to end femicide and other forms of gendered violence against women. She is the founder of Counting Dead Women – Kenya, an initiative that aims to record every woman's murder reported in the Kenyan media.

Since coming to Australia 10 years ago – first to The Cairnmillar Institute in Melbourne, then Flinders University and now Southern Cross University – Kathomi's research, leadership and influence within academia and the African-Australian community have only expanded. She is the president of the Australian Gender and Women Studies Association, the peak body for Australian researchers in the fields of gender and women studies. She is also one of the best known and respected academics on issues impacting Africans in Australia and is sought regularly to give voice to these issues.

Giving voice is a major priority for Healing Together as it continues to demonstrate cultural leadership and a spirit of creating solutions to recurring problems. Launched in 2020 at the height of the #BlackLivesMatter worldwide protests, Healing Together is an online counselling and psychotherapy initiative that was Kathomi's response to a shortage in Australia of services catering specifically to the cultural and racial needs of Black people. Demand has continued to soar, with Kathomi one of the most sought-after psychotherapists for people seeking culturally safe mental health services.

"When the #BlackLivesMatter protests were at their height, my phone was going off, mostly from Black people affected by the collective racial grief triggered by the movement," she says. "They were seeing, hearing and experiencing what I was also seeing, hearing and experiencing ... and we were stuck, competing for very scarce available mental health support systems, especially from practitioners who demonstrated an

advanced understanding of what was going on. Being in places where Black experiences are met with invalidation, minimisation or even hostility only adds to racial grief and, in some instances, leads to significant mental health issues.

"When I opened Healing Together, it was mostly out of frustration that Africans didn't seem to have a seat at mental health services tables. I decided to stop complaining, use my expertise, build my own table, and invite people to sit around it."

"It is beautiful to see people once so shy about seeking help now sitting around this table I made. They know their issues won't be explained away. They know they will be treated with respect."

Looking ahead, Kathomi is applying her steely commitment to address the need for more psychologists, psychotherapists and counsellors trained within frameworks of cultural sensitivity.

"We know from research that despite the increasing mental health needs in the Black community, the available mental health and support services do not meet the cultural and racial needs for Black people and people of colour," she says.

"In fact, the global pandemic has provided a perfect illustration of why we need our communities. Africans are quite communal and so the isolation experienced during the pandemic compounded a sense of loneliness and separation with which many migrants sometimes struggle."

Kathomi's efforts demonstrate strong academic and community leadership which she blends through her teaching and research. She is also quick to acknowledge others.

"I have been incredibly supported at Southern Cross University. I have made some deeply personal friendships and also some very collaborative professional relationships which have kept me going. I have colleagues who know I have no family members in Australia, and they have made me feel part of their families. So, yes, it is luck and also a lot of hard work, but for as long as I am still able to, I will keep showing up authentically and boldly."

- Michael Jacobson

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Associate Professor Christian Swann

The other 98 percent

With mental health now a prominent issue in elite sport, Southern Cross University's Associate Professor Christian Swann is co-leading a program that directs the focus into the community. And it is now reaching a global audience.

As professional athletes prove more willing to discuss the mental health challenges faced during and after their illustrious careers, an issue that once went unsaid is increasingly being heard.

In recent years, AFL's Lance Franklin, tennis stars Naomi Osaka and Serena Williams, rugby league greats Greg Inglis and James Tedesco, cricketers Glen Maxwell and Will Pucovski, and Olympic legend Ian Thorpe, are among many to have come forward and told their stories.

Southern Cross University researcher, Associate Professor Christian Swann, applauds their courage before noting

how it pays to remember that the nexus of sport and mental health is not solely the domain of the elite.

"Elite sport accounts for about two per cent of sports participation around the world," says Christian. "We're very conscious of the other 98 per cent, that majority of people who take part in sport mostly in community clubs. My priority is research and programs to improve mental health outcomes within this vast cohort, especially among adolescents."

One initiative – Ahead of the Game – Is now in the international sporting spotlight.

Co-led by Christian and the University of Wollongong's Associate Professor Stewart Vella, Ahead of the Game was an official mental fitness program for the 2021 Rugby League World Cup which, thanks to the global pandemic, was rescheduled to October-November 2022.

Such a major international event enables Ahead of the Game – which is funded by men's health charity Movember – to spread the message of mental health awareness and strategies to thousands of people involved in community level rugby league.

Even so, the World Cup is just one example of how Ahead of the Game is doing precisely as its name suggests.

"Mental health has become such a huge part of sport," says Christian, who joined Southern Cross University in 2018 and is now an Associate Professor in Psychology based at Coffs Harbour. "With that comes an increasing awareness of mental health issues in community sport, and from an early age. Almost one in seven adolescents will be experiencing problems at any given time."

Problems are wide-ranging and can stem from factors including upbringing, stigma, undeveloped or under-developed social and coping strategies. Impact is felt by individuals, families and communities – sometimes grievously.

"Mental health is a bit of a monster," says Christian. "In particular, it is killing men and young males. Sixty men take their own lives every hour in the world. We must do something about that, and it turns out that sport is an ideal entry point. That is a key element of Ahead of the Game."

Christian's research supports that resolve: "Teenage boys told us that their sporting clubs were a very accessible setting in which to have conversations with their coaches, parents and teammates around mental health. It is an environment they feel comfortable in and as such is conducive to reaching more young people. There is a shared experience, a shared vision, among the kitbags and uniforms before and after training.

"Plus, they're all in it together. Sporting teams go through a lot of ups and downs and teammates are more likely than classmates to be closer and to have each other's backs. Teammates are also more used to talking about how things are going, including about how to get through those ups and downs together."

With so many more professional athletes opening up about their mental health, Christian says young athletes are eager to learn how their role models manage the challenges, stresses and anxieties in sport. The rise of COVID-19 has only added to them.

"The pandemic meant that young people have not been able to get out as much for sport and exercise in social and competition settings," says Christian. "For many vulnerable young people, it exacerbated their vulnerability."



"Teenage boys told us that their sporting clubs were a very accessible setting in which to have conversations with their coaches, parents and teammates around mental health."

Originally from Donegal in Ireland, Christian might have eyed his own sporting career as a professional golfer until curiosity led him to specialise in sport psychology and mental health.

After a decade at the University of Lincoln (UK) as an undergraduate student, PhD candidate and then lecturer in sport psychology, he came to Australia in 2015 to work on Ahead of the Game.

Seven years later, there is no complacency for Christian or the Ahead of the Game team. And that won't change after the World Cup, as the program ramps up and adapts for other sports, countries and cultures.

Among programs in Australia, Christian has been working with Movember to deliver Ahead of the Game in rugby league communities in Far North Queensland, as well as online to deliver models for regional, remote and rural Australia. And it is now reaching a global audience.

"We know the social, family and government investment in sport. We also know that Ahead of the Game works. It's evidence-based and it is reaching a lot of young people," says Christian. "We're on our way to reaching the other 98 per cent."

"I think that's an important message to launch from the global stage and then direct into local communities and sporting clubs everywhere."

- Michael Jacobson

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John Stewart

Conducting the school of life

When speaking with John Stewart – Conductor of the Living School in Lismore – it is soon apparent that education means much more than teaching and learning, fundamental though they may be. As John’s passion pours forth, education emerges as both key and door, choice and opportunity, idea and ideal, possibility and pathway.

Such qualities inform the philosophy and practice of the Living School, through which a bold education model manifests in ways including:

- a curriculum that respects, responds to, and grows with the community
- keystone qualities embracing identity, nature, life and living, civilisation, phenomena and service

- a powerful environmental focus and sensibility
- an holistic unity and understanding between students, staff and parents
- flexibility with learning and learning spaces.

And at the heart of everything, an unwavering belief in the potential of children.

“There hasn’t been much to challenge the traditional model of education that has existed for hundreds of years,” says John. “While there are aspects that are still wise and worthy, at the Living School we are unashamedly operating in the now, in this era.

“The rise of the Internet and the introduction of smartphones and other devices have every student plugged in. There are benefits and risks with that, but the traditional model of education is wanting in its recognition and response to this new era.

“We need schools that are engaged with this time, that are aware, active and pertinent, that can provide education to improve community and social structures. We need schools that are both current and progressive.

“That is why there are so many threads to what we do at the Living School. Progression is about taking education beyond the mainstream to engage, empower and give agency. School should be a place of wonder and joy, where students are curious and confident, and where learning is life-worthy.”

All of which begs the question: what kind of student was John?

“As the sixth of eight children in my family, I was always learning at home and was no stranger to disruption. I went from Lismore Primary to Lismore High to Southern Cross University’s Lismore campus. I was always the student who asked a lot of questions. I must have driven some of my teachers mad. Some might be shocked to learn that I became a teacher.”

They might be more shocked at the kind of teacher John became, one whose vocation has fueled an eclectic career.

Before launching the Living School in 2015, John spent two years as Head of Bali’s Green School – hailed as the world’s greenest school. Other positions include Headmaster of NSW’s Tudor House, Australia’s only stand-alone prep boarding-school for boys; Head of Junior School at NSW’s Central Coast Grammar, Director of Studies at St John’s College, Cambridge, and Head of

Section at Hill House International School in London.

A recipient of the National Excellence in Teaching Award and a Golden Goody international award for social good, John’s commitment to education extends to publishing. Co-author of the book *Thriving at School* (with Dr John Irvine), John was also the developer and author of *WriteOn* – a creative writing textbook – and *WriteOnline*, a multimedia creative writing program.

As the Living School took shape in his mind, John saw coming home to Lismore as a major factor in bringing a bold notion to bolder fruition.

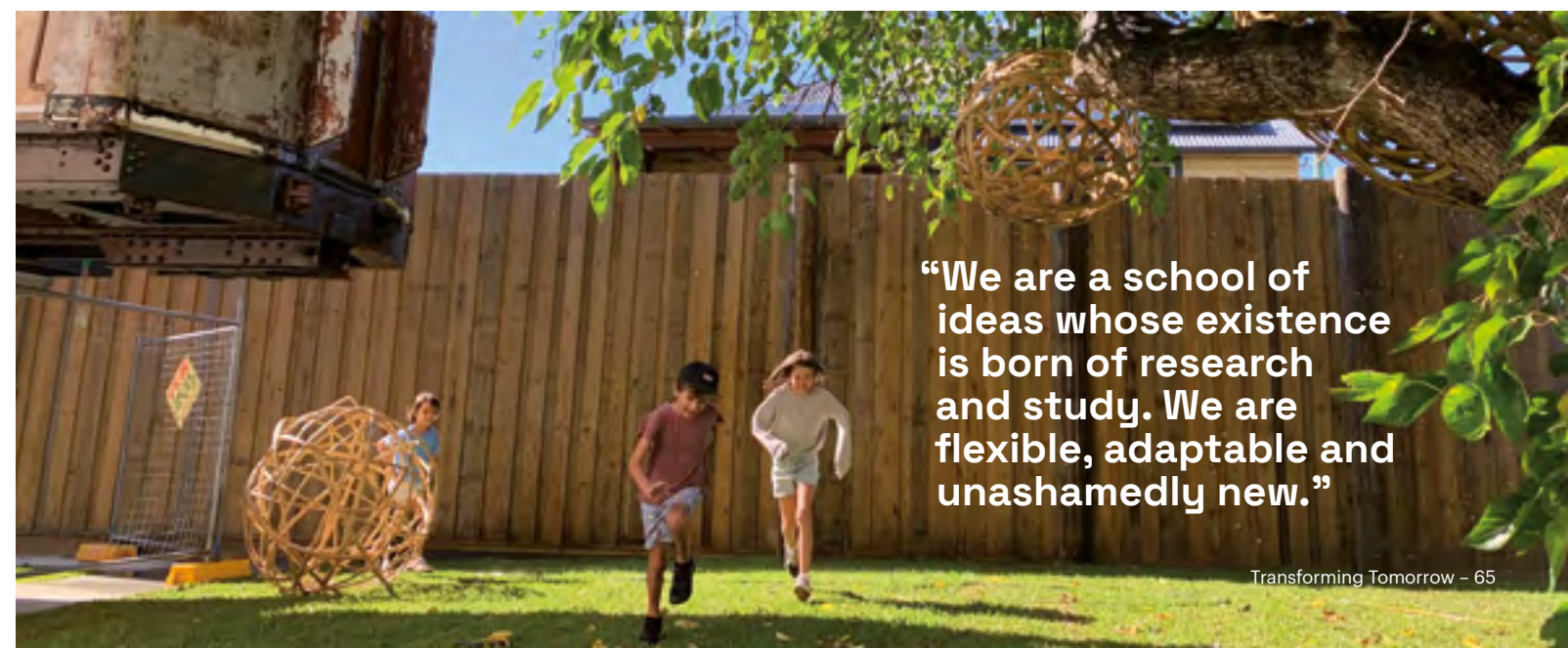
Today, the Living School is an idea made real, one comprising many strands that reveal the breadth of research John applied to its making – the Aristotelian notion of the city as a classroom; the Montessorian idea of the environment as a class; the Steiner-esque approach of aligning with the rhythm of the day; democratic models affording more power to students. Such parts come together to form, and inform, the whole. The effect is orchestral, helping to explain John’s title of the Living School’s Conductor.

“I have always liked etymology,” he says. “The origins and meanings of words fascinate me. It is why I chose the term Conductor. It is multi-faceted, one that relates to leading an orchestra, to energy, to behaviour and manner. And of course, to education. It is a word that suggests so many possibilities. I think the Living School does too.”

At its core, the Living School embraces the character and potential of every student via a determination for engagement, betterment, relevance and transformation.

- Michael Jacobson

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“We are a school of ideas whose existence is born of research and study. We are flexible, adaptable and unashamedly new.”



Dr Alessandro Pelizzon

In defence of Mother Nature

Ecological Jurisprudence is a long title for a challenging concept – the legal rights of nature – and Southern Cross University’s Dr Alessandro Pelizzon is one of its most committed and globally influential advocates. Michael Jacobson writes.

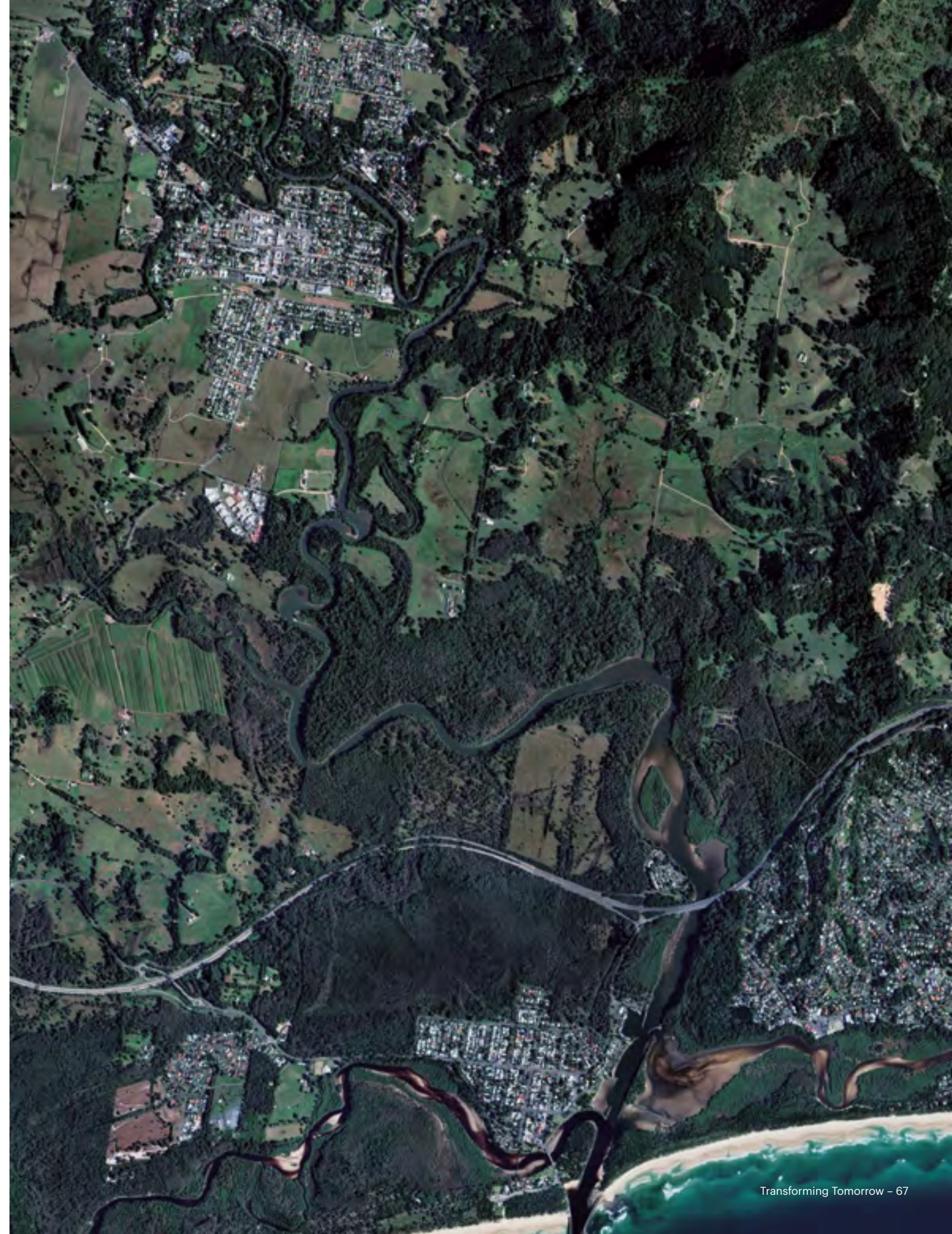
We are all aware of the laws of nature. But what of the rights of nature under the law? Are the laws that protect people translatable to the protection of nature? Is nature a defendant?

Southern Cross University’s Dr Alessandro “Alex” Pelizzon would say yes. What’s more, he has prosecuted the case for what is known as Ecological Jurisprudence around the world. He maintains it is the fastest growing legal movement of the 21st century.

“Ecological Jurisprudence is based on the idea that our

Earth is the total sum of all ecosystems within which humans exist, and that humans are members of this interconnected network of ecosystems, beings and phenomena,” says Alex. “Human wellbeing is connected to, dependent on and ultimately predicated upon the wellbeing of the network as a whole.

“Nature is the place we inhabit, the common ground beneath our feet, and we have a responsibility for everything that surrounds us. Ecological Jurisprudence opens that space as a law for nature. Its time is now.” Many countries now recognise the rights of nature



as a means of promoting sustainable development. Ecuador, Bolivia, Colombia, New Zealand, India, Uganda and France either have or are moving towards having Ecological Jurisprudence enshrined in legislation. While primarily this has involved the identification of rivers as both natural features and legal persons, momentum is rapid and diverse.

Alex has played a significant role in this progress. For example, in 2019 he moderated a panel on Harmony with Nature at the UN General Assembly in New York, where international delegates discussed the implications of education and law and their impact on nature.

“There are two theories in law,” he says, “one being that all laws are made by humans for the benefit of humans (a theory known as legal positivism). The second is natural law theory, which suggests that law exists irrespective of human desires.

“Ecological Jurisprudence says law can neither be purely arbitrary nor self-evident. Rather, it holds that the law is an emerging property of an ongoing dialogue with nature, and a comparative tool to engage different legal traditions.”

It is an exciting concept, although Alex admits many issues remain unresolved, asking: “Who speaks for nature or determines its rights? Who has agency for nature? How do I represent a river? How does anyone know what a river wants?”

Interestingly, he may soon have a stronger grasp on some of the answers, given his work with the 2022 Biennale of Sydney, which has identified rivers, wetlands, saltwater and freshwater ecosystems as dynamic living systems with varying degrees of political and legal agency.

A new way of thinking

As much as all this may sound ‘out there’ to some, Alex contends that Ecological Jurisprudence is opening new ways of thinking about the cosmos by recognising the entire universe may have agency. His credentials are impeccable, beginning in his homeland of Italy, traversing the world and culminating in his current role as Senior Lecturer in the Faculty of Business, Law and Arts at Southern Cross University.

“I studied law at the University of Turin, specialising in comparative and legal anthropology, and I lived and studied in Peru not long after. I have always been interested in how societies regulate themselves,” he says.

“I first came to Australia as an exchange student in 1991. I lived 400km north-east of Perth and it was there I fell in love with Country. I loved that heartfelt, spiritual and actual connection between Aboriginal people, culture, nature and land. It is Ecological Jurisprudence in action, and it struck me like lightning.”

“I fell in love with Country. I loved that heartfelt, spiritual and actual connection between Aboriginal people, culture, nature and land. It is Ecological Jurisprudence in action, and it struck me like lightning.”

The experience was transformative, bringing Alex back to Australia in 2005 when, as he describes it, he stumbled on his PhD: “I was at the University of Wollongong and I met Aunty Barbara Nicholson, a Wodi Wodi woman, who became my mentor and my friend. Through her, I really learned how to approach and acknowledge Country.”

While Alex had been involved in Indigenous rights since his university days – including helping to establish a research group that participated in and supported the drafting of the UN Declaration on the Rights of Indigenous Peoples – meeting Aunty Barbara was cathartic. His PhD explored Native Title and legal pluralism in the Illawarra region, looking at traditional narratives and interest in land and how these are not considered by the Native Title process. Alex believes the process has simply become another form of colonialism – a compromising of Country.

In 2009, he was in Adelaide for the first Wild Law and Earth Jurisprudence Conference. Next, he ended up in Ecuador, where he became a founding member of the Global Alliance for the Rights of Nature. Along the way, he became a founding member of the Australian Earth Laws Alliance.

Alex joined Southern Cross University in 2010, on Valentine’s Day, an appropriate date for this passionate Italian by birth and Australian by choice. He is delighted that the University has the highest concentration of academics in Australia who are actively researching in Ecological Jurisprudence.



A monitor for the world

Today, Alex is Chair of the Steering Committee (Academic Hub) for the Global Alliance for the Rights of Nature and his commitment is profound and proactive.

“You know, when we started the Global Alliance, we had 35 people and about three books. Talk about a small start for a big idea. Now, in less than 10 years, we have 3000 members and our literature is growing exponentially,” he says.

A case in point is the Eco-Jurisprudence Monitor, launched in 2021 and a map of all Ecological Jurisprudence initiatives throughout the world – about 600. Alex says this massive undertaking will unlock comparative tools, research, learning opportunities and initiatives. The audience, he adds, is growing and receptive.

“Ecological Jurisprudence has entered the public discussion,” he says. “People no longer ask what it is and how it works. They know what it is and ask how it is working. That is a transformation of thinking.”

He includes his students in this, saying: “They get it and are ready to set the trajectory of Ecological Jurisprudence. They are politically and intellectually engaged. They understand that it goes beyond straight environmental law.

“It is metaphysical. It shows that nature is not in the way; it is the way. It is for living beings and living things. And once you see it, you cannot unsee it.”

- Michael Jacobson

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The University's National Marine Science Centre in Coffs Harbour has a special flow-through seawater system for its tank farm that pumps ocean water from nearby Charlesworth Bay. Charlesworth Bay is a unique environment where temperate and tropical currents meet.



Dr Daniel Harrison

Change in the clouds

As Australia's Great Barrier Reef continues to suffer in the era of climate change, could there be hope in the clouds? At Southern Cross University, Dr Daniel Harrison's 'cloud brightening' technology offers innovative and promising potential for an environmental treasure.

On clear days, when the sky is that unique Australian blue and the ocean is glass, Dr Daniel Harrison reckons there is no better place in the world than being at the controls of his four-seater Piper Warrior light aircraft. Following a flight plan that traces the Coffs Coast and then takes him out to sea, Daniel views from up high what is happening in the sea below.

There was a time when Daniel had ambitions to be a career pilot, which seems in contrast to what he does

now as an oceanographer, engineer, researcher and Senior Lecturer at Southern Cross. However, consider the projects that he is either leading or in which he is closely involved, and the separation of sky and sea is not so marked.

At the heart of everything is a unifying purpose – protection of Australia's Great Barrier Reef – where the concept of transforming tomorrow is imbued with massive energy and urgency.

A major player in this mission is the \$150m Reef Restoration and Adaptation Program (RRAP), a collaboration between several Australian universities – including Southern Cross University – as well as the Australian Institute of Marine Science (AIMS), the CSIRO, Great Barrier Reef Foundation and the Federal Government. Daniel’s scientific team is investigating cooling and shading options for the Reef, including the use of cloud brightening technology, floating reflective surface films, and creating sea fog.

“When it comes to the Great Barrier Reef, we have a window of opportunity that is rapidly closing,” says Daniel. “But if some of these ideas work as well as we hope, our modelling suggests it might be enough to alter the trajectory of the Reef and help it transition through this difficult period. There’s such a large amount of warming that’s already locked into the climate system that we need to see really strong action now.”

Cloud brightening is the strong action earning greatest attention. It involves the pumping of atomised sea water into the air above the Reef. As each tiny droplet evaporates, just three per cent – give or take – is crystallised salt. Each salt crystal then has a chance to become the nucleus for a cloud droplet.

“We’re not actually creating clouds,” explains Daniel. “When the cloud forms, there’s a given amount of water content and each droplet needs a nucleus to condense around. If we provide more of these cloud condensation nuclei, the same cloud reflects more sunlight, thereby deflecting solar energy away from reef waters when heat stress is at its maximum.”

It was off the coast of Townsville in 2020 that Daniel led the world’s first outdoor trial of cloud brightening technology to combat coral bleaching. “At the time, the Great Barrier Reef had gone through three mass bleaching events in just five years,” says Daniel. “Corals were bleaching all around us while we conducted our tests. It really emphasised the extent of the problem and how little time we have. Reef bleaching has occurred again during 2022 and we were one of the first groups to raise the alarm with the Great Barrier Reef Marine Protection Authority.

Along with Daniel and the Southern Cross University National Marine Science Centre, researchers from the Sydney Institute of Marine Science, the University of Sydney and Queensland University of Technology were involved in testing prototype equipment developed in partnership with Italian company EmiControls.

“Using drone technology linked to a sampling vessel, it showed how we can successfully create hundreds of trillions of these sea salt crystals per second which

then float up into the atmosphere to bolster the reflectivity of existing clouds,” says Daniel.

“If the technology proves successful and could be expanded and applied over the Great Barrier Reef – a massive upscaling from the proof of concept type processes based research the group is now undertaking – it could reduce the severity of coral bleaching during marine heatwaves by cooling and shading the corals below.”

Daniel says the benefits of cloud brightening are environmental and economic. As well as protecting against coral bleaching in a relatively cost-effective way, it also just might buy enough time for longer-term climate change mitigation to lower ecosystem stress.

“The coral used to have such vibrancy, such colour. It’s such a treasure and we run the risk of losing it.”

Talk of treasure provides an ideal segue for one of the impetuses of Daniel’s scientific career, although it means going back 600 years or so.

To explain, between 1405-1433, China sent hundreds of treasure-laden ships and tens of thousands of men to extend imperial and trade control over the Indian Ocean and beyond. In charge was Zheng He, an extraordinary figure in history who went from court eunuch one day to fleet admiral the next.

But that’s another story. Suffice to say that much speculation exists about Zheng’s voyages, including the contention that he sailed to America decades before Columbus and to Australia centuries before the Dutch, French and British.

Jump forward six centuries and you find the younger Daniel Harrison as a University of Sydney engineering undergraduate engaged during his Honours project developing a novel underwater sonar: “My role was to examine silt and mud to determine the efficacy of technology in finding evidence of shipwrecks. Having read about Zheng He, engineering and oceanography came together for me. It just made sense. I suppose that is what set me on my career path.”

That path brought Daniel to the Southern Cross University National Marine Science Centre in 2019. Before that, career highlights included two years as a Visiting Scholar at the University of Southern California, Senior Research Fellow at the Sydney Institute of Marine Science, and recipient of the prestigious Myer Innovation Fellowship.

The Fellowship was to develop the concept of using solar radiation management approaches for bleaching protection on the Great Barrier Reef.

“These concepts and research are exciting, but they are driven by a far greater need,” says Daniel. “When you see the Great Barrier Reef, what you see is loss. That is alarming because humans are terrible at seeing the big picture and we forget so quickly what we have lost. Add the impact of pollutants, plastics, fishing and other stressors, and I wonder what I can show of the Reef to my young sons as they grow.

“Even if cloud brightening works, it can still only buy us time. Unless the world shifts from its current path and prioritises green energy and carbon dioxide removal of some of our pollution already in the atmosphere, then the long-term future of the Reef looks bleak.

“It will take a marathon effort to save it. Blue sky thinking for a blue water environment. But is there a choice? I don’t believe so.”

- Michael Jacobson

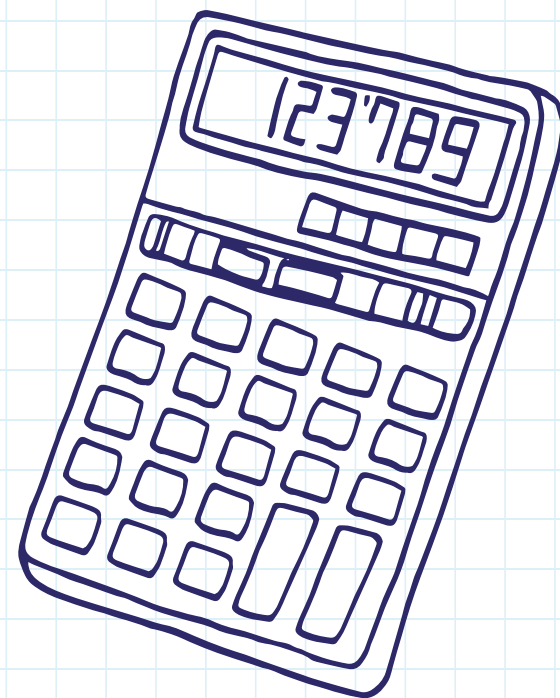
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Image credits: Brendan Kelaher, Alejandro Tagliafico



Holly Millican



The education equation

Holly Millican is a transformative teacher. With her career still in its early stages, she is already internationally acknowledged for the ideas and innovation she brings to her mathematics students, which translate beyond the classroom.

Teaching mathematics adds up for Holly Millican. It is an equation in which factors of commitment, initiative, inquiry, flexibility and fun come together for a solution that engages her students and continues to propel her career.

That career is still in its fledgling stages, yet Holly's energy for teaching is a lesson in itself. As she says: "My goal as a teacher is to alter the way mathematics is viewed. I want to transform this perception that maths is a boring subject that only some people are good at, into the idea that it can be something that students are

excited to learn about and truly feel they understand."

A graduate of Southern Cross University's Faculty of Education, since 2018 Holly has been teaching mathematics at South Grafton High School in the Northern Rivers region of NSW.

She quickly made her mark, introducing innovative teaching methods through games, team-based learning and interactive techniques. Notable among them was an enrichment tutoring program aimed at students struggling with basic mathematical concepts.

Applying mathematics in ways that were regionally relevant and translatable outside the school environment, what began with two students soon expanded to five teachers and nearly thirty students in just two terms.

If that is not impressive enough, at the same time Holly was studying for her Master of Education – in student wellbeing and school leadership – again through Southern Cross University.

While mathematics is the field in which Holly excels, her calling is teaching.

"When I decided on education, it wasn't maths that clicked with me as much as teaching in general," says Holly. "Initially I wanted to become a primary teacher. Then when I started to think more about the best way I might make a real difference as a teacher, I found myself drawn to secondary education.

"Looking back at my high school years in Woolgoolga, I had some wonderful teachers. For maths, I remembered one who went all out to make it fun. He was inspiring and I still use his hands-on trigonometry exercises today. He taught beyond the textbook and that really connected with me. Now I apply that thinking to all of my teaching.

"Maths can be experimental and divergent. As much as the aim is to reach the correct solution, getting there can take you on several pathways. It is an exciting journey that is not always, or necessarily, set in stone in a textbook. Maths can take you in different directions and that can be thrilling and also provide important lessons for life."

The many accolades Holly has received offer clear demonstration of the success of her approach to teaching.

In 2019, she was named Young Alumnus of the Year at Southern Cross University's inaugural Impact Awards for her "innovative mathematics teaching methods that engage 21st century learners". The same year brought international attention via a Learning Edge Teaching Practice Award at Google HQ in Sydney. This was a joint initiative between the NSW Department of Education and Teachers Mutual Bank in partnership with YouTube and Google.

In 2020, Holly won the Teachers Guild of NSW Early Career Award (Secondary School) and in 2021 she was named the Rising Star of the Year at the prestigious Australian Education Awards.

For one so adept in the classroom, it seems strange to consider that Holly may never have pursued a teaching career. There was a time when the ski slopes occupied most of her attention.

Born in the UK, Holly was a baby when her parents migrated to Australia. Her childhood was unconventional to say the least.

"We travelled a lot," she says. "Mum and Dad wanted to work in the ski fields and so we followed the winter and went back and forth to the US for many years. I could ski before I could walk and went on to become US national

standard junior skier until the family decided to come back to Australia full-time."

Clearly, skiing's loss has been education's gain, with Holly at the vanguard of a new generation of teachers applying next-generation teaching methods. Technology and the internet are the textbooks of today and they come with – mathematically speaking – pluses and minuses.

"At times the current generation has been caught between a rock and a hard place as education grappled with the transition from traditional teaching – the days of chalk and talk – to the teaching and learning opportunities created by these incredible technological resources," says Holly.

"However, the next generation will be the first to have grown up using technology wholly and solely. They are learners in the era of Zoom, of SMART projects. Their grasp of technology will be ingrained and education will need to reflect that."

"My goal as a teacher is to alter the way mathematics is viewed."

Holly's embrace of the online environment, particularly via engaging instructional videos made for students and fellow teachers, has long been a staple of her teaching. It took on extra meaning during the disruption of the global pandemic.

"Whether in the classroom or teaching online, I implement hands-on activities which promote critical and creative thinking in my students," says Holly. "In covering both syllabus content and enhancing creative and collaborative practice, the goal is always to create a deep understanding and appreciation of the beauty of mathematics."

And not just mathematics. Teaching in general, when done with heart and generosity, can also be beautiful. Holly embodies that.

"From the first time I walked into a classroom on my first prac, I've absolutely loved teaching and I fall more and more in love with it every day," she says. "The best part is when you see a struggling kid finally 'get it' and it clicks for them. If that's what gives you joy, then you should become a teacher."

- Michael Jacobson

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A connection through time and place

Months later, talk of the flood prevails. Ideas and opinions flow. Memories and emotions pour. Hope springs. Long after the inundation, conversations still hold water, water everywhere. This is Lismore, late 2022, where the impact of the recent past remains so strong that some might think it has washed away all thought of the future.

It pays to remember that Lismore has been here before, rebuilding in 1954 and again in 1974 in the aftermath of other floods. Then in 1994, the 20-year pattern changed when instead of recovery, the theme became discovery; and instead of looking down at the water, it was time to look up to the stars. As it happens, a particular set of stars.

Southern Cross University was established in Lismore in 1994 and almost immediately presented itself as a university of difference. In practical terms alone, it meant Northern Rivers students no longer needed to leave the region for their university studies. It also boosted local employment and the area's economy and began the

process – ongoing today – of collaboration with a network of businesses and industries closely connected to the campus.

Just as important were more philosophical notions, such as identity, permanency, belonging and intrinsic value. From the outset, Southern Cross University wasn't just in Lismore and the Northern Rivers. It was of them, for them and about them.

Almost thirty years later, much may have changed in the near and far world, but that quintessential connection remains unbroken. It weaves through the story of Southern Cross University's place and purpose, its expansion north and south – and especially its people.

The richness of possibility

Within the narrow triangle that connects Lismore, the Gold Coast and Coffs Harbour, there exists a huge diversity of communities, environments, industries, interests, resources, needs and opportunities. The area is its own ecosystem, rich with possibility and chock-full of stories.

These stories begin in ancient times and travel through generations of First Peoples – Bundjalung, Gumbaynggirr, Nganduwal, Minjungbal/Yugambeh – today encompassed in initiatives like the Gribi College of Indigenous Australian peoples and close relationships with Elders and communities.

They travel through more recent history, such as those first Italian families – displaced but determined – who settled at what became known as New Italy, south of Ballina, and built a model settlement that helped to shape the experiences and histories of the area. Southern Cross University researchers were instrumental in attaining heritage status for the settlement.

Still, for the moment – and understandably – the prevailing story remains the flood. And it should be told here, though not simply to repeat all that it wrought at the time, but to consider what it could lead to in time. Transformation from devastation. That too is quite a story.

The answer is Yes

The University's Vice-President (Engagement), Mr Ben Roche, shakes his head as he remembers when the rain poured down and the people poured in, those needing help and those doing the helping.

"Every 15 to 30 minutes, Blackhawk helicopters were landing on the Morrie Ryan rugby oval, dropping people off," he says. "The campus was in complete blackout and there was very, very patchy mobile connectivity. We had little sense of what was happening.

"We very quickly agreed that our response to the questions would be 'Yes' and then we'd work out what that meant afterwards for the University."

What ensued was stunningly quick, from a university one minute to a refuge and crisis centre the next. Staff and students joined the effort on campus and in the city. Like Education student Christa Morrow.

"I just trawled Facebook for addresses that were popping up that needed help ... it kind of just clicks in that this is someone's life; this is their reality. We started with a team of students and we just didn't stop. You don't even think twice about it."

The University-wide response was not only prompt and deeply personal but is enduring.



Image credit: NR Aerial Photography

Within weeks the Lismore campus - high, dry and safe - became home to Trinity College, the Living School, the Lismore Primary Health Care Network, Business NSW and even the Richmond Police Command. It is part of the 'yes' culture at the University.

More than 2000 extra people today interact with the campus that is transforming into an educational and commercial hub as the region rethinks its future.

Several weeks after the floods, in an interview with ABC Radio before he appeared at the NSW Flood Inquiry, Vice Chancellor Professor Tyrone Carlin cited the response to the flood as a platform for the future.

"As we look forward, what we will find will be opportunities to do innovative things as we share the campus and build something more special than we did before," he said, also using a word that has become thematic. The Lismore campus, he said, was transformed.

All this happened because the University said yes.

A new chapter

The task of recovery will be an extended one. Yet there again, Southern Cross University is helping to write that story.

For example, from 2023 the new Bachelor of Business and Enterprise will be based at Lismore and will connect students to one of the most remarkable commercial shifts in Northern NSW. Fostering business skills, entrepreneurship and innovation will be central to recovery efforts for the Northern Rivers and this degree will enable graduates to have a say and a role in the new Lismore.

Meanwhile, the University is also funding seven research and community engagement projects to aid ongoing flood recovery in the Northern Rivers. Community engagement is a priority in projects that include the future health and use of the Richmond River; a digital archive of the Richmond Catchment; the impact of the floods on young people and marginalised groups; and creation of an online map of community resources contributing to recovery.

There are so many other examples – new starts, new ideas, new initiatives, new chapters – that demonstrate how the flood is a big story, but not the only one.

For Southern Cross University, Lismore and the Northern Rivers, transformation is under way. And tomorrow is not the end of the story.

It is only the beginning.

- Michael Jacobson, Lee Adendorff

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Image credit: Bradley Eyre





Holly Ahern

Lismore is still here

In the wake of unprecedented flooding, images of a sculpture of two hands holding a red heart above flood waters went viral. The artists behind the sculpture, Holly Ahern and her partner Eden Crawford-Harriman, never imagined their work would become a symbol of hope for a town in despair.

With the Lismore arts community devastated, the pair launched a fundraiser selling t-shirts featuring images of the In the Heart sculpture. They raised tens of thousands of dollars in just two days.

Sitting inside her home at Lismore Heights in late February, watching the waters recede, Holly had expected flood levels to be on par with 2017's 11.59 metres. As a precaution, she had moved her artwork and equipment a metre above the previous flood level at her studio on Rural Street. In actuality, the February 2022 floodwaters peaked above 14 metres, wiping out a career's worth of art.

Despite the devastating loss, Holly's public sculpture, In the Heart – made in collaboration with Eden – was still standing in the Lismore CBD. Photos of the sculpture began to go viral and before she knew it, her work had become larger than life.

"It was so beautiful that so many people got behind the sculpture as a symbol of the collective journey through this horrible situation," said Holly.

The artwork seemed destined to be a marker of hope from the start and represented a turning point in Holly's career. After completing the Bachelor of Art and Design and then the Bachelor of Arts with Honours at Southern Cross University, Holly reached a low point. Unsure of what to do with her career, she started applying for grants. A simple idea sketched on a post-it note soon became a project larger than Holly ever imagined.

Holly and Eden submitted plans for a small multimedia sign to be hung in the Lismore CBD. The concept was to create a two-dimensional neon sign with two hands and a heart that would flash 'you are here' when activated by a motion sensor nearby.

"The panel liked our idea so much that they had the trust in us to make it bigger and turn it into a 3D object," Holly said. "It was sort of this moment of being like, okay, so we are going to make something big."

Holly was studying fashion design at the time and made the decision to leave the course and to pursue this opportunity in art.

The aftermath of the floods

Following the flood events in February and March, many local artists lost both their homes and their studios. Holly and Eden decided they wanted to help. Holly used the In the Heart sculpture to design a t-shirt which read 'We are still here. Lismore, NSW' and featured the sculpture hands holding the You Are Here heart above flood waters. They also started a fundraiser selling the t-shirts to raise money for local flood-affected artists.

"We were expecting to make \$500 but within 48 hours our PayPal froze and we were trying to prove that we weren't a scam. It was this crazy moment because we raised \$20,000 in such a short period of time.

"Fifteen hundred people shared a tile of the fundraiser on Instagram. It was mind-blowing that people were wanting to purchase our t-shirt for fundraising efforts."

"It was so beautiful that so many people got behind the sculpture as a symbol of the collective journey through this horrible situation."

With the support of Arts Northern Rivers, the money will be used to pay flood-affected artists to facilitate a small-scale event with the hopes of populating Lismore's CBD with local artists' works.

"I think to be able to reactivate the CBD through an event like this will be really beautiful," Holly said. Despite the achievements of the fundraiser, living through a natural disaster has had a lasting impact. Holly has made changes to the way she organises her studio space, including keeping any artworks or equipment not in use in storage. She has also implemented a flood plan.



"We can't be complacent anymore because there is no pretending that it's not going to happen again.

"I'm coming to terms with the fact that I lost 10 years of my practice, and that is 10 years of artworks and 10 years of research that is just gone. So, that has been really hard. I haven't started making art again yet and it's been seven months.

"I keep saying to Eden, I think maybe in four years I'll be able to put this experience into better words about what this actually meant to us. But right now, I think we're still going through the motions of processing what happened. And I'm so happy that the sculpture survived. I'm so happy that it became this symbol."

Holly is optimistic that the outpouring of love for the In the Heart sculpture will change community attitudes towards public art.

"I'm hoping that our work has really changed people's views on public art. It was something that was instantly able to be engaged with. You can walk up to it, you can touch it, it's not going anywhere. So, I'm hoping that this helps to set the precedent and creates more openness towards public art in Lismore's future, which is really exciting.

After having taken some time out to reset, Holly is now putting that abandoned fashion design course to use. "So, I just made the biggest purchase of my life," she laughed. "I've bought an industrial sewing machine which is really exciting."

"I'm hoping this is the push I need to get making again. I think there's a really important need for me to step back and just enjoy making art again."

- Cloe Jager

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Photographs supplied by the artist.

