

**VICTORIA
UNIVERSITY**

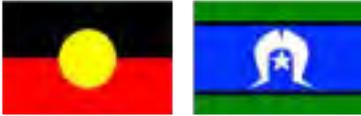
MELBOURNE AUSTRALIA

THE NEW WAY TO DO UNI

PEOPLE, PLACE AND PLANET

Commitment to the
United Nation's
Sustainable
Development
Goals

Acknowledgement of Country



Victoria University (VU) acknowledges the Ancestors, Elders and families of the Boonwurrung, Woiwurrung (Wurundjeri) and Wathaurung (Wadawurrung) on our Melbourne campuses, and the Gadigal and Guring-gai people of the Eora Nation on our Sydney campus. These groups are the custodians of University land and have been for many centuries.

As we share our own knowledge practices within the University may we pay respect to the deep knowledge embedded within the Aboriginal community and their ownership of Country.

We acknowledge that the land on which our campuses stand is the place of age-old ceremonies of celebration, initiation and renewal. The Kulin and Eora peoples' living culture had, and has, a unique role in the life of these regions.

VU supports the aim of Reconciliation Australia to build better relationships between the wider Australian community and Aboriginal and Torres Strait Islander peoples for the benefit of all Australians. It is important that staff, students and visitors understand and respect the significance of recognising the traditional owners of University land.

For more information:

Office of the Vice-Chancellor

P +61 3 9919 4000

E compliance@vu.edu.au

Postal address:

Victoria University

PO Box 14428

Melbourne VIC 8001

vu.edu.au/annual-reports



PURPOSE, VISION AND MISSION

PURPOSE

Victoria University emboldens its people to design their future and has a deep commitment to protecting country.

VISION

To be a global leader in dual sector learning and research by 2028.

STRATEGIC DRIVERS

We will achieve this vision by:

- ◆ **DOING DUAL DIFFERENTLY**
Enabling students around the world to 'start well, finish brilliantly'.
- ◆ **PARTNERING WITH PRINCIPLE**
The 'flipped campus' is the campus of the future.
- ◆ **MAXIMISING RESEARCH WITH IMPACT**
We work to have outcomes that benefit people, place and planet.
- ◆ **PROTECTING COUNTRY**
We honour our deep diversity as a foundation for collaboration and social progress.
- ◆ **A THRIVING PLACE TO STUDY AND WORK**
A place where people love to belong, and feel immense pride.



VICTORIA UNIVERSITY'S CONTRIBUTION TO THE UN SUSTAINABLE DEVELOPMENT GOALS



Victoria University's (VU) strong commitment to the realisation of the UN Sustainable Development Goals is founded on our distinctive models for higher and vocational education.

ETHICAL MODEL

PROTECTING COUNTRY, PLANETARY HEALTH, SUSTAINABILITY

CURRICULUM MODEL

FIRST YEAR COLLEGE, VU BLOCK MODEL, DOING DUAL DIFFERENTLY

OPERATING MODEL

FLIPPED CAMPUS, INDUSTRY, EMPLOYABILITY

The recently released Strategic Plan 2022–2028, 'Start Well Finish Brilliantly', builds on past achievements and successes in transforming VU's place in the economy, society and environment, and charts a course to be a global leader in dual sector learning and research by 2028. The plan's strategic drivers to achieve our vision, speak explicitly to the UN SDG's.



STRATEGIC DRIVERS



Doing Dual Differently is built on VU's unique approach to teaching and learning, including the world leading Block model and better integration of Higher Education and Vocational Education. These initiatives to expand access to postsecondary education go to the heart of SDG 4 Quality Education, and provide graduates with capabilities to contribute to innovation and the global community across the SDGs.



The ethos behind **Partnering with Principle** is to forge alliances on ethical and socially responsible lines. Located in the heart of the West of Melbourne, a region facing significant disadvantage and challenges, VU is well equipped to address social, health, environmental and economic needs at the local level, which is then leveraged onto the wider national and global arenas. To this end, VU is building strong, comprehensive and ethically responsible partnerships with industry, community, government, non government and sporting organisations, with an objective of at least one industry partner onsite.



Maximising Research with Impact means that our strengths, in translational applied research with practical outcomes, will address challenges and needs in areas inextricably linked to the UN SDGs, including health and well-being, social and cultural inclusion and transformation, climate change, water and energy management, education, gender equality, urban design and infrastructure.

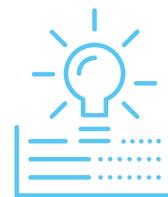


Protecting Country is the connection between people, place and planet. We are working for a sustainable future for all and to improve the health and well-being of our local and global communities and the planet that we share. Central to this is respecting and listening to indigenous voices and standpoints, privileging self-determination, sovereignty and authority and embedding indigenous perspectives and knowledge. We will be respected globally for excellence in indigenous led cultural, social and climate solutions that speak explicitly to SDGs.



As **A Thriving Place to Study and Work**, VU is, and will continue to be, a beacon for: access, opportunity and equity; promoting outreach into the community; fostering empowerment; and managing its own resources in accordance with the highest standards of sustainability. In all that it does and says, VU will be committed in its own operations to upholding the values and behaviours consistent with the UN SDGs.

DOING DUAL DIFFERENTLY



Doing Dual Differently brings together higher and vocational education to offer concurrent and complementary studies providing multiple pathways. This flexible approach enables earn while you learn, personalised and digital learning options.

Central to Doing Dual Differently is VU's distinctive Block model of learning which is offered at all levels of study. An Australian first, the Block model enables students to take subjects one at a time, sequentially, allowing for tailored support, collaborative classrooms and better integration of Higher and Vocational education.

The Block model has improved student retention and success rates. The Block model is to be extended into partner schools to create seamless pathways into tertiary education at VU.

The Block model, through the First Year College, has won a number of awards including the prestigious Australian Award for University Teaching from Universities Australia in 2020 and the International Education Association of Australia Award for innovation in 2018.

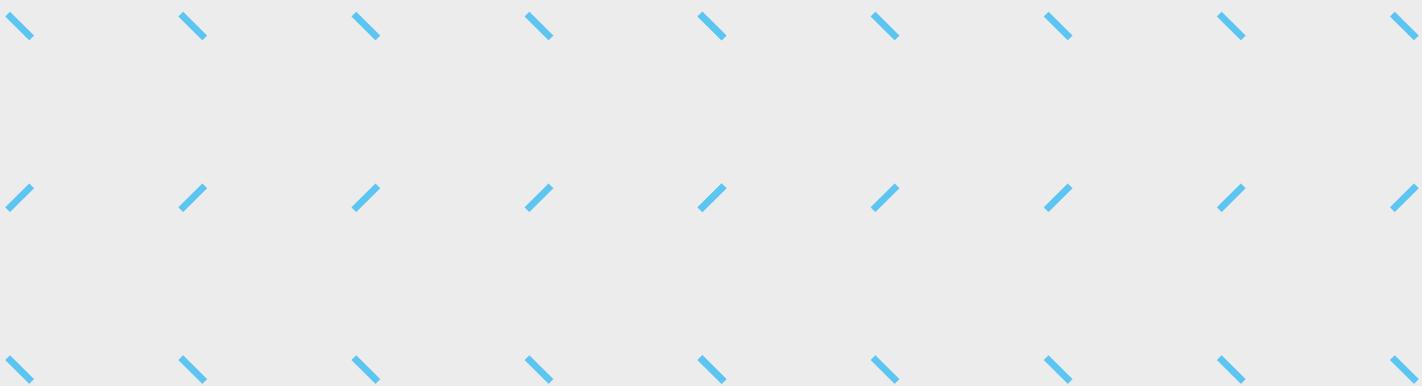
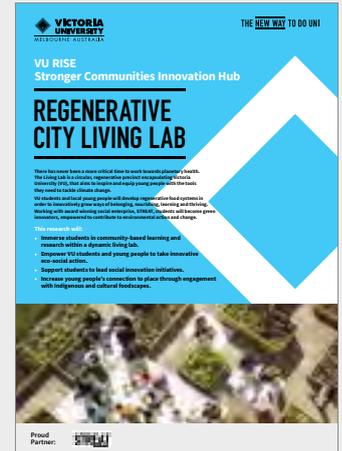


VU RISE

Looking to the future

In 2021, VU established [VU RISE](#) (Recover, Innovate, Sustain & Evolve) framework and four Innovation Hubs: Stronger Communities; Sustainable Futures; Education; and Jobs and Skills with \$22m in funding from the Victorian Higher Education State Investment Fund. These hubs are focus areas of applied research in partnership with industry, community and government in the west of Melbourne to create solutions and impact for a post-COVID world.

The sustainable Innovation Hub framework seeks to activate opportunities through partnership development, accelerator and incubator programs to develop innovation and entrepreneurial capabilities in VU staff, students and community partner organisations.



EDUCATION FOR THE GOALS

Victoria University's graduate capabilities include the aim that every student will contribute to a more equitable and sustainable world:

Developing capacities required to contribute to a more equitable and sustainable world, including courage and resilience.

Throughout VU's courses and programs in higher and vocational education, the focus is upon social and cultural inclusion and transforming lives.

As students prepare to enter the world of work, their employers increasingly require skills, knowledge and a mind-set attuned to sustainability, including familiarity with the SDGs in accordance with SDG 4.7.

The focus is now on reviewing courses and making changes to existing units, and the design of new units, modules and courses. Rather than labelling units as having connections to the SDGs, VU is being explicit in how a unit contributes towards the goals.

Implementing planetary health in the curriculum was part of all college plans, with a focus upon identifying priorities, developing frameworks and pilots working towards a systematic transformation, with a variety of approaches taken across the different fields and levels of education.

A planetary health approach is already embedded in various courses across such areas as Community Development, Global Public Health, Outdoor Education, Leadership and Environmental Science.

For example, the College of Health and Biomedicine is introducing the Applied Sustainability in Health Care unit for all health students, to create awareness and commitment to the factors for sustainable health care. It has four parts: Our Health, Our planet; Transforming to Sustainable Healthcare; Applying a framework for sustainability in healthcare to health settings and workplaces; and Driving change towards sustainable healthcare.



“

DURING MY STUDIES, I COMPLETED MY INDUSTRY PLACEMENT, CONTRIBUTING TO GERMINATION TRIALS FOR A CRITICALLY-ENDANGERED GRASSLAND SHRUB. IT WAS A VALUABLE EXPERIENCE THROUGH WHICH I PUT MY THEORETICAL KNOWLEDGE INTO PRACTICE.

”

BRADY
Bachelor of Science

Graduate Certificate in Planetary Health

Australia's first Graduate Certificate in Planetary Health was launched in July 2020.

The course is designed for professionals seeking to change career directions, but also to respond to new demands from employers, clients, government and communities for environmental, economic and social sustainability.

The units are:

- ◆ Planetary health – a place based approach;
- ◆ Responding to climate change through planetary health lens,
- ◆ Disaster Resilience and response through a planetary health lens;
- ◆ Making a healthy planet – a transdisciplinary transformation.

These units add to existing courses and can be incorporated into new course proposals.



Dawt (Nunu) Sarum,
Bachelor of Engineering (Honours)
Civil Engineering

VU's [WISE – Women in Science and Engineering](#), coordinated by Associate Professor Juan Shi, supports female engineering and science students through a program of seminars and work-shops featuring women engineers, scientists and IT professionals.

SDG HIGH-LEVEL ACHIEVEMENTS 2020

In 2020, Victoria University further focused our commitment to the UN Sustainable Development Goals (SDGs), to protect country and address the challenges to the health and wellbeing of people, place and planet by:

◆ Sustainable Development Solutions Network

- ◆ joining the Sustainable Development Solutions Network for Australia, New Zealand and Pacific of organisations working to raise awareness of the SDGs, promote the role of universities as key stakeholders, and to provide support for official SDG processes in our respective countries.

◆ Planetary health

- ◆ investing \$1 million in seed funding for 25 new research projects focussed on people, place and planet;
- ◆ joining the global Planetary Health Alliance; and
- ◆ launching the first course in Australia dedicated to planetary health, the Graduate Certificate in Planetary Health.

◆ Research strategy

- ◆ releasing a new Research Strategy 2021–2025 to undertake life-changing and world-changing research for the wellbeing of people, place and planet to solve the issues of planetary health and the UN SDGs.



Spotlight on Partnerships for SDG3 Good Health and Wellbeing

WESTERN BULLDOGS FOOTBALL CLUB

When you think of the Western Bulldogs, you probably think of a white knuckle final series and their dogged supporters, but the Western Bulldogs is so much more than that.

The Western Bulldogs and Victoria University are working together to improve the health and wellbeing of people in the region, through sport, the Community Foundation and health services.

Sport for the goals

VU researchers and athletes from the major sports clubs in the West of Melbourne presented 30 minute sessions at school recess time each day for kids to participate in the sporting activities.

Victoria University Sport and Bianca Chatfield of the VU Netball Academy partnered with the Western Bulldogs, Western United FC and Footscray Community Arts Centre to conduct an online [Kids Active Recess: Westside](#) to keep kids active during a 112 day lockdown in 2020. VU researchers also provided videos to support mindfulness and active living.

Western Bulldogs Community Foundation

Since 2016, VU has been an active contributor to the [Community Foundation \(WBCF\)](#). Each year students and staff from diverse fields work alongside the Foundation team to:

- ◆ Deliver the WBCF programs through student placements and projects.
- ◆ Conduct research to inform program design and undertake program evaluation.
- ◆ Facilitate advocacy for the diverse community of the west.



Western Bulldogs Football Club

Community Foundation Program Streams in the west of Melbourne

HEALTH AND WELLBEING

Sons and Daughters of the West

The free 10 week program of education, physical activity opportunities and a supportive social network can annually attract over 1300 participants. The program addresses key public health concerns through the development of health pathways and co-designed content which focuses on health promotion and behavioural change.



DIVERSITY AND INCLUSION

CALDplay

The 6 week program, run in conjunction with English Language Schools, provides newly arrived people opportunities through structured sports programs, to learn and speak English, to make social connections and to develop employability skills, particularly teamwork and communication.

GOAL

GOAL Mentoring is a free program for young African Australians connecting them with players and community leaders to support personal development and goal setting.



YOUTH LEADERSHIP

Nallei-Jerring Koori Leadership Program

The program provides Indigenous young people with an exciting range of life, cultural and sport experiences and connections to provide cultural knowledge and to develop leadership capabilities.

Leaders of the Pack

A 10-week leadership sports program for young women with fun workshops and information about different education and employment pathways.



COMMUNITY ADVOCACY

The Foundation engages with more than 20,000 community members annually to promote inclusiveness and equality for all, regardless of race, faith, gender or disability, by facilitating a variety of events to raise awareness and educate, and works closely with the Club and Foundation partners to deliver special programs.

WBCF and Victoria University deliver key events:

- ◆ Supporting AFL and AFLW Indigenous round, Pride round and themed rounds that address social issues e.g. mental health, organ donation
- ◆ Leveraging VU Whitten Oval as a community hub for diverse and positive community interaction



Western Bulldogs Football Club

Evidence Based Program Design

A team of VU researchers, headed by Professor Jenny Sharples, examines the ways in which the Foundation contributes to the health and wellbeing of the community.

The research team completed an evaluation of the Sons of the West (SOTW) program, [Exploring the impact of a large gender-sensitised health promotion program](#) ✓ which showed the program achieved improvements in psychological wellbeing, individual resilience and a sense of connectedness. According to the paper:

“The importance of behaviour change in healthcare is substantial, in terms of both morbidity and mortality risks. Many existing interventions that target health-related behaviours rely on influencing the way people consciously think about their behaviour, assuming that people change behaviour when their motivations and intentions are changed”.

The SOTW program takes the next step in changing peoples behaviours and providing them with networks that provide social support for their new healthier routines.

Western Bulldogs Community Foundation General Manager Kashif Bouns spoke to the importance of ensuring the foundation’s programs are evidence based and cutting edge.

“The unique nature and audience group of the SOTW program means our content and outcomes need to be consistently evaluated. We’re very fortunate to have a long-standing and successful partnership with VU and studies like this provide us with the guidance to ensure our program content and delivery is at the highest possible standard”.

The research team continues its evaluations of the WBCF programs, in 2020 taking the opportunity to assess what works and what does not when programs are provided online, during the COVID-19 lockdowns, for the Youth Leadership and the Daughters of the West programs.



Spotlight on Partnerships for SDG4 Quality Education

VU IN THE COMMUNITY

Education and training opportunities

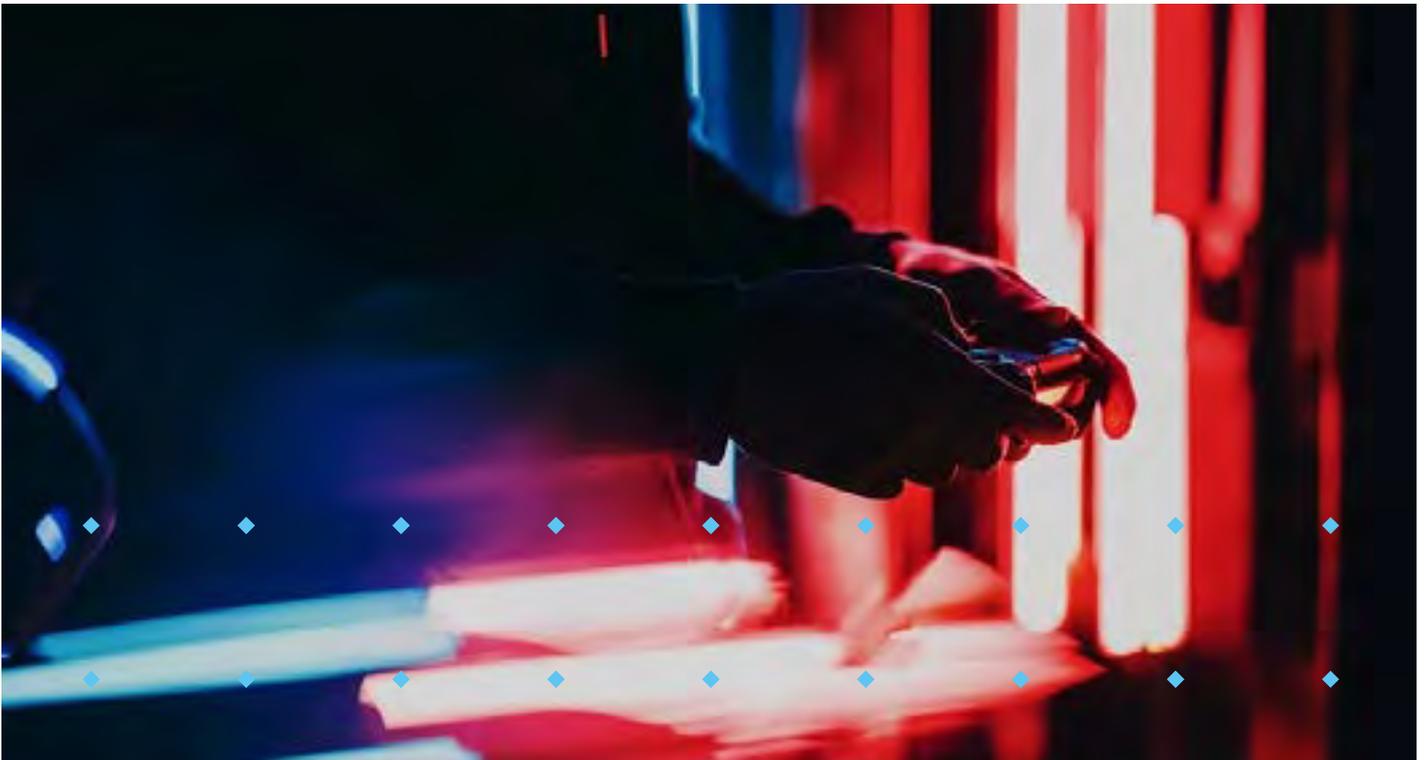
Victoria University is engaging with local Councils, community organisations and schools to improve educational opportunities in the West of Melbourne.

Footscray University Town, the first initiative, starting in 2014, is a partnership between Victoria University and Maribyrnong City Council to revitalise Footscray as a hub of knowledge, learning, creativity and opportunity. In 2020, VU signed two further memorandums with Brimbank and Hume City Councils to collaborate on educational participation and for community and economic development.

City of Brimbank is already home to two of Victoria University's higher and vocational education campuses at Sunshine and St Albans. The [Sunshine Skills Hub](#) 

at VU Polytechnic was opened in 2020. The Skills Hub includes a health and community services centre of excellence, an innovation and incubation space with the latest technology for prototyping, as well as a learning commons and café.

The [Wyndham Tech School](#)  is run by VU at the Werribee Campus to provide state-of-the-art programs and technology for design, robotics and programming to over 24,500 students from 34 regional secondary schools.



VU in the community

Lifelong learning

Footscray Learning Precinct

VU is engaged in the long term planning and provision of the [Footscray Learning Precinct](#) (FLP) to network early childhood, primary and secondary schools, and VU as post-secondary education across the Footscray area. Despite the challenges, 2020 saw the launch of Footscray High School, with upgrades to existing campuses and the construction of a new campus to open in 2021.

VU participates in a new structure for governance and collaboration across the FLP members and is providing a scholar to lead an innovative model of learning – STEAM Labs. The FLP focus on science, technology, engineering, art and maths (STEAM) is designed to build the 21st Century knowledge, skills and capabilities for teachers and students.

To support the FLP learning goals, VU's AVID worked with schools to identify needs, conduct professional learning sessions and connect schools with other schools pursuing student-led learning, to expand opportunities for collaboration. The Mitchell Institute

raised the profile of the STEAM Labs as a Third Space away from normal classroom settings in the state government Department of Education and Training working group on the future of secondary schooling.

Hume Education and Community Program

VU is working with Hume City Council to facilitate lifelong learning in Hume by making tertiary education and training opportunities more accessible to Hume residents. The initiative will increase access to jobs, skills and education pathways for people in the region, particularly for young people and for migrants.

A sustainable Hume Multiversity is being established, commencing in 2020 with the opening of the Hume Global Learning Centre, sponsored by VU, offering meeting, library and training facilities.

Through the centre, VU will partner with the Council to develop a program of education and community-engagement activities over the next five years.



VU in the community

Lifelong learning

VU in Brimbank

VU is working with [Brimbank Council](#) to:

- ◆ Increase access to skills, knowledge and jobs in the Sunshine Priority Precinct through the development of learning, skills and economic development programs.
- ◆ Undertake major research to improve disadvantage for young people.
- ◆ Strengthen VU's campuses as key anchors for learning, skills and engagement by working with the local communities to make our teaching and training responsive to local needs, and by better linking and connecting to local secondary schools, to develop job pathways.

VU in Wyndham

[Wyndham is home to VU's Werribee campus](#) which now incorporates the [Wyndham Tech School](#) for regional secondary school students to learn technical skills using leading-edge technologies. The school conducts programs for computer aided design, robotics and programming and regular future focussed public events on science, technology and engineering.

The annual [Wyndham Learning Festival](#) is a collaboration between VU, Wyndham City Council, industry and community partners to promote life long learning by providing free learning opportunities for people from all backgrounds and all ages 'to acquire the knowledge and skills they need to fulfill their aspirations and contribute to their societies.' UNESCO Education Strategy 2014-2021.



VICTORIA UNIVERSITY'S CONTRIBUTION TO THE UN SUSTAINABLE DEVELOPMENT GOALS

2020 Report



This report highlights the important projects that VU has been undertaking in respect of each SDG.

This includes cutting edge work in: children at risk due to family employment stress; sustainable agriculture to end hunger; Australia’s health tracker; educational opportunities; prevention of violence against women; processes to decontaminate water; design of renewable energy battery storage systems; COVID-19 impacts on economies; smart logistics; education and projects in support of Timor-Leste; projects based on indigenous health knowledge; biodiversity and green spaces; implications of net zero emissions on industries, regions and jobs; projects for social cohesion and combatting terrorism for safe and inclusive communities; and returns from Government investment in health.

VU is strongly supported in all these dimensions by its leading edge think tanks through the Mitchell Institute, Centre for International Research into Education Systems (CIRES), Centre of Policy Studies (COPS), Sir Zelman Cowan Centre (SZCC), Victorian Institute for Strategic Economic Studies (VISES), Institute for Sustainable Industries and Liveable Cities (ISILC) and Institute for Health and Sport (IHES). These organisations are at the forefront of scholarship relating to the UN SDGs through research, best practice analysis, practical policy advice to governments and collaboration with counterparts at home and abroad.





End poverty in all its forms everywhere

2020 HIGHLIGHTS

Research

The Centre for International Research on Education Systems and the Mitchell Institute prepared a major report to inform educational policy. The report [Educational opportunity in Australia 2020: Who succeeds and who misses out](#) provides indicators to measure progress towards the national goals for education. The national data shows that the Australian education system is not bridging the gap between rich and poor in the crucial early years of learning, allowing cycles of poverty to continue.

The number of Australian children at risk due to family employment stress doubled in 2020 to 1.4m according to [COVID-19, Employment stress and student vulnerability in Australia](#) report by the Mitchell Institute. The report highlighted the need for urgent government action to prevent long term damage to the education and work prospects of young people in communities suffering from COVID-19 related job loss.

Microfinance has become a means of addressing poverty, through small loans to poor people to fund ventures that will provide an income. A study of [microfinancing in Indonesia](#) found that to improve depth of outreach with a given level of sustainability, microfinance institutions should provide more loans with the group lending methodology.

Research on the [economic impact of tourism in Uganda](#) shows that while tourism serves to reduce poverty in the short run, the effect reduces in the long-run, and so further economic stimulus is necessary to break the cycle of poverty.

Engagement

Victoria University's Mitchell Institute was awarded a [\\$5.5m grant by the Paul Ramsay Foundation](#) to conduct a community based research program in the West of Melbourne to improve the transition from school to further education and work. The program aims to break the cycle of poverty for young people from low socio-economic backgrounds.

Education

The [Master of International Community Development](#) engages with the UN SDGs in the course learning outcomes and practice-based assessments, to prepare graduates to work on SDG projects and programs of implementation. The approach is one of critical engagement, interrogating intersectionality and social and cultural inclusion in the SDG targets and indicators.



Units focus on transformational change, including: transnational gender issues and human rights; conflict resolution in groups and communities; engaging communities for sustainability; building capacity: and mobilising civil society, as well as project and organisational management. Students undertake a research thesis or a community based research project arising out of a placement with a partner development agency or project in Australia or overseas.



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2020 HIGHLIGHTS

Research

Ashok Sharma and Ted Gardner undertook an [Assessment of socio-economic factors impacting on the cropping intensity of an irrigation scheme in developing countries](#) ✓ as a framework to solve barriers to the increase of cropping intensity required to achieve global food security.

Victoria University research into sustainable agriculture on the [water footprint of food exports](#) ✓ found Australia loses about 35,000 gigalitres of freshwater a year embedded in agricultural exports. That is roughly equivalent to all Australia's stored reservoir water. As Australia has volatile water resources, measuring the water footprint of products is critical for national policy. The study found 65% of the nation's agricultural products are exported for relatively low benefit, when water is factored into the cost. The report was co-authored by Dr Muhammad Tariq and Dr Nitin Muttill and two Bachelor of Civil Engineering students Riley Damnic and Zohreh Rajabi, along with Muhammad Laiq Ur Rahman Shahid from the University of Engineering and Technology Taxila. Dr Tariq and Dr Muttill mentored the students in after-class sessions toward a goal of publication.

The Mitchell Institute released a policy evidence brief on [Nutrition Policy In Australia: Adopting A Harm Minimisation Approach Policy](#) ✓. The policy brief examined the specific food components and dietary risk factors which are responsible for the greatest amount of harm to health outcomes in Australia and presents the case for adopting a formal harm minimisation approach regarding nutrition policy in Australia.

Mark Horridge from the Centre of Policy Studies collaborated with Brazilian researchers to look at the critical question of [The Expansion of Irrigated Agriculture in Brazil and Potential Regional Limitations](#) ✓. The book presents modelled scenarios to assess the impacts on water demand

for 2025. Expansion has benefits to farmers and for food security, but it has a damaging effect on water availability and may worsen episodes of regional water scarcity.

Giang Hoang co-authored recommendations for how the Vietnamese government could promote [Geographical Indications implementation](#) ✓ to enhance agricultural product quality in Vietnam.

Vasileios Stavropoulos worked with Turkish and UK researchers to develop a [new food addiction scale](#) ✓ for the measurement, prevalence and psychological risk factors associated with addictive food consumption.





The [Advanced Food Systems](#) researchers examined the [nutritional value of eight species of native food plants](#) from Martang Djab Wurrung Country and Worngundij Country in Western Victoria. Despite popular use, rich nutrient content and adaptability to harsh climatic conditions, there are limited scientific data for many useful native food plants to help reduce dependence on unhealthy food choices in Australia. The research established preliminary findings for the sustained nutritional value of the native food plants over a three year period.

Engagement

A Victoria University researcher, Dr Fiona MacDonald, who specialises in inclusive education, has looked at the effect that [remote learning in 2020 due to COVID-19 will have on school breakfast clubs](#). The clubs, a partnership between the Victorian Government and Foodbank Victoria, provide disadvantaged children with healthy breakfasts before school. Dr MacDonald co-authored an [evaluation of the school breakfast program](#) which found the clubs create nurturing and caring spaces that make children feel safe and welcome at school –

something that cannot easily be replicated when students are at home. Dr MacDonald said: One of the greatest challenges as COVID-19 forces schools online is managing the gap between advantage and disadvantage. It is yet to be seen if a substitute such as a door-drop delivery of food packs conveys the same level of connection, nurturing and care.

Education

VU launched a new [Bachelor of Nutritional Science / Master of Dietetics](#) to address the need to improve diet related health.





Ensure healthy lives and promote well-being for all at all ages

2020 HIGHLIGHTS

Research

The [Institute of Health and Sport](#) specialises in research into the prevention and treatment of chronic disease, the benefits of active living, sport optimisation and social factors for sport and exercise participation.

[Australia's Health Tracker](#) series of reports are the work of the [Australian Health Policy Collaboration](#) of health organisations and chronic disease experts led by Professor Rosemary Calder, from the Mitchell Institute, to measure progress towards national health targets for 2025.

Four reports were released in 2020. Australia's Health Tracker by Area: Smoking Rates Report shows smoking rates in Australia's poorest areas are up to seven times the rate of wealthy areas, with the reduction of the national smoking rate stagnating at 12.2% for the last four years.

Australia's Gender Health Tracker report card 2020 highlights differences in gender based health needs and risks, how current policy, funding and service models are failing women, and the estimated costs of system shortcomings. The additional Health Tracker reports published were the Alcohol Summary Report and the NSW Aboriginal Community Controlled Health Tracker.

The Mitchell Institute prepared for the Australasian College for Emergency Medicine, the peak body for emergency care, the report [Nowhere else to go: why Australia's health](#)

[system results in people with mental illness getting 'stuck' in emergency departments](#). The report provided a comprehensive set of recommendations for people seeking mental health support to access the services they need and to alleviate the pressure on hospital emergency departments.

Preclinical research by exercise metabolism researchers, Professor Glenn McConell and Dr Filippa Falcao-Tebas, indicates that [women who exercise before and during pregnancy](#) could overcome the risk of their child developing diabetes that comes from having an obese father. The study on rats found that pregnant mothers who exercise can 'reprogram' the low insulin sensitivity and increased likelihood of diabetes for the offspring of obese fathers.

Professor Melinda Craike and Matthew Bourke, found that people need to feel good, to derive pleasure and to have achievable goals in order to stay motivated to maintain long term [commitment to moderate-to-vigorous physical activity](#). External sources of enjoyment such as a great view or upbeat music are important to counter negative internal monologues and physical discomfort.

Rubina Sarki; Khandakar Ahmed; Hua Wang; Yanchun Zhang of ISILC conducted a systematic survey of automated approaches to diabetic

eye disease detection for [Automatic Detection of Diabetic Eye Disease Through Deep Learning Using Fundus Images](#). The survey is to provide a comprehensive synopsis of diabetic eye disease detection approaches, including state of the art field approaches, for research communities, healthcare professionals and patients with diabetes.

[Effects of visually augmented gait training on foot-ground clearance: An intervention to reduce tripping-related falls](#), involving Rezaul Begg, looked at how to prevent dangerous trips and falls by training people to increase their toe clearance.

[Factors influencing self-management of depression in older adults: a qualitative study](#) involving Terry McAinch, looked at developing strategies for older adults to successfully self manage depression.

[Exercise Interventions in Polycystic Ovary Syndrome: A Systematic Review and Meta-Analysis](#) was undertaken by Nigel Stepto, international and Australian health researchers, to more clearly establish what interventions are effective in providing favourable outcomes for PCOS.

Karen Mickle co-authored, ['Jump start' childcare-based intervention to promote physical activity in pre-schoolers](#), an assessment of whether an early intervention program can promote physical activity.



Engagement

A [Brief Interventions Toolkit](#) was deployed on the headspace website, accessed by thousands of young people, to provide solutions-focused, skills-based material to help handle life's challenges, without needing to speak to a clinician. The toolkit of micro-intervention modules for use by young people to deal with personal trials, draws on the research by Professor Alex Parker into physical activity and problem solving by young people with mental health concerns.

Chronic obstructive pulmonary disease (COPD) is the second leading cause of avoidable hospital admissions. [Professor Clint Moloney](#), a leading expert on COPD, was a research lead of the [Reducing Avoidable Chronic Obstructive Pulmonary Disease emergency presentations project](#) to examine a potential over-use of emergency services and to address gaps in outreach services in the treatment of COPD. The project was undertaken in collaboration between three non-metropolitan health services in South East Queensland. It has informed referral treatment initiatives' implementation and evaluation e.g. anxiety management, smoking cessation referral, and quality intra-professional care programs, based on identified causal factors. Professor Moloney published a series of articles on the findings of this project for emergency presentations and treatment of COPD.

The Mitchell Institute conducted the [Giving it a Go: Working towards health and wellbeing](#) program, a collaborative and innovative research project designed to help people with chronic musculoskeletal (MSK)

conditions who are on the Disability Support Pension. The free online program is designed to help people better manage the condition and build confidence to engage with work, education and the community.

Nilufa Khanom and Shah Jahan Miah address the digital divide in [Cloud Motherhood Clinic: A Healthcare Management Solution for Rural Communities](#), by co-designing with stakeholders a mobile Health (m-Health) solution for service support in a virtual clinic environment.

The Behavioural Risk Tool (BRT), developed by Associate Professor Michelle Ball and her research team, is now being offered as a standard part of the Firelighting Consequence Awareness Program (Fire-CAP) intake process to allow high BRT scores to be rapidly managed and to identify if mental health support is required.

A team of researchers from the health and university sectors and Telethon Kids Institute, co-lead by Associate Professor Jacqueline Williams, have

reported on a survey of parents of children across Australia for the [Impact for DCD Survey](#) the largest survey conducted in the world on the impacts of Developmental Coordination Disorder. DCD is a little-known neuro-developmental condition, estimated to affect up to one in twenty children, which often co-occurs with other disorders, masking its effects and delaying diagnosis. Its effect on motor skills and coordination means that children with DCD have trouble with activities like getting dressed, eating, writing, running or playing. The report provides an evidence based guide for improving support for children with DCD and their families.

[VU Elevenses](#) was a live discussion for staff and students on weekday mornings to support people's mental health during the 2020 COVID-19 lockdowns. Directed to lifestyle and health, the sessions aimed to improve the wellbeing of participants. The sessions are available on YouTube for on demand viewing.





Associate Professor Deborah Zion was appointed to the World Health Organization on Ethics, Public Health and Migration.

Prof Ramon Spaaij was invited as a panellist for the United National High Commissioner for Refugees (UNHCR) and International Platform on Sport and Development webinar.

Education

The [Master of Global Public Health \(Nutrition and Active Living\)](#) is directed to complex global health issues and in 2020 VU offered a new [Master of Public Health](#) online with specialisations in Health Promotion and Global Health

Leadership, to address current and emerging health issues in local and global contexts.

Western Health and VU

Victoria University and [Western Health](#) have formed a strategic partnership for education, research and engagement to improve health care and treatment for acute and chronic conditions and the health of communities in the region .

The Western Centre for Health Research And Education

VU and Western Health collaborated with The University of Melbourne on the development of the Western Centre for Health Research and Education (WCHRE). This is a state-of-the-art teaching, training and research centre at Sunshine Hospital. The WCHRE makes major contributions to the future health of local communities through leading research.

Current projects

Staff and students from our College of Health and Biomedicine, Institute for Health & Sport (IHES) and VU Business School work closely with Western Health to understand a number of chronic diseases.

Other research by VU's nursing and midwifery staff informs Western Health's addresses the barriers to nurses and midwives providing the best care for patients and supporting patients to make better health choices.

Joint health research by Victoria University and Western Health Researchers

Some examples of research completed in 2020:

- ◆ The [PAPHIO study protocol](#), led by Professor Vassio Apostopolous, engaged survivors of breast cancer in a long term physical activity program to determine whether it would result in better mental health, quality of life and boost their immune function.
- ◆ The [paradoxical effect of parp inhibitor bpg-15 on irinotecan-induced cachexia and skeletal muscle dysfunction](#), involving Professor Alan Hayes and IHES researchers, are developing an inhibitor to protect patients from chemotherapy-induced muscle wasting and dysfunction and an increase in the risk of morbidity and mortality.
- ◆ [Education, occupation and operational measures of sarcopenia: Six years of Australian data](#) also involving Professor Alan Hayes, looked at targeted interventions to prevent progressive muscle loss in sedentary occupational groups.
- ◆ [Effect of inorganic nitrate on exercise capacity, mitochondria respiration, and vascular function in heart failure with reduced ejection fraction](#) is the largest study to date to examine the effects of inorganic nitrate supplementation in patients with heart failure to improve exercise capacity and recovery.

Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

2020 HIGHLIGHTS

Research

VU has two research centres specialising in educational policy and in education systems, that inform educational policy, funding, practice and performance.

The Centre for International Research into Education Systems (CIRES) released the [Evaluation of the Fair Education Program In New South Wales](#) report on a major initiative by the Vincent Fairfax Family Foundation and Australian Schools Plus to support schools in disadvantaged areas.

The evaluation confirms the program’s success for improving outcomes and the key features of the program’s support of schools.

[Impact of learning from home on educational outcomes for disadvantaged children](#), by the Mitchell Institute and CIRES was commissioned by the federal education department and government to assess the impact of remote learning due to COVID on educational outcomes, and indicated a range of factors restricting learning

from home for socially disadvantaged students and skills and competencies teachers need to effectively manage learning online.

The Mitchell Institute released a series of policy briefings to inform national policy considerations:

- ◆ [Australian Investment In Education: Higher Education](#) analyses funding for universities over the past decade and the challenges posed to the sector through border closures in 2020 and the loss of international student revenue.
- ◆ [Australian Investment In Education: Early Childhood Education And Care](#) proposes policy reform to: improve transparency and certainty of funding; invest in quality in all early learning services, including child care; and improving the transparency of private investment to simplify funding for families.
- ◆ For [Every Early Childhood Educator Matters](#), Mitchell brought together 33 researchers with expertise in early childhood education and care (ECEC) workforce development in a national roundtable to generate evidence-based policy ideas and presented findings in the report, to inform the National ECEC Workforce Strategy due for release in 2021.





- ◆ [Student-Centred Senior Secondary Schooling](#)  seeks to transform senior secondary learning and pathways through a commitment from governments to school-led reform, by sustaining a holistic focus on lifelong learning and by enhancing learning pathways.
- ◆ Efrat Eilam, Veerendra Prasad and Helen Widdop Quinton from the College of Arts and Education, examined the ways in which the [Victorian curriculum educates senior-secondary students about the climate change crisis](#) . The researchers propose curriculum reforms to address and incorporate climate change as a coherent body of knowledge.

Engagement

Dr Jen Jackson was a member of the Macklin Review, [Future Skills for Victoria - Driving collaboration and innovation in post-secondary education and training](#) , of post-

secondary education, to ensure skills development for future economic growth. The Review contracted CIREs for two evidence reports. The Mitchell Institute made two submissions to the Review, [Skills Innovation at Victoria University](#) , examining new ways of delivering tertiary education emerging within VU, and [Skills for recovery: the vocational education system we need post-COVID-19](#) , describes the key issues and charts a way forward to create a system that effectively supports a strong recovery from the pandemic.

VU's [Wyndham Tech School \(WTS\)](#)  is a centre of Science, Technology, Engineering and Mathematics learning for area schools. Programs were delivered to 34 schools and over 22,000 Year 7–12 students.

[AVID Advancement Via Individual Determination](#)  organised a national conference for school professionals in 2020: Lessons from lockdown, and what we learned from teaching and

learning remotely. The event brought together teachers, researchers and NGOs from Australia and USA to share their learnings for remote delivery of school education.

Professor Gary Foley commenced free online 'Black Fire' lessons on Indigenous political activism and an alternative view of Australian history via Facebook and a series of online lectures for the public, badged [Melbourne School of Discontent](#) .

Education

VU has among the highest proportion of first-generation students in Australia with about 40% of students first in family to go to university. The [Kick Start](#)  program develops the social capital of first-generation students through intensive workshops that focus on campus familiarisation, study skills, creating academic and personal support networks, and more.





Achieve gender equality and empower all women and girls

2020 HIGHLIGHTS

Research



[Australia's Gender Health Tracker report card 2020](#) , highlights differences in gender based health needs and risks, and highlighted that current policy, funding and service models are failing women, with serious social and economic impacts.

The UNFPA publishes each year a report on the [State of the World Population](#)  which in 2020 was dedicated to the rights of women. Bruce Rasmussen of VISES provided modelling and analysis of the impact of child marriage and costs of interventions to eliminate child marriage.

The United Nations Population Fund, Avenir Health, John Hopkins University and VISES researchers collaborated

on assessing the [impact of COVID 19 on family planning and ending gender based violence](#) .

Engagement

HealthWest Partnership and Victoria University worked together on [Project Momentum: Working Together with Men](#)  to engage younger male students and staff in prevention of violence against women. The project created a guide for creating and supporting projects of this kind. The project conducted a number of activities in 2020 for exploring ideas of manhood and the narratives surrounding 'real men', including the Enter the Man Box art installation for VU O Week and workshops on the Man Box Story.

[A Level Playing Field: the case for investing in women's sport](#)  is a collaboration by VU, Australian Women in Sport Advisory Group, Male Champions of Change and Price Waterhouse Coopers to advocate for the equality for women in sport participation and employment.

Professor Ramon Spaaij and his research group have been instrumental in changing sport participation to be more inclusive. The [Change Makers Project](#) , has resulted in a community of practice of more than 50 local sports club representatives implementing inclusion projects to promote gender equity by increasing the number of girls and women participating and more women in club leadership and coaching. The 'Participation versus performance: managing (dis)ability, gender and cultural diversity in junior sport' project resulted in a number of institutional changes in 2020 within community sports clubs, local authorities and state sporting associations to be more inclusive of diverse members of society, including recruiting and mentoring women to become part of their committee and governance structures. Professor Spaaij said.

Girls and women are less likely to continue participating in sports where they don't feel welcome and their achievements are undervalued.



This leads to issues of retention, and girls and women losing out on the numerous health and social benefits provided by community sport participation.

A study by Professor Clare Hanlon examined the [role that uniforms play in increasing the confidence of girls to participate in sport](#) and physical activity. The study, funded by a \$20,000 Change Our Game research grant from the Victorian State Government, Office for Women in Sport and Recreation, in collaboration with S-Trend Sportswear, surveyed

more than 300 Victorian girls aged between 12 and 18. The findings indicated that feeling comfortable and not exposed in the uniform was a critical factor to feeling positive about sports participation.

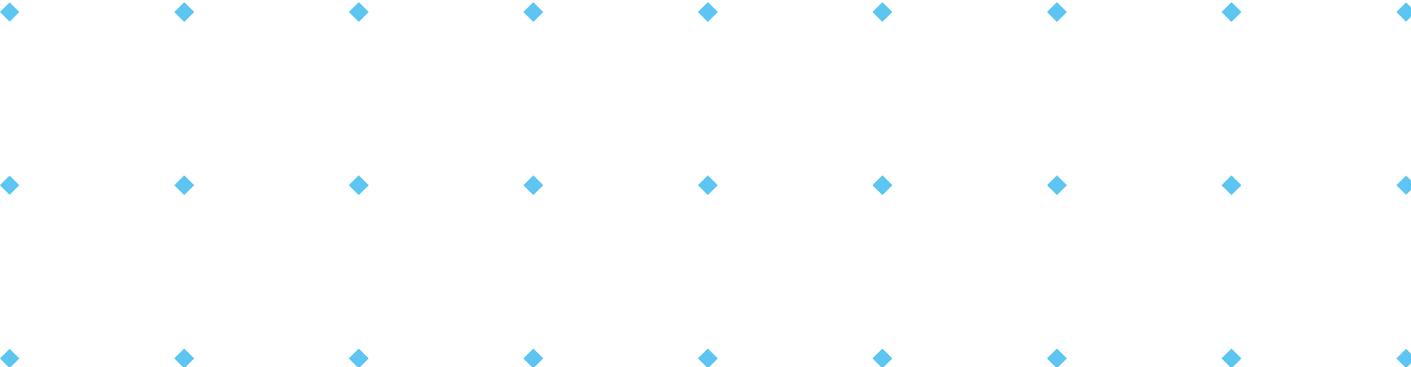
Professor Clare Hanlon was also invited to be a member of the International Women's Group of Sport, Capability and Knowledge Steering Group.

Education

Victoria University Business School launched Australia's first [Female](#)

[Quotient Lounge](#), as part of a global movement to advance gender equality for women in business. They have become an influential female-led community initiative, activating change at events across industries, universities, and organisations, including the World Economic Forum.

[Future Female 2020](#) was presented by VU and Study Melbourne, to equip international women students with the knowledge and inspiration to bridge the gender gap and to work towards a fairer future.





Ensure availability and sustainable management of water and sanitation for all

2020 HIGHLIGHTS

Research

The [Institute for Sustainable Industries and Liveable Cities](#) has two research areas focussed on water management, conservation and treatment research, [Water Supply Demand & Security Research](#) and [Water and Wastewater Treatment](#).

Conflicts between territories over water sharing arrangements may become more severe due to additional dependency on water, growing population, and reduced availability as a result of climate change. This complex issue is addressed in [An Engineering Perspective of Water Sharing Issues in Pakistan](#), in relation to the water sharing arrangements between Pakistan, India and Afghanistan in the Indus Basin, by Muhammed Atiq Ur Rehman Tariq from VU and researchers from the Netherlands and Pakistan. Equitable management issues and outdated irrigation practices are exacerbating a water shortage in the basin which is now increasingly countered by the use of groundwater. This sudden high extraction of groundwater is causing depletion of the groundwater table and quality issues, which is heightening provincial conflicts over water. Policy, enforcement, engineering and social support are all needed to develop a comprehensive, fair and transparent water strategy.

Ashok Sharma and Ted Gardner tackle regional water planning issues both

in Australia and in other countries. The researchers: developed a [methodology to ensure that rain water policies are effective](#) for achieving predicted tank water savings for urban water supply planning; and teamed up with researchers from Nepal to examine [Impacts of climate change on the flow of the transboundary Koshi River, with implications for local irrigation](#).

In advancing the treatment of wastewater, researchers contributed numerous reports.

Two reports by Peter Sanciolo and Stephen Gray looked at the viability of pasteurisation for the treatment of wastewater as an alternative to chemical treatment. Pasteurisation does not produce harmful by-products and so could offer a sustainable alternative, with a lower pre-treatment requirement, to other disinfection processes. The researchers teamed up with water supply industry researchers in Australia and the United States for [Selection of surrogate pathogens and process indicator organisms for pasteurisation of municipal wastewater](#) and for [Effectiveness and Energy Requirements of Pasteurisation for the Treatment of Unfiltered Secondary Effluent from a Municipal Wastewater Treatment Plant](#).

In other wastewater treatment research: Mickel Duke led a team of VU researchers to improve the [removal of herbicide from industrial wastewater](#) and develop a method using [light conducting photocatalytic membrane](#) for sustainable, low-chemical filtration of polluted water; Jianhua Zhang teamed up with researchers from the CSIRO to conduct [A Review on Current Development of Membranes for Oil Removal from Wastewaters](#).

Investigations to improve water supply included a collaboration by Anne Ng and Chris Perera with Sri Lankan researchers to look at the issues, challenges and opportunities of [Optimization of Green Infrastructure Practices in Industrial Areas for Runoff Management](#); and Sharma Ashok co-authored a paper to examine the [Economic Viability of Water-Supply Gravity Main](#) which can provide cost savings, as it does not require power and is more reliable than a pumped system.

Engagement

A project led by Dr. Nitin Muttill for City West Water in 2019-2020, to reduce the [problem of bursts and leaks in the pipe network](#), had great success for saving water, reducing repair costs and for developing a source of clean energy. When looking into the causes of pipe failure, Dr Muttill identified excess pressure in sections of the



network causing pipes to burst could be used to drive water turbines to generate electricity and, at the same time, relieve the pressure. This project involved developing AI algorithms to predict locations of leaks. This allows the water utility to develop a pipe replacement plan based on the risk factors identified.

Victoria University partnered with EGL (Environmental Group Limited) Water to develop a process to separate and destroy harmful PFAS (Per- and Polyfluoroalkyl compounds) in contaminated water. PFAS is a developing crisis, as the chemicals are toxic, highly persistent and accumulate in the bodies of fish, animals and people. [EGL applied for a patent in](#)

[2020](#) after successful trials at a pilot plant, with the oversight and technical guidance of VU researchers.

Wyndham Tech School, managed by VU, in partnership with Greater Western Water, offer an Industry Program [Toilet to Treatment](#) to regional secondary students in solving real world problems of water network management and waste treatment.

Education

[Greater Western Water](#) is a close industry partner working with our engineering researchers and teachers for the [Bachelor](#) and [Master of Engineering](#) civil engineering specialisations.





Ensure access to affordable, reliable, sustainable and modern energy for all

2020 HIGHLIGHTS

Research



VU is contributing to affordable and clean energy through policy and engineering research.

Engineering researchers Ujjwal Datta, Akhtar Kalam and Juan Shi produced a series of research reports addressing issues of clean and affordable energy. The researchers addressed the technical challenges of managing an electricity grid drawing on hybrid renewable energy sources of solar and wind power plants by designing a [battery energy storage system](#) to control grid loss of charge and to enable charge recovery. The battery energy storage system, in conjunction with a smart coordinated control of photovoltaic, also has applications for [electric vehicle charging stations](#), to avoid the problem of overloading. They also investigated the financial

and environmental implications of [rooftop photovoltaic installation](#) in a case study of commercial buildings in Bangladesh.

Applying mathematics to the problem of clean energy, Seyed Morteza Alizadeh, Sakineh Sadeghipour, Cagil Ozansoy and Akhtar Kalam presented a new voltage stability model in [Developing a Mathematical Model for Wind Power Plant Siting and Sizing in Distribution Networks](#), for two common types of Wind Turbine Generators, to enable design engineers to predict how voltage will behave in different conditions.

The Centre of Policy Studies examined the [Economic Implications of Global Energy Interconnection](#) to quantify the economic implications of the

proposed Global Electricity Interconnection (GEI) electricity system. Modelling results suggest that, by 2050, the GEI network will benefit all regions and will increase world GDP by 0.33 per cent, as well as contributing to sustainable energy and a reduction in green house gas emissions.

The [Victorian Energy Policy Centre](#) (VEPC) at VU has established that new forms of renewable energy generation are much cheaper than traditional energy sources. Bruce Mountain and Steven Percy of VEPC found that solar, wind and other forms of renewable energy sources are much lower in cost for the supply of electricity compared to coal, gas, hydro or nuclear electric power.

Engagement

The Victorian Energy Policy Centre was funded by the Victorian Government to address a lack of energy policy research in Australia and to inform state and national energy policy. The VEPC reports are critical to informing the development of evidence based policy in Australia with VEPC policy research translating into state and national policy decisions over time.

The VEPC produced numerous reports on the relative costs and benefits of power production including: [A Reality check: Why CCS has no role in Australia's energy system](#) prepared



for the Australian Conservation Foundation, which estimated that carbon capture and storage (CCS) is currently likely to cost at least six times as much as comparable wind generated power; and,

[Wrong way, go back: An analysis of the economics and greenhouse gas impact of Marinus Link and Battery of the Nation](#) [↗](#), prepared for the Bob Brown Foundation, which, as

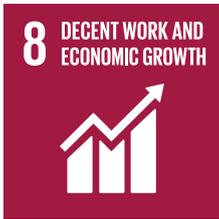
the title suggests, found, consistent with similar studies, that the costs of interconnection exceeded benefits, with much cheaper options available to achieve the transition to renewable energy.

Education

The [Master in Engineering](#) [↗](#) has a particular focus on contemporary ‘Smart’ electricity systems, building

upon the [Bachelor of Engineering \(Honours\) \(Electrical and Electronic Engineering\)](#) [↗](#), and is designed to meet the global and national demand for professionals with advanced skills in creating Smart-compliant electricity grids.





Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

2020 HIGHLIGHTS

Research

The [Centre of Policy Studies \(CoPS\)](#) provides computable general equilibrium (CGE) modelling and analysis of the factors for sustainable economic growth, to support the evidence base for public policy and improve economic decision-making, both in Australia and internationally.

The CoPS team [published 21 peer-reviewed papers and book chapters](#) and engaged in public debate addressing issues of policy change, investment and economic growth which encompassed COVID-19 short term impacts and longer term implications of changes to economies, climate change and recovery from the Australian bushfires. For example, the

CoPS researchers modelled [The Effects of Financial Decoupling of the U.S. and China: Simulations with a Global Financial CGE Model](#) and [The economic effects of the U.S.-China trade war](#) to understand the implications of a distancing between the two nations; and to advance the utility of economic models [Creating a Disaggregated CGE Model for Trade Policy Analysis: GTAP-MVH](#) and [Developing a DSGE Consumption Function for a CGE Model](#).

The Mitchell Institute released a policy report [Averting an Escalating Labour Market Crisis for Young People in Australia: A Proposed National Job Cadet Program](#) supported by the

national employer association Ai Group, arguing that Australia should extend apprenticeship schemes into new occupational area to provide greater employment opportunities for young people.

The Mitchell Institute investigated the [Impact of Coronavirus on Apprentices and Trainees](#), warning that government funding was already at its lowest levels since 2011 and that youth unemployment will jump with an estimated drop of 130,000 or 30% in the number of apprenticeships and traineeships offered over two years.

Engagement

The “innovative” Victorian Land Use and Transport Integration (VLUTI) model shows how land use and transport infrastructure can directly influence each other, and how infrastructure investment could change the distribution of population and employment across the state of Victoria. The VLUTI model, was used to inform the development of the state of [Victoria's Draft 30-Year Infrastructure Strategy](#).

The West of Melbourne Economic Development Alliance (WoMEDA) was established by Victoria University to bring together local Councils and businesses to develop an economic strategy for the region. WoMEDA





meets regularly to discuss economic analysis provided by Victoria University and opportunities for economic advancement.

WoMEDA released [Investing in a New Hospital for Melton](#), which outlines the importance of a hospital to the region.

In 2020, CoPS work with policy agencies, including capability development through [training in CGE modelling](#) using GEMPACK software developed for the purpose, saw the team engage with 160 public, education, finance and international organisations across 35 countries, including the IMF and the United Nations Economic Commission for Africa. CoPS research directly contributed to policy and public funding development for Australia, the USA, China and Mongolia.

The [School for the Visitor Economy](#) with funding from the Australian Department of Industry, Innovation and Science, undertook Project Jigsaw to develop an integrated data platform to inform tourism investment and planning. After a successful proof of concept phase, a further \$1m in funding was obtained to develop and implement the platform [VisScope](#) (external link). It's development involved extensive engagement with the Victorian Department of Jobs Precincts and Regions.

Dr Joanne Pyke from the School of the Visitor Economy participated on the [Victoria Tourism Industry Council Visitor Economy Recovery Taskforce](#) to support the tourism, hospitality and events industries through the pandemic and build sustainable industry foundations post-pandemic.

In 2020 VU joined Techstars, Launch Vic and Tennis Australia to launch Australia's first [Techstars Sports Tech Melbourne Accelerator](#). Out of over 100 applications, ten finalists are now taking part in the accelerator program.

As part of their exclusive mentorship programs, start-ups have access to Victoria University's state-of-the-art sports facilities, and to experts from the program partners.

Education

The [Master of Tourism, Hospitality and Events Management](#) focuses upon 'Green Growth' and sustainability and how these themes benefit businesses in the sector and local communities, featuring units like Green growth transformation of destinations.



Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

2020 HIGHLIGHTS

Research

[Impact of smart logistics on smart city sustainable performance](#) by Himanshu Kumar Shee, Shah J. Miah and Tharaka De Vass concludes that smart logistic functionalities are likely to have a positive impact on smart city sustainability, and that future research is necessary to consider a wider pool of technologies in improving sustainability of logistics operations.

[Smart City-Ranking of Major Australian Cities to Achieve a Smarter Future](#) concluded Canberra is Australia’s leading ‘smart city’ based on a series of indicators using Australian Bureau of Statistics data. The analysis was undertaken by Bachelor of Engineering students Muhammad Atiq Ur Rehman Tariq, Alavaiola Faumatu, and Maha Hussein, as their capstone research project, together with researchers Muhammad Laiq Ur Rahman Shahid and Nitin Muttli.

Florian Schiffmann from the Centre of Policy Studies collaborated with twenty nine researchers from around the world to develop an [open source software package CP2K](#) for computer simulation of atomistic behaviour and dynamics of solid-state, liquid, molecular, and biological systems.

Engagement

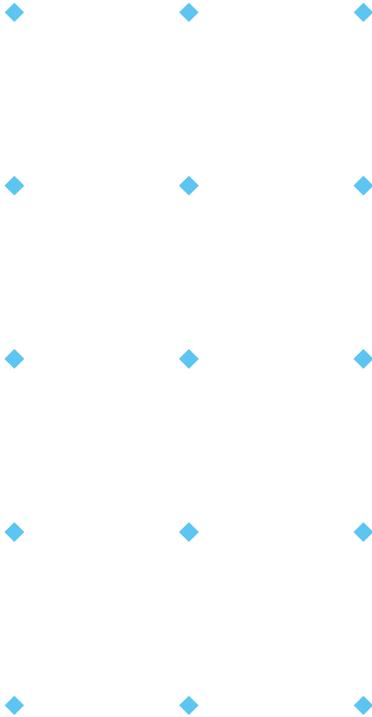
Victoria University and Maribyrnong City Council completed the [Footscray Smart City for Social Cohesion Project](#) to transform Footscray into a digitally connected smart city. The ongoing program features many environmentally responsible initiatives to enhance sustainability and wellbeing. The infrastructure rollout features free WiFi and interactive information for people in Footscray and gathers data on urban area usage, transport and air quality for better city planning and design and health advocacy.

It has been estimated by the World Health Organization that over 2 billion food borne diseases episodes worldwide are a result of unsafe food practices. Fatah Ahtesh, Jack Feehan, Maximilian de Courten and Vasso Apostolopoulos from IHES joined researchers from the United Arab Emirates and industry partner, The Product Makers, to establish [patented natural polyphenol rich sugar cane extract \(PRSE\)](#), which is an efficient antimicrobial. PRSE could be included at differing dosages to target a range of food borne and environmental pathogens and has the potential to be used in place of thermal processing or chemical processing which results in diminished nutritional properties.

Professor Prof Vasso Apostolopoulos was appointed to the Board of Nobel Laureates Australia Innovation.

Education

Necessity is the mother of invention, and so during the COVID 19 extended lockdown in Victoria in 2020, the VU Business School launched the [Virtual Consultancy Practice](#) to enable students to complete internships online.





Reduce inequality within and among countries

2020 HIGHLIGHTS

Research

Victoria University contributes to Reduced Inequalities through the Centre of Policy Studies (CoPS), the Institute for Sustainable Industries and Liveable Cities (ISILC) and the Victorian Institute of Strategic Economic Studies (VISES) research into investments for sustainable and inclusive development.

VISES, in conjunction with the [Global Initiative on Health and the Economy](#), an initiative of the U.S. Chamber of Commerce, released a joint report on [Increasing Social and Economic Benefits Globally: Rates of Return on Health Investments](#). The report establishes the economic return on government investment around the world in the prevention of chronic or non-communicable diseases. This is a study of health effects on productivity globally. It entails investigating health investments focussed on disease conditions that are especially important for work force participation. This includes the diseases which have a high impact on absenteeism and presenteeism such as mental disorders (depression) and high burden diseases such as cardiovascular disease (CVD), cancers, diabetes and respiratory diseases.

The Centre of Policy Studies examined [The Effects on the Indian Economy of an Expansion in Financial Capital Supply](#) to understand the impact

on the Indian economy of a hypothetical rise in foreign-supplied capital to local Indian financial institution investees, and the engagement activities that might be associated with it, that might potentially improve the allocation of capital within India.

Engagement

Victoria University has a long standing engagement with [Timor Leste](#) and partnership with the National University of Timor-Leste, the Universidade Nacional Timor Lorosa'e and the Dili Institute of Technology. The [Timor-Leste Strategy 2018-2020](#) commits Victoria University to provide educational exchange and projects to support the young nation to build its skills and capabilities.

In 2020, VU continued this engagement with a joint event Covid-19: Threat And Opportunity In Timor-Leste? with an

impressive list of speakers and panellists from Timor Leste and Australia, including Dr José Ramos Horta, Nobel Peace Laureate, who provided a broad overview of the contemporary political and economic situation in the nation.

VU also published the first edition of [Voz Timor](#) in 2020 to reflect on the 20th anniversary of the vote for independence, as well as the part young people are playing in working towards the United Nation's Sustainable Development Goals.

Education

The specialisation in [Aboriginal Yulendj \(Knowledge\) and Community](#) is a ground breaking program managed and taught by the Moondani Balluk Indigenous Academic Unit. The specialisation to incorporate Indigenous perspectives is offered across a range of degrees.





Make cities and human settlements inclusive, safe, resilient and sustainable

2020 HIGHLIGHTS

Research

Dr Jillian Marsh, Dr Clare Land and Dr Paola Balla in Centring Indigenous Peoples, Standpoints and Knowledges within Planetary Health, examined the needed support to achieve VU's planetary health agenda and the Universities Australia strategy to Indigenise tertiary curricula. Related to this Professor Chris Sonn, Karen Jackson and Dr Paola Balla and Dr Clare Land looked at new opportunities and settings for VU students and non-Indigenous staff to engage with Critical Race Praxis Research & Teaching.

Karen Jackson, Dr Paola Balla, Professor Chris Sonn, Dr Amy Quayle

and Rowena Price examined the context and issues for 'Connecting Aboriginal women to Country through local healing practices', leading to the further project [Blak Women's Healing](#) which extends this work by collecting stories of incarcerated Aboriginal women, or those at risk, drawing on their cultural practices, to build resilience, connection and identity.

Elliott Flowers joined researchers from Australia and Belgium in [Exploring Children's Views on Important Park Features](#) to understand how parks can be better designed to encourage children's use and physical activity.

Professor Gary Foley and Dr Clare Land from Moondani Balluk Indigenous Unit were awarded an ARC Special Research Initiative (Linkage) grant for a project to investigate the connection between the origins of the Aboriginal Community Controlled Health Movement and two Melbourne-based Black Power educational programs. This project will further inform the Aboriginal History Archive recording the history of Indigenous activism for self-determination.

Professor Christopher Sonn, Rama Agung Igusti, Samuel Keast & Amy Quayle were invited to contribute an article to the InPsych journal on





Unsettling psychology: Whiteness and the cost to black lives.

Dr Mengbi Li examines underlying concepts and expressions of cultural, social and political meaning in architectural design. From this perspective, Dr Li contributed to [media](#) and [panel](#) discussions of how COVID-19 is making people rethink building design. In [Reviewing the Notion of Progress in the Quest for Sustainability: The Example of Chinese Architecture](#), Dr Li proposes that the modern Chinese concept of progress, developed in a period of national crisis, needs a critical rethink in the context of sustainability and low-carbon living.

Engagement

Research by members of the Community Identify Displacement

Research Group, led by Professor Chris Sonn, has informed policy and practice in the City of Brimbank’s Neighbourhood Houses and Community Centres, Brimbank’s Diversity and Inclusion Policy and delivery of Brimbank’s People Strategy and the Neighbourhood House Strategy and Action Plan.

[Footscray University Town](#) is a ground-breaking partnership between Victoria University and Maribyrnong City Council to advance liveability and prosperity for the area. Under this banner is a [series of projects](#) to enliven Footscray as a hub of knowledge, learning, creativity and opportunity.

In 2020 this included the completion of the Footscray Smart City project and the Footscray Art Prize awards.

The efforts over the past 6 years were rewarded, in 2020 by the Victorian State Government announcement that Footscray would become a [Priority Precinct](#) for development as a key cultural, commercial and education hub in the region.

Professor Tony Birch was awarded the New South Wales Premier’s Award for Indigenous Writing for *The White Girl* and was short-listed for the Miles Franklin Literary Prize.

Education

The [Graduate Certificate of Planetary Health](#) was launched in 2020. The first program in Australia of its kind, the course encompasses Indigenous philosophies and perspectives of colonialism and sustainability.





Ensure sustainable consumption and production patterns

2020 HIGHLIGHTS

Research

Bakti Sedayu, Marlene Cran and Stephen Bigger investigate how to improve the properties of eco-friendly plastics derived from biomaterials, particularly for food packaging applications in [Improving the moisture barrier and mechanical properties of semi-refined carrageenan films](#) and [Reinforcement of Refined and Semi-Refined Carrageenan Film with Nanocellulose](#).

[Impact of smart logistics on smart city sustainable performance](#) by Himanshu Kumar Shee, Shah Miah and Tharaka De Vass concludes that smart logistic functionalities are likely to have a positive impact on smart city sustainability, and that future research is necessary to consider a wider pool of technologies in improving sustainability of logistics operations.

[Environmental Social and Governance \(ESG\) risk disclosure](#) is of rising importance with Australian Securities Exchange listed companies required to comply with disclosure rules. A study co-authored by Chitra de Silva Lokuwaduge examined ESG disclosure practices of the extractive sector companies for which ESG disclosure is of increasing importance.

Engagement

[Eco-Bricks and Panels From Coffee Cups and Plastics](#) is a project to develop environmentally sustainable building materials, including bricks and panels. The VU researchers Zora Vrcelj, Yanni Bouras, Malindu Sandanayake, Rudi VanStaden, Paul Joseph are collaborating on the project with ClosedLoop, Wyndham City Council and RMIT.

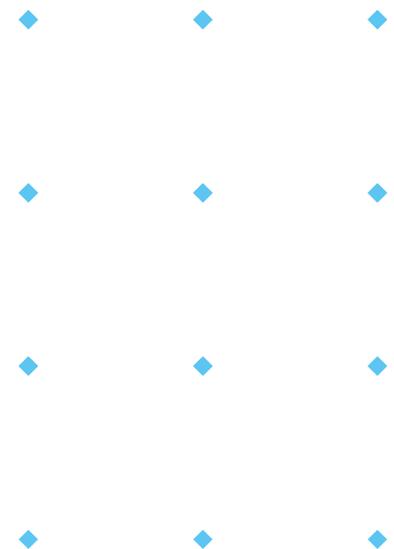
[Recycling agricultural waste into packaging](#) was funded by VU's 2020 planetary health research grants to create new bio-packaging from agricultural and by-products; and to develop practical strategies to reduce supply-chain hazards that drive protective packaging demand. The project is being undertaken in conjunction with industry partner Velisha Farms.

Professor Terry DeLacy was appointed to the [World Economic Forum's Global Future Council on Sustainable Tourism](#) that has the goal to transform the industry to be more sustainable, inclusive and resilient, focussed around three themes: sustainable destinations; the blue/green economy; and nett zero. [Professor DeLacy](#) is leading Council development for two of the ten principles to underpin sustainable tourism: 'Science based targets'; and 'Resilience building'.

Professor Todor Vasiljevic's Innovation Connections project with Brooklite (Peerless Foods) recommended investment into a new food waste management technology.

Education (examples)

[EnactusVU](#) engages students in working towards the UN 2030 Goals and a sustainable future for all. The [Plastics Solutions Project](#) used low cost methods to recycle plastic waste into useful items, invested in clean up events and educated the community about socially responsible plastic management.



Take urgent action to combat climate change and its impacts

2020 HIGHLIGHTS

Research

The Centre of Policy Studies undertook a number of modelling projects to predict the impact of climate change on agriculture and industries in Australia and internationally.

[Zero net Emissions by 2050 – what it means for Australian regions, industries and jobs](#) is a project to model the changes needed to the structure of the Australian economy to achieve zero-emissions. The research by Philip Adams, Christopher King will provide an update to the 2014 UN-sponsored [2050 Deep Decarbonisation Pathways Project](#) report, in light of changes to the energy landscape.

John Madden was a co-editor of a book published in 2020, [New Frontiers in Regional Science: Asian Perspectives](#),

[Environmental Economics and Computable General Equilibrium Analysis \(CGE\)](#), which involved researchers from CoPS, Asia and North and South America using CGE models to examine the economic costs, effective responses and risk management for environmental impact scenarios. CoPS researchers collaborated on chapters on the impact of climate change and epidemics on developing nations. In response to the call by the National Science and Technology Advisors from a dozen countries for publishers to make their COVID-19 and coronavirus-related publications and data immediately accessible, the chapters were provided to PubMed Central (PMC) and other public repositories

to support health emergency response efforts.

The selection of models that will accurately predict the likely future climate for a specific geographical location is a crucial step to assess impacts of climate change on different sectors. In [Representative general circulation models selection and downscaling of climate data for the transboundary Koshi river basin in China and Nepal](#) VU researchers Santosh Kaini, Ted Gardner and Ashok K. Sharma teamed up with Nepal researchers, Santosh Nepal and Saurav Pradhananga, to develop and evaluate models for short-term to long range forecasting of climate change impacts for specific regions.





The [Pacific Ocean heat engine](#) by Roger Jones and James Ricketts provides a greater understanding of the complex relationship between the absorption and later release of heat into the atmosphere by the ‘heat engine’ spanning the tropical Pacific Ocean triggering surface temperature changes in Europe. This model will help anticipate how green house gas which forces rises in the temperature of the Pacific will transfer to the northern hemisphere.

Building energy use is estimated to contribute 40% of the global energy demand and to currently produce one-third of global green house gas emissions with the potential to double by 2030. Current methods for using computer simulations to optimise

building energy use for design or retrofitting require a high number of calculations. In [Building energy optimization using surrogate model and active sampling](#), Keivan Bamdad joined with Michael Cholette and John Bell from Queensland University of Technology to develop method to calculate an optimal solution with a lower computational cost.

Engagement

The ISILC team of Malindu Sansanayake, Yanni Bouras, Robert Haigh and Zora Vrcelj conducted a comprehensive review of [Current Sustainable Trends of Using Waste Materials in Concrete](#) in preparation for an international project to develop

a new concrete made with recycled materials. The new concrete is intended to replace the conventional Portland Cement concrete which contributes significantly to global CO2 emissions, second only to fossil fuels.

Education

The [Green-Living Lab](#) rooftop garden of native plants and wetland area was installed at Footscray Park campus, for research, teaching and community education. The Green-Living Lab will be used for research and teaching on the value of green infrastructure for building thermal properties, to counter the urban heat island effect, for the quality of water run-off capture and to boost biodiversity across university sites.





Conserve and sustainably use the oceans, seas and marine resources for sustainable development

2020 HIGHLIGHTS

Research



Professor John Orbell, in conjunction with the researchers at the Penguin Foundation, developed the [magic oil spill wand](#) to safely clean oil from

spills off marine animals. Oil spills can have a devastating effect on the environment, but the team is now working on further development of the Oil Spill Wand to be able to dramatically reduce the impact oil spills have on wildlife. The project team hopes to make the Oil Spill Wand available to Wildlife Rescue Centres across the world within three years.

Engagement

Victoria University's Footscray Park campus is situated on the banks of the Maribyrnong River. VU Students and

staff regularly work as volunteers to clean up rubbish from the banks of the Maribyrnong and Yarra Rivers that converge a short distance south of the campus. The clean ups prevent plastic waste from travelling down stream into Port Phillip Bay, to reduce microplastics in our oceans and the threat of plastic entanglement and ingestion by wildlife. Between April 2018 and February 2020, students and staff participated in the [Yarra River Blitz](#) to undertake an audit of rubbish along the river system and to clean up millions of litter items, using the innovative boat mounted vacuum





system, removing approximately 38,000 kg of litter from the reed beds, rock walls and riverbanks of the lower Yarra and Maribyrnong Rivers.

The [Plastic Solutions Project](#), an [EnactusVU](#) initiative for VU students to target the UN Sustainable Development Goals, takes VU's commitment to the environment one step further by investing in clean up events across Victoria and reusing the plastic rubbish gathered to make

useful objects. In addition, the project works to inform youth and the community of the economic, social and environmental benefits of responsible plastic management through a school's program.

Education

Courses, specialisations and student leadership programs for the goal.

The [Bachelor of Outdoor Education and Environmental Science](#) and the

[Bachelor of Outdoor Leadership](#) engage students in study of the natural environment, environmental rehabilitation, conservation and sustainability.





Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation & halt biodiversity loss

2020 HIGHLIGHTS

Research

In [Nitrogen immobilization may reduce invasibility of nutrient enriched plant community invaded by *Phragmites australis*](#) [Md Nazim Uddin](#) and [Randall Robinson](#) of ISILC joined [Takashi Asaeda](#) from Japan to test whether manipulating soil nutrients (nitrogen) may be an effective management tool to control invasive species and restore the degraded ecosystems.

As many conservation targets are not well characterised genetically, [Joshua Johnson](#) and researchers from the Royal Botanic Gardens Victoria examined the utility of [sequencing a reduced representation of the genome](#) [to inform conservation of plant species](#).

Engagement

Victoria University research team, led by environmental scientist [Dr Christine Connelly](#), is working with Bass Coast Shire Council and Phillip Island Nature Parks to minimise the high number of wildlife killed on a Phillip Island road by the installation and trial of a [virtual fence](#) [to deter animals from approaching the road and being hit by vehicles](#).



The [Green-Living Lab](#) [is also used for community education, for school and other groups, on the value of green infrastructure, water run off for tank water and native flora to support biodiversity of the region](#).

The St Albans campus is the access to one of the last remaining pockets of Indigenous flora and fauna of the region, the Iramoo Wildflower Grassland Reserve. To support the conservation and replanting of the Indigenous flora in the region, the Iramoo Grassland Centre and Nursery at St Albans grows the original flora from the now threatened ecological communities of the region. Plants are grown to order for local councils,

community groups, and local landscapers. Some of the plants are no longer available from the original source due to urban expansion, and the remaining pockets in which these local species grow naturally are fast disappearing.

Iramoo in partnership with the Department of Justice, hosts a Community Correctional team that help maintain the Grassland Centre. The team has established a Bush Food Display garden, which offers a self-guided tour for visitors, and showcases the enormous diversity of the local plants used by Aboriginal people for traditional food, weaving and for making tools.



Moondani Balluk worked with landscape architects to install a native landscape using Indigenous plants from the region at the Wunggurrwil Dhurrung Centre in Wyndham. The facility provides a dedicated space for the Aboriginal community that is culturally safe and to host community services and events. The native landscape uses roof run off to water the plants. The location of the native landscape at the Aboriginal community centre showcases

the value of Indigenous flora for Aboriginal traditions, biodiversity and for water conservation.

Victoria University joined the Greater Western Water initiative [Greening the West](#) to develop green spaces in Melbourne's west, including V4U Day plans to plant one million trees.

Education

The [Bachelor of Science](#) is focussed on environmental sustainability,

climate change and biodiversity with a mandatory first year unit Global Environmental Issues, a major in Ecology and Environmental Management, and minor in Environmental Science.





Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

2020 HIGHLIGHTS

Research

[National Identity and Social Cohesion in a Time of Geopolitical and Economic Tension](#) by Robert Walters explores human rights and international law and addresses the legal, social and political rationale and ramifications of highlighting identity by national states to increase and decrease population numbers for economic benefit.

Bill Swannie's research explores questions of free speech, human rights law, equal opportunity law and media law and published a series of articles examining [racial vilification and discrimination law in Australia](#).

He is a member of the Law Institute of Victoria Human Rights Committee. Bill Swannie led the Australian Discrimination Law Experts Group, a team of more than a dozen Australian university law academics, in a submission to a [NSW parliamentary inquiry into changes to discrimination complaints handling](#). The Group condemned proposed changes that would limit access to justice and exclude legitimate complaints.

Engagement

The [Preventing and Countering Violent Extremism](#) (PCVE) group has been engaged in a series of applied research projects for preventing radicalisation,

promoting social cohesion and countering terrorism for safe and inclusive communities. Four major reports for international, national and state partners were completed in 2020 on: assessing terrorism risk, evaluation of police case management, understanding vulnerabilities to right-wing extremism and identifying transitions to violent attacks.

The group's research informs the state and national government, local councils and evaluation of policing processes for early intervention, diversion from extremism and countering militancy.

[Associate Professor Debra Smith of PCVE](#), co-leads the Applied Security Science Partnership (ASSP) that brings together police, security practitioners and academics to build robust evidence on behavioural indicators of violent extremism. Debra was also part of the expert panel commissioned for the Independent review of effective case management and information sharing barriers relevant to violent extremism.

The PCVE group report led by Mario Peucker, [All in this together: A community-led response to racism for Wyndham](#) was used to inform the establishment of the [Wyndham](#)



[Anti-racism Support Network](#), the first of its kind in Australia.

Debra Smith and Mario Peucker conducted workshops and reviews for capability building for the Victoria Police and local councils to increase understanding of vulnerabilities to extremism and [effective early interventions to prevent radicalisation](#) leading to violence, including a forum open to the public, [Learning about Hate: Creating a Connected Community](#).

The Ripple Effect project conducted by Sir Zelman Cowan Centre (SZCC) with funding from the Victorian Legal Services Board, brought together ten faith leaders from Victoria's diverse faith-based communities representing six different faith groups, to upskill and support these leaders to deliver governance workshops to the boards

of their organisations. During the pandemic, the program was delivered online to support participants to acquire technical skills in online facilitation and use of online resources.

In June 2020, SZCC hosted [Governing in a Crisis](#), a forum for community leaders examining the effects of COVID-19 on faith-communities in Victoria. The panel reflected on the support faith-based organisations are providing to individuals in crisis due to the pandemic, how communities are managing to worship together while being apart, and how good governance practices can help faith-based organisations meet the needs of their communities in these challenging times.

Professor Ramon Spaaij served as scientific expert to the United Nations Office on Drugs and Crime (UNODC) on

preventing violent extremism through sport. His research is cited extensively in UNODC's new Preventing Violent Extremism through Sport: Technical Guide, for which he was also an expert reviewer and member of the UNODC Expert Group.

Education

The [Victoria Police Diversity Recruitment Program](#) is a collaboration with the Victoria Police and community organisations to provide employment opportunities for people from African-Australian, Culturally and Linguistically Diverse and refugee backgrounds in the police force. Five graduates of the program have joined the Police Academy, 28 have passed the police exam and 51 participants are progressing through recruitment and employment pathways.





Strengthen the means of implementation and revitalise the global partnership for sustainable development

2020 HIGHLIGHTS

Research

Professor Anthony Zulli was a co-first author together with Martin Caprnda of [The therapeutic effect of B-type natriuretic peptides in acute decompensated heart failure](#) [↗](#), to review the clinical data on B-type natriuretic peptides (BNP) for the treatment of acute heart failure. Despite the potential for BNP to treat renal failure, several clinical trials of the treatment have failed to demonstrate beneficial outcomes. The review of the clinical data, funded by the Czech Science Foundation, was to establish a detailed understanding of the mechanism of BNP and a better integration of basic and clinical science, involved a team of seventeen researchers from: Slovakia, Australia, United Kingdom, Norway, Romania, Lithuania, Czech Republic and Canada.

The Mitchell Institute released the national policy blueprint [Self-Care For Health](#) [↗](#). The policy blueprint presents nine priorities to support self-care and improve the underlying factors linked to disparate health outcomes for well resourced versus disadvantaged communities. The report launched by the Federal Minister for Health, Honourable Greg Hunt MP, was developed by seven expert working groups developed the blueprint, involving researchers and

authorities from Australian and international universities and government and non-government health organisations, including the World Health Organisation.

Professor Vasso Apostolopoulos collaborated with an international team of researchers for [The potential application of probiotics and prebiotics for the prevention and treatment of COVID-19](#) [↗](#).

Professors Željko Pedišić and Stuart Biddle joined with five other researchers from five countries to review [National physical activity and sedentary behaviour policies in 76 countries: availability, comprehensiveness, implementation, and effectiveness](#) [↗](#).

Closer to home, Professor Pedišić was a contributing author to the [Getting Australia Active III](#) [↗](#) policy report to the Australian Department of Health. The report was prepared by The Australian Prevention Partnership Centre, a national collaboration of researchers, policy makers and practitioners who are working together to identify new ways of understanding what works and what doesn't to prevent lifestyle-related chronic health problems in Australia.

A team of seven researchers from IHES – Tawar Qaradakhi, Laura Kate Gadanec, Kristen Renee McSweeney, Alexander Tacey, Vasso Apostolopoulos, Itamar Levinger and Anthony Zulli – collaborated with researchers from Slovakia, Canada, Spain and the Czech Republic to establish the potential for the [use of angiotensin-converting enzyme II \(ACE2\) activator diminazene aceturate \(DIZE\)](#) [↗](#) in the treatment of cardiovascular, cancer, diabetes and other chronic diseases.

Engagement

VU's [Research Strategy 2021–2025](#) [↗](#) is centred on planetary health and VU's commitment to the UN Sustainable Development Goals. In the development of the strategy, the importance of place and co-design with partners in the community, industry and government was foregrounded to anchor VU's research in solutions for sustainable development.

This focus and commitments extended to a wider university endeavour for planetary health and sustainability in all our functions, in the development of the [University Sustainability Actions](#) [↗](#) to ensure: campus operations and investments are



carbon neutral by 2025; and the Campus Master Plan for campus precincts connected with ethical industry partners and meeting the challenges of surrounding communities.

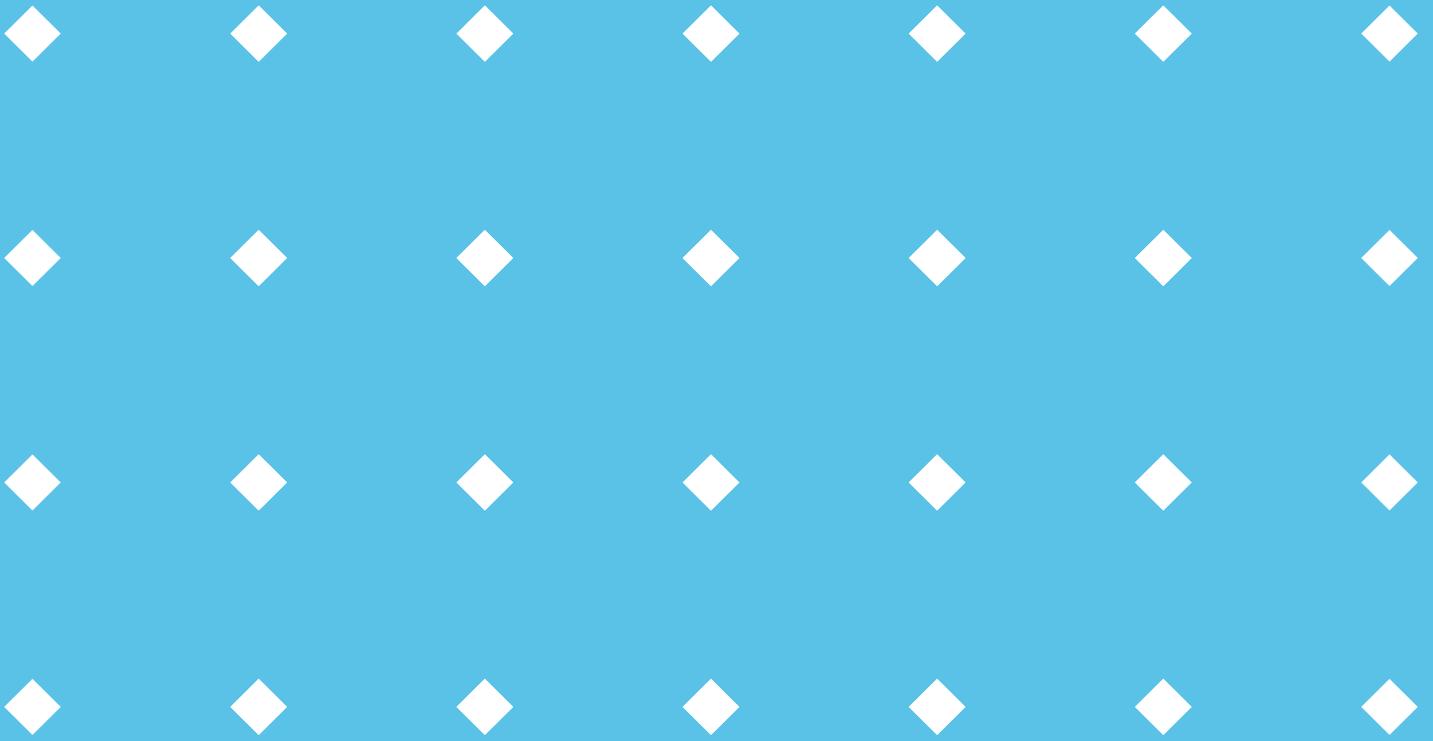
VU VOLLIES Volunteering Program provides students with volunteering opportunities on campus and in the local community throughout the year. The VOLLIES assist in the delivery of various events in the local community such as West Projections, One Night in Footscray and AFL Clinics. During 2020 VU VOLLIES students [shared their stories from lockdown](#) [to encourage, support and inspire each other through a long and challenging winter.](#)

V4U Day is Victoria University's biggest community volunteering event of the year, where staff, students and alumni take part in activities over a full day. In 2020 V4U Day was held remotely due to lockdowns with volunteers working in virtual groups to make, entertain, connect and plan to benefit community groups across Melbourne's west.

Education

[VU Academy for Social Change and Leadership](#) [engages VU students to learn leadership skills and achieve success, while making a positive impact on society and the environment. The program is directed to social impact projects that expands students skills in: entrepreneurship, sustainability, teamwork, innovation, community building, design, engineering, business and marketing and technology.](#)





THE NEW WAY TO DO UNI