



MACQUARIE
University
SYDNEY · AUSTRALIA

Annual report 2019

VOLUME 1



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In accordance with the *Annual Reports (Statutory Bodies) Act 1984* (NSW), Macquarie University presents to the responsible Minister the following report of its proceedings for the period from 1 January to 31 December 2019.

Dr Martin Parkinson



CHANCELLOR

Professor S Bruce Dowton



VICE-CHANCELLOR
AND PRESIDENT

Photo: Morris McLennan.

Financial performance

2120 higher degree research enrolments

\$130 million
in research income and block grants

\$3938 million

total assets
Up \$381 million on FY18

\$2674 million

investment in campus assets
Up \$237 million on FY18

\$85 million

in scholarships and grants to students

\$69 million

other comprehensive income

\$50 million

cash flows provided by operating activities

\$1179 million

income from continuing operations
Up \$50 million on FY18

12,222 international students

from more than 120 countries

Message from the Vice-Chancellor

The past year has again been significant for Macquarie University. With more changes in Australian government policy, alongside domestic and international market shifts, resources have continued to be constrained. It is important to highlight, however, that it has also been a year of outstanding accomplishments for Macquarie.

At the heart of our work remains our collective commitment to students and their success. This is evident by making enormous inroads into Macquarie's Curriculum Transformation Project, to be rolled out in 2020. The new curriculum provides some unique points of difference for the University, which, in the competitive global education market, presents us with great opportunity. Our focus remains on providing transformative and distinctive learning experiences relevant now and into the future.

We were delighted to announce the Australian Government's \$35 million funding commitment to establish the Australian Research Council (ARC) Centre of Excellence in Synthetic Biology, headquartered at Macquarie to advance environmentally sustainable biomanufacturing. This announcement recognises Macquarie as a world leader in synthetic biology research and will have a significant impact on the future of biomanufacturing globally. The centre is a collaboration between Macquarie, six other Australian universities and 25 industry partners. As the largest international collaboration of its kind in the world, it builds on our expertise as the only Australian university in the Yeast 2.0 international consortium. It also places Macquarie at the forefront of large collaborative research projects that address ways to better manage our agriculture, health and environment, as well as build our bioeconomy.

Five distinguished Macquarie academics were accepted into the ARC College of Experts, six Macquarie scientists joined Nobel laureates as the world's most highly cited researchers, and \$2.3 million was awarded to Macquarie's rising research stars. Twenty-three Macquarie researchers were awarded \$9.6 million in Discovery funding, plus an additional grant under the ARC's Discovery Indigenous scheme.

These are only some of our achievements, with many more that demonstrate the high calibre of world-leading research being undertaken by our University. These are major milestones in our trajectory, and I commend the impact that Macquarie's research is having globally. The latest Excellence in Research for Australia (ERA) results confirm that 100 per cent of our research is rated at world standard and above at the two-digit level. Nine subjects were rated as above world standard and four rated well-above world standard. This is a very pleasing result.

Multiple building works continued across our beautiful campus to better serve our students and support the work of our remarkable staff. In July, construction commenced on the Central Courtyard precinct redevelopment. It is the largest and most transformative project in our Campus Development Plan and will contribute greatly to a vibrant, sustainable and world-class campus.

We also look forward to the launch of our new Arts Precinct, due to open in mid-2020, which will feature an exciting new museum space housing the collections of the Museum of Ancient Cultures and the Australian History Museum.

This year, we opened Walanga Muru's new outdoor space called *Jannawi* (meaning 'for me, for you' in Darug language). *Jannawi* provides a culturally affirming and intellectually engaging space for Aboriginal and Torres Strait Islander students, staff, community members and friends. In December, the Astronomical Observatory on campus was reopened. Macquarie enjoys one of the largest and fastest-growing astronomical centres of research excellence in Australia, the Research Centre for Astronomy, Astrophysics and Astrophotonics (AAAstro). The observatory provides a nexus for research, teaching, outreach and engagement, and underpins our leadership in astronomy, astrophysics, instrumentation and transformative education.

Signalling a new approach to business education and research collaboration, the University announced the rebrand of the Macquarie Business School, with the development of a new six-year strategic plan forming the foundations of the school to better represent its students and staff. Our stackable and competitive Global MBA, launched online in 2018, and our Excel Skills for Business short course are proving to be

extremely popular. This has resulted in Macquarie being listed as a top-rated university on Coursera, one of the world's largest online learning platforms.

I am proud that Macquarie was awarded SAGE Athena SWAN Bronze accreditation in recognition of action we have taken to address gender equity in STEM disciplines. The accreditation process was highly collaborative involving colleagues across the University. Our initiatives are bold and innovative, and we are working together to create long-term sustainable change.

In October, we farewelled the longest-serving chancellor in Macquarie's history, the Honourable Michael Egan AO, following 11 years of outstanding service and 13 years' involvement with the University Council. Dr Martin Parkinson AC, PSM, former Secretary of the Department of the Prime Minister and Cabinet, was announced as Macquarie's new chancellor. I very much look forward to working with Dr Parkinson in the coming years. He brings a deep understanding of the role Australia can play in a rapidly changing world and has a strong interest in how Macquarie, along with all universities, has a key responsibility in securing a bright future for the nation.

At this time more than ever, as we embark on another year of adapting to the changing landscape around us, our sense of community will be even more important. We will continue to adapt to shifting circumstances while maintaining the fundamental notions of service and engagement that set Macquarie University apart.

It is our community that will anchor us as we recalibrate for the future. And it is our diversity and ability to pull together that will carry us through the changing landscape ahead and set us up for continued success.



Professor S Bruce Dowton
VICE-CHANCELLOR AND PRESIDENT

Our purpose, vision and values



PURPOSE

Macquarie is a University of service and engagement:

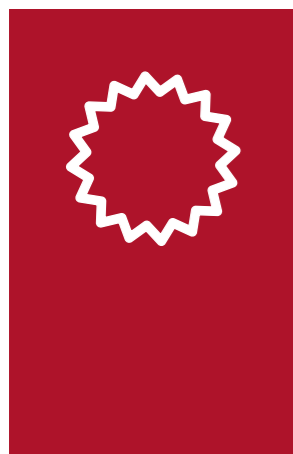
- We serve and engage our students and staff through transformative learning and life experiences.
- We serve and engage the world through discovery, dissemination of knowledge and ideas, innovation and deep partnerships.



VISION

We aspire to be:

- a destination of choice for students and staff who share our values.
- deeply connected with our stakeholders and partners, and known for this globally.
- ranked among the highest-performing research universities of Australia, and recognised globally for our pre-eminence in key disciplines.
- known across Australia and beyond as custodians of a remarkable university campus that blends the vibrancy of a cosmopolitan university village with a natural Australian bushland setting.



VALUES

As custodians of Macquarie University, we value:

SCHOLARSHIP

We believe learning, enquiry and discovery improve lives.

INTEGRITY

We conduct ourselves ethically, equitably and for mutual benefit.

EMPOWERMENT

We make our community a source of strength and creativity.

Through our actions, as staff and students, we live these values and it is against them that we hold ourselves accountable.

Snapshot



5 QS Stars

in teaching, employability, research, internationalisation, facilities, innovation, inclusiveness and specialist criteria



\$1 billion

invested to create a collaborative campus with world-class facilities and infrastructure



More than 45,000

students from over 140 countries



100 per cent

of research activity rated at world standard or above



More than 30,000

work placements or community experiences through PACE (Professional and Community Engagement) partnerships



Only university in Australia

with its own metro station



More than 150

partner universities for student exchange in over 45 countries



More than 130

single bachelor and master degrees



Ranked in the top 1 per cent

of universities in the world



Ranked among the top 10

universities in Australia for employability (QS Graduate Employability Rankings, 2020)



Heart of Sydney's fastest-growing business region

only 15 kilometres from the Sydney CBD



More than 3000

partner organisations across Australia and around the world, offering industry contacts and employability skills to help students jump-start their careers



More than 300

industry partners on campus or in the adjacent high-tech precinct, providing access to internship and job opportunities



10,000 degrees

awarded annually



Fully integrated health precinct

centred around our on-campus hospital



More than 196,000

alumni from over 140 countries

Leadership

PRINCIPAL OFFICE BEARERS

(AT 31 DECEMBER 2019)

VISITOR

Her Excellency the Honourable Margaret Beazley, AC, QC

CHANCELLOR

Dr Martin Parkinson, AC, PSM, BEc (Adel), BEc Hons (Adel), MEc (ANU), MA (Princeton), PhD (Princeton), FASSA, FIPAA

DEPUTY CHANCELLOR

Louise Mason, BA, LLB (Hons) (Macq)

VICE-CHANCELLOR AND PRESIDENT

Professor S Bruce Dowton, MBBS (Syd), MD (Syd), FACMG, FRACP, FAICD, FRSN

DEPUTY VICE-CHANCELLOR (RESEARCH)

Professor Sakkie Pretorius, BSc (Free State), BSc (Hons) (Free State), MSc (Free State), PhD (Free State)

DEPUTY VICE-CHANCELLOR (ACADEMIC)

Professor Kevin Jameson, BSc (Hons) (Adel), SFFin

DEPUTY VICE-CHANCELLOR (ENGAGEMENT)

Professor David Wilkinson, BSc (Manc), MBChB (Manc), MSc (Col), MD (Natal), PhD (UniSA), DSc (UniSA), FRCP (London), FAFPHM, FRACGP, FACRRM

VICE-PRESIDENT, FINANCE AND RESOURCES

Robin Payne, BA (Cantab)

VICE-PRESIDENT, PEOPLE AND SERVICES

Nicole Gower, BA/LLB (Hons) (UTS)

EXECUTIVE DEAN, FACULTY OF ARTS

Professor Martina Möllering, BA (Essen), MA Appl Ling (Macq), PhD (Macq)

EXECUTIVE DEAN, MACQUARIE BUSINESS SCHOOL

Professor Stephen Brammer, BA Econ (Hons) (UEA), MA Econ (UEA), PhD Econ (UEA)

EXECUTIVE DEAN, FACULTY OF HUMAN SCIENCES

Professor Simon Handley, BSc (Psych) (Card), PhD (Card)

DEPUTY VICE-CHANCELLOR (MEDICINE AND HEALTH) AND EXECUTIVE DEAN, FACULTY OF MEDICINE AND HEALTH SCIENCES

Professor Patrick McNeil, MB BS (Hons) (UTas), PhD (UNSW), FRACP

EXECUTIVE DEAN, FACULTY OF SCIENCE AND ENGINEERING

Professor Barbara Messerle, BSc (Hons) (Syd), PhD (Syd) (until 23 August)

Professor Bernard Mans, MSc (UPMC Paris), PhD (UPMC Paris) (from 26 August) (Acting)

MEMBERS OF COUNCIL

(AT 31 DECEMBER 2019)

CHANCELLOR

Dr Martin Parkinson, AC, PSM, BEc (Adel), BEc Hons (Adel), MEc (ANU), MA (Princeton), PhD (Princeton), FASSA, FIPAA

DEPUTY CHANCELLOR

Louise Mason, BA, LLB (Hons) (Macq)

VICE-CHANCELLOR

Professor S Bruce Dowton, MBBS (Syd), MD (Syd), FACMG, FRACP, FAICD, FRSN

CHAIR OF THE ACADEMIC SENATE

Professor Mariella Herberstein, BSc (Syd), (Hons) (UNSW), Mag Rer Nat (University of Vienna), Dr Rer Nat (University of Vienna)

ELECTED BY AND FROM THE ACADEMIC STAFF

Professor Catherine Dean, BAppSc (Phy) (CCHS), MA (Columbia), PhD (Syd)

Associate Professor Wylie Bradford, BEc (Hons) (Newcastle), MPhil (Cambridge), PhD (Cambridge)

ELECTED BY AND FROM THE NON-ACADEMIC STAFF

Dr Evianna Grosvenor, BA (Roosevelt), MPhil (Cambridge), PhD (Cambridge)

ELECTED BY AND FROM THE STUDENTS OF THE UNIVERSITY

Alexander Hablutzel

GRADUATE MEMBERS APPOINTED BY COUNCIL

Chum Darvall, AM, BA (Macq), F Fin, FAICD

John Wigglesworth, BEc (Macq), FCA

Frank Zipfinger, LLB, LLM, BAcc, BEcon (Macq), MBA, MAICD

APPOINTED BY COUNCIL

Deborah Hadwen, BA, MA, MCommLaw (Macq), MAICD

Jingmin Qian, BEc, MBA, CFA, FAICD

APPOINTED BY THE MINISTER FOR EDUCATION AND TRAINING

Louise Mason, BA, LLB (Hons) (Macq)

Michael Book, BEc (Macq)

Macquarie University Organisation Structure

Vice-Chancellor Professor S Bruce Dowton

Deputy Vice-Chancellor (Research)
Professor Sakkie Pretorius

- Research Services
- Office of the Pro Vice-Chancellor (Research and Innovation)
- Office of the Pro Vice-Chancellor (HOR Training and Partnerships)
- Office of the Pro Vice-Chancellor (Research Integrity and Development)
- Office of the Pro Vice-Chancellor (Research Performance)
- Macquarie Animal Research Services

Deputy Vice-Chancellor (Academic)
Professor Kevin Jameson

- Office of the Executive Director, Student Engagement and Registrar:
 - Student Life
 - Student Administration
 - Student and Academic Business Transformation
 - Student and Academic Systems Transformation
- Governance Services
- Office of the Pro Vice-Chancellor (Learning and Teaching):
 - PACE
 - Learning Innovation Hub
- Office of the Pro Vice-Chancellor (Programs and Pathways):
 - Programs and Pathways
 - Widening Participation
- Walaruga Muru - Office of the Pro Vice-Chancellor (Indigenous Strategy)
- University Library and Art Gallery

Deputy Vice-Chancellor (Engagement)
Professor David Wilkinson

- Advancement
- Corporate Engagement
- Group Marketing
- Future Students
- Incubation and Entrepreneurship
- Office of DVC Engagement
- Macquarie International College (MUSIC)
 - English Language Centre (ELC)

Vice-President, People and Services
Ms Nicole Gower

- Human Resources
- Information Technology
- Business Intelligence and Reporting
- U@MQ/Campus Life
- Workplace Health and Safety

Vice-President, Finance and Resources
Mr Robin Payne

- Finance
- Property
- Corporate Risk and Insurance
- MGSM Hospitality
- Access MQ

General Counsel
Ms Carol Kirby

- Legal
- Compliance
- Corporate Secretariat
- Internal Audit
- Privacy
- GIPA
- Archives and Records

Major Controlled Entities

- Access Macquarie Ltd
- MQ Health Pty Limited
 - Professor Patrick McNeil
 - Macquarie University Hong Kong Foundation Ltd
 - Fiona Reynolds
 - U@MQ Ltd
 - Peter Boyle
- Saveria Dimas (until 4/10/19)
- Australian Proteome Analysis Facility Ltd**
 - Professor Alison Roodger
 - Associate Professor Anne Cooper
 - MGSM Ltd
 - Peter Boyle
- **Delegated 6 November 2019

Executive Dean Faculty of Arts
Professor Martina Möllering

- Departments:
 - Ancient History
 - Anthropology
 - English
 - Geography and Planning
 - Indigenous Studies
 - International Studies
 - Media, Music, Communication and Cultural Studies
 - Modern History, Politics and International Relations
 - Philosophy
 - Security Studies and Criminology
 - Sociology
- Macquarie Law School
- Big History Institute

Executive Dean Macquarie Business School
Professor Stephen Brammer

- Departments:
 - Accounting and Corporate Governance
 - Actuarial Studies and Business Analytics
 - Applied Finance
 - Economics
 - Management
 - Marketing

Executive Dean Faculty of Human Sciences
Professor Simon Handley

- Departments:
 - Cognitive Science
 - Educational Studies
 - Linguistics
 - Psychology

Executive Dean Faculty of Science and Engineering
Professor Bernard Mans (interim)

- Departments:
 - Biological Sciences
 - Chiopracitic
 - Computing
 - Earth and Planetary Sciences
 - Environmental Sciences
 - Mathematics and Statistics
 - Molecular Sciences
 - Physics and Astronomy
 - School of Engineering
 - Australian Astronomical Optics (AAO)

Deputy Vice-Chancellor (Medicine and Health) and Executive Dean, Faculty of Medicine and Health Sciences
Professor Patrick McNeil

- Faculty of Medicine and Health Sciences:
 - Biomedical Sciences
 - Clinical Medicine
 - Health Professions and Populations
 - Australian Institute of Health Innovation
- Macquarie University Hospital
- MQ Health Clinics and MindSpot



2019 in review



New teaching, breakout and courtyard areas were opened at Macquarie University International Language College and English Language Centre. PHOTO: Joanne Stephan.

JANUARY

DARK ENERGY SURVEY COMPLETES SIX-YEAR MISSION

After scanning a quarter of the southern skies for six years and cataloguing hundreds of millions of distant galaxies, the Dark Energy Survey is completed.

GLOBAL QUEST FOR MISSING RICE PROTEINS

Researchers identify more than 5700 new rice proteins and are calling for a global effort to find the remaining missing proteins.

FEBRUARY

NEW LEADER APPOINTED FOR AUSTRALIAN ASTRONOMICAL OPTICS

Dr Mark Casali joins Macquarie as the Director of the Macquarie node of Australian Astronomical Optics (AAO-Macquarie).

TREES REMEMBER HEATWAVES

Australian eucalypts can 'remember' past exposure to extreme heat, which makes the tree and its offspring better able to cope with future heatwaves.

LANDMARK STUDY MAPS CRITICALLY ENDANGERED GREY NURSE SHARKS FOR THE FIRST TIME

The study finds Australia's eastern grey nurse shark population has declined to only 400 breeding sharks.

THE MILKY WAY IS WARPED

The first accurate 3D map of our galaxy reveals the Milky Way's true shape: warped and twisted.

MARCH

HEARING STRATEGY LAUNCHED

The strategy aims to transform hearing health through research, education and engagement with partner organisations.

INAUGURAL RESEARCH ENGAGEMENT AND IMPACT ASSESSMENT

The Australian Research Council (ARC) 2018 Engagement and Impact Assessment found that more than 90 per cent of Macquarie's impact case studies make a significant contribution beyond academia. See page 16.

REPUTATION ENHANCED THROUGH RESEARCH EXCELLENCE

ERA ratings show all assessed Macquarie research as world class and above at a two-digit level. There was a 50 per cent increase in areas of research rated five at the four-digit level.

BUSINESS SCHOOL STUDENTS CHOOSE ETHICAL EMPLOYERS OVER HIGH SALARIES

Nearly one in five business students are willing to sacrifice more than 40 per cent of their salary to work for a responsible employer.

STATE GOVERNMENT BACKS SYDNEY QUANTUM ACADEMY

The NSW Government provides \$15.4 million for a new Sydney Quantum Academy that brings together four leading universities in NSW.

RESEARCHERS AWARDED FULBRIGHT SCHOLARSHIPS

Two Macquarie researchers are announced as recipients of prestigious Fulbright scholarships.

SYNTHETIC BIOLOGY RESEARCH AWARDED \$2.5 MILLION GRANT

Research into pioneering new agricultural and biomedical technologies is being supported by the establishment of a synthetic biology biofoundry.

APRIL

MACQUARIE BUSINESS SCHOOL LAUNCHED

The launch of the Macquarie Business School signals a new approach to business education and research collaboration. See page 14.

BEHAVIOUR THE KEY TO WHY SOME ANIMAL SPECIES BECOME INVASIVE

A new study finds adaptability is the key to invasive species succeeding in non-native environments.

INAUGURAL MASTER OF DISABILITY STUDIES GRADUATIONS

The first 18 graduates from the Master of Disability Studies receive their degrees.

BUILDING FARMS AND TOWERS AT SEA TO FEED AND POWER THE WORLD

Macquarie engineers will develop new technologies for ocean infrastructure as part of the new Blue Economy Cooperative Research Centre (CRC).

MACQUARIE TO LINK AUSTRALIA'S FUTURE SMART SATELLITES

Macquarie is part of the new CRC for Smart Satellite Technologies and Analytics.

MAY

EARTH RECYCLES OCEAN FLOOR INTO DIAMONDS

Traces of salt trapped in many diamonds show they are formed from ancient seabeds that became buried deep beneath the Earth's crust.

PROFESSOR IAN WRIGHT ELECTED AS AUSTRALIAN ACADEMY OF SCIENCE FELLOW

Internationally renowned plant ecologist Professor Ian Wright is named as a fellow of the Australian Academy of Science.

FUNDING FOR DEVELOPMENT OF NEW FRUIT FLY CONTROL TECHNOLOGY

Macquarie receives \$4.7 million funding from Horticulture Innovation Australia to identify the genetic code that eliminates females in overseas fruit flies.

JUNE

CUTTING-EDGE DRUG SCREENING EQUIPMENT IDENTIFIES NEW TREATMENTS FOR MND

An innovative drug screening system could bring researchers closer in their pursuit of discovering an elusive treatment for motor neuron disease (MND).

2019 CRAWFORD MEDAL AWARDED

Award recipient Associate Professor Ronika Power is one of Australia's foremost experts in bioarchaeology.

OSTEOPOROSIS UNDERDIAGNOSIS PUTS LIVES AT RISK

Research points to an epidemic of underdiagnosis that is leading to increased risk of fractures and potential fatal falls.

JULY

DEEP-SEA SHARKS ARE NOT SAFE FROM FISHING FLEETS

Even in the most remote parts of the world's oceans, migratory sharks are in severe danger from commercial fishing fleets.

AUSTRALIAN INSTITUTE OF HEALTH INNOVATION AWARDED \$2.5 MILLION

Professor Johanna Westbrook receives funding to advance knowledge of electronic medication management technology and medication safety.

AUGUST

\$14 MILLION IN HEALTH RESEARCH FUNDING AWARDED

Projects aim to improve the safety and quality of healthcare and find effective treatments for a range of conditions including Alzheimer's disease, MND, other neurodegenerative diseases and mental health.

ONLINE TREATMENT FOR OBSESSIVE-COMPULSIVE SYMPTOMS INCREASES ACCESS TO EFFECTIVE TREATMENT

Researchers find internet-delivered cognitive behaviour therapy effective in treating obsessive compulsive disorder and reducing long waitlists.

\$1 MILLION FUNDING FOR CHRONIC FATIGUE SYNDROME RESEARCH

The Mason Foundation awards a \$1 million grant to conduct research using the first Australian Registry and Biobank for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS).

GENDER BENDING: BABY TURTLES INFLUENCE THEIR OWN SEX

Research reveals that baby turtles influence their gender by moving around inside their eggs.

RESEARCH COLLABORATION USES ARTIFICIAL INTELLIGENCE TO DETECT BRAIN ANEURYSMS

A partnership between Fujitsu, GE Healthcare, the University and Macquarie Medical Imaging uses AI to rapidly detect brain aneurysms.

MIA MIA CELEBRATES 25TH ANNIVERSARY

The Mia Mia Child and Family Study Centre celebrates 25 years as a globally recognised leader in early childhood education and teaching.

SEPTEMBER

GLOBAL LEADERSHIP PROGRAM WINS PRESTIGIOUS AWARD

Macquarie's Global Leadership Program (GLP) receives the Progressive Education Delivery Award at the 2019 PIONEER Awards.

PVC RESEARCH INNOVATION APPOINTMENT

Macquarie announces the appointment of Professor Dan Johnson to the new role of Pro Vice-Chancellor Research Innovation.

THERE IS NO PLACE LIKE HOME: BUTTERFLIES STICK TO THEIR BURBS

Birthplace exerts a lifelong influence on butterflies as well as humans – something many researchers previously thought impossible.

MACQUARIE COMMITS TO IMPROVING LGBTIQ+ PARTICIPATION IN SPORT

Macquarie becomes a key partner in the Australian Pride in Sport program, committing to further develop and enhance LGBTIQ+ participation across all sport and recreation.

OCTOBER

CHIEF INFORMATION OFFICER APPOINTED

Tim Hume becomes Chief Information Officer, to help transform the University's services, systems and processes.

NEW CHANCELLOR WELCOMED

The former secretary of the Department of the Prime Minister and Cabinet, Dr Martin Parkinson, AC, PSM, is announced as the seventh Chancellor of Macquarie University.

GLOBAL SUCCESS RECOGNISED IN EXPORT AWARDS

Macquarie is recognised for its strong global partnerships, winning a Premier's New South Wales Export Award in the category of International Education and Training.

ARC FUTURE FELLOWSHIPS ANNOUNCED

Quantum computing, birdsong musicology, star formation and computer image recognition research are among projects awarded \$5.4 million.

MYSTERY OF NATURE'S TOUGHEST MATERIAL CRACKED

The nanoscale architecture of nacre (mother of pearl) combines organic and inorganic material to produce the best properties of layers and solids, hardness and resilience into a nearly indestructible supermaterial.

NEW RESEARCH CENTRE TO GROW AGRICULTURE ANNOUNCED

Macquarie researchers are strongly represented at the new ARC Centre of Excellence for Plant Success in Nature and Agriculture.

NEW CENTRE OF EXCELLENCE FOR SYNTHETIC BIOLOGY ANNOUNCED

A consortium centred around the University's biofoundry receives \$35 million in funding to create a new ARC Centre of Excellence in Synthetic Biology from 2020.

\$3 MILLION TO ASSESS LIFESTYLE INTERVENTIONS AGAINST ALZHEIMER'S DISEASE

Macquarie announces funding for research into lifestyle factors that may protect brain health and reduce the risk of dementia.

NOVEMBER

AUTISTIC TEENAGERS' SENSORY BRAINWAVES COULD HELP EARLIER DIAGNOSIS AND SUPPORT

Researchers believe that variances found in the brainwaves responsible for visual perception of autistic teenagers could assist in earlier diagnosis and help inform support.

VON HUMBOLDT FELLOWS GATHER AT MACQUARIE

An event held at Macquarie for the first time, it focuses on sharing knowledge in today's world.

\$2.3 MILLION AWARDED TO RISING RESEARCH STARS

Six of the University's most promising early career researchers receive funding in the ARC's Discovery Early Career Researcher Award (DECRA).

MACQUARIE UNIVERSITY HOSPITAL SURGEON NAMED NSW AUSTRALIAN OF THE YEAR

The outstanding contribution of MQ Health orthopaedic surgeon and humanitarian, Associate Professor Munjed Al Muderis, is recognised with the state's highest honour.

ANTIBIOTIC ARMS RACE MOVES AT HIGH SPEED

Researchers discover cells are becoming resistant to antibiotics at low levels of exposure – findings with implications for antibiotic waste management.

MACQUARIE CENTRE FOR READING LAUNCHED

The centre boasts five researchers in the Global Top 150 in Language, Reading and Semantics (SciVal).

DECEMBER

MACQUARIE RESEARCH GETS \$9.6 MILLION FUNDING BOOST

ARC Discovery Projects grant funding is secured for 23 research projects across the University, with an additional grant awarded to Professor Bronwyn Carlson under the Discovery Indigenous scheme.

ACADEMIC PROMOTIONS ANNOUNCED

More than 100 academic staff receive promotions in the 2019 Academic Promotions round.

ACCESS AND INCLUSION PLAN LAUNCHED

The plan provides an inclusive learning environment that enables every individual to thrive.

IDEAS GRANTS SECURED FOR INNOVATIVE HEALTH AND MEDICINE RESEARCH

Researchers from across medicine, science and engineering, and business are awarded NHMRC funding to support research into treatment of chronic ill health and vision impairment.

DARUG-LED YANAMA BUDYARI GUMADA PROJECT WINS A GREEN GOWN AWARD

Macquarie wins the Benefitting Society award at the 2019 Green Gown Awards Australasia, recognising the work of the Yanama budyari gumada research collective.

MACQUARIE NAMED BEST UNIVERSITY WORKPLACE FOR NEW DADS

A study by private health insurer HBF and research firm CoreData finds Macquarie is Australia's best university workplace for new dads.

Transforming our student experience

It is our mission to make sure our students are well prepared for the future – whatever their futures may be. With experts predicting that by 2025 about 50 per cent of jobs as we know them today will not exist, it is vital that when they graduate, our students have a skillset that allows them to reinvent themselves in any industry.

During 2019, we undertook an extensive body of work to enhance the student experience at all levels, from the structure and content of courses available for study to the technology that underpins the delivery of student services and administrative functions. Together, these changes ensure students' engagement with Macquarie is seamless and help them achieve both short- and long-term goals.

During 2019, we undertook an extensive body of work to enhance the student experience at all levels.

STUDENT SUCCESS STRATEGIC FRAMEWORK

The *Student Success Strategic Framework*, launched in April, outlines our unified approach towards helping students succeed (see page 26). It speaks to our focus not only on academic success, but also on our longstanding commitment towards supporting and empowering students to realise their individual potential through professional networks, authentic experiences and our nurturing community.

To support the framework, we established new roles that focus on student services and support, new technologies that connect information, programs to develop student employability and personal success, communication campaigns that promote services and information, and targeted initiatives that support the academic and personal needs of international and postgraduate students.

Administrative procedures were also streamlined to reduce the need for manual intervention, while a digital campaign now keeps students informed about changes to their courses and provides access to their personalised study plan and other communications.

CURRICULUM TRANSFORMATION

Alongside this work on student success, we moved into the delivery phase of the Curriculum Transformation Project, which had commenced in 2018 in response to risks identified in our course architecture and supporting processes. Course evolution over time had created inconsistent structures and rules in our course suite, and our ageing support systems lacked integration and relied too heavily on manual processes. Together, these were impacting on the student experience. The Curriculum Transformation Project allowed us to address these issues and reassert our touchstone that students are co-creators in their learning.

Having redesigned our principles of curriculum architecture and applied these principles to the creation of a new coursework suite, the second phase of the project in 2019 involved preparing for the delivery of the new curriculum through extensive work in designing units for the new courses, and ensuring our underlying systems and processes that support our course suite were ready for 2020. At the core of our systems solution is a new and customised Curriculum Management System (CMS). In addition, we embarked on a significant renovation of our Student Management System to optimise the student experience.

All undergraduate courses were redesigned as either generalist or specialist degrees with core and flexible zones. In a generalist degree, for example, the flexible zone is eight units of study, which can be used by students to increase their depth of study or broaden their interests.

Macquarie undergraduates are currently enrolled in double degrees at twice the national average. In 2018, however, about 50 students were completing two degrees concurrently because their preferred combination was not offered. The new modular course architecture empowers students to decide any combination that works for them, with almost 130 new double degree combinations already nominated for Session 1, 2020.

At the postgraduate level, we introduced a modular approach with foundation, core and flexible (maturity) zones. This structure allowed us to address the Australian Qualifications Framework volume of learning expectations by focusing much of our work on admission points. These help to establish how a student's previous qualifications and experience determines the amount of work they need to undertake for the completion of their degree. We have also extended our flexible double degree approach to the postgraduate space.

Another significant change is our introduction of combined degrees, where students are able to complete an integrated undergraduate and postgraduate award in a condensed period, saving them both time and money, and providing them with an exciting new qualification.

We can already see benefits from our Curriculum Transformation Project. At a time when all universities are focused on financial challenges, the new course suite appears to be playing its part in building positive trends in our admissions.

Ultimately, however, this project is about ensuring student success by rebuilding our curriculum foundations to deliver innovative learning that empowers students – and sends them out into the world prepared to meet whatever opportunities and challenges come their way.



Our *Student Success Strategic Framework* reinforces our commitment to help students to realise their individual potential through professional networks, authentic experiences and our nurturing community. Photo: Morris McLennan.

Launching a new way of doing business

In May, we launched the Macquarie Business School (MQBS), signalling a new approach to business education and research collaboration.

MQBS fully integrates all business and economics education and research at Macquarie into a comprehensive entity. It retains and celebrates the best of the Faculty of Business and Economics, the Macquarie Graduate School of Management (MGSM) and the Macquarie Applied Finance Centre (MAFC), ensuring that Macquarie remains a strong global competitor.

The new school consists of more than 17,000 students and 450 academic staff.

The change positions MQBS to have greater impact internationally; to be more innovative; and to better meet the changing needs of our students, alumni, staff and business partners. It helps prepare Macquarie for future challenges and ensures we are more competitive on the world stage. It also empowers our researchers, educators and students to lead the changes they want to see in the world.

Our integrated and cross-disciplinary research and innovative programs, such as the fully online Global MBA, and new appointments of directors of Alumni and Career Services, provide even greater focus on career-enabling opportunities for students in multidisciplinary areas throughout their careers.

The change grew out of recognition that business education must shift to a focus on working together to create real-world solutions that emphasise best practice and community engagement, rather than a focus on discrete disciplines operating in a traditional siloed way.

MQBS is committed to providing inspiring and engaging student experiences. It aims to be a global leader in technology-enabled learning, providing enhanced opportunities for flexible and student-led learning. We therefore launched our new fully online Global MBA on the international Coursera platform in May with a cohort of 59 students, representing a talented group of professionals from around the globe looking to consolidate and fast-track their careers.

The new program features an innovative model that is stackable, affordable and future-focused. It addresses future workplace essentials, including problem solving in high-impact teams, influencing stakeholders, critical thinking, and adapting to an increasingly disrupted and accelerated world.

Later in the year, Coursera announced that Macquarie is the top-rated university on the platform. Enrolments for Macquarie's Global MBA continue to grow, with 18,901 students enrolled by August 2019 (including 59 award students from the first intake and 67 from the second intake). The courses have been rated with an average of 4.9/5 by students. The Excel Skills for Business course, also on the Coursera platform, continues to be extremely popular with students across the globe, with more than 120,000 active learners in under two years and a student rating of 4.85/5.

Supporting our students is a core mission, and to enhance the student experience we launched the MQBSuccessful campaign to coincide with Session 2 Orientation Week. The program provides a one-stop shop for students on all programs, resources and support available outside the classroom at MQBS and across the University to create a sense of connectivity and belonging. It complements our Course Compass initiative, which is a new course-level communication, information and engagement portal that connects students with their course peers and course director, and provides a framework for students to map their learning journey.

In 2019, we undertook a number of student and industry engagement initiatives, including the following:

In August, Moody's Analytics – the leading provider of financial intelligence – teamed up with MQBS to host the Real Estate Forecasting Challenge. The challenge provides students with hands-on learning that mimics real-world application in a collaborative and fun environment. More than 90 students participated from across the business school, and the competition provided them with an exciting opportunity to interact with industry professionals and academic mentors.

We launched the MQBS Young Leaders Program and the MQBS Leaders and Achievers Scholarship Scheme to complement our growing Co-op program for high-achieving accounting and actuarial studies students. The new programs also give students the opportunity to enhance their practical skills as they alternate study with industry placements.



Macquarie is the top-rated university on the Coursera platform, supported by the Global MBA and the Excel Skills for Business online courses.

The new MQBS alumni team is successfully engaging our alumni. For example, more than 75 of our young alumni attended the Backpack to Briefcase Financial Literacy Challenge, which taught attendees about equities, fixed income and property. The event also affirmed that a Macquarie education is about lifelong learning and discovery.

In December, MQBS formed a strategic alliance with the Guangzhou-based School of Business at Sun Yat-sen University to provide expertise and thought leadership in the sustainable development of China's Greater Bay Area (GBA).

This alliance focuses on understanding and addressing the challenges related to the growth of the GBA through research and teaching expertise in innovation, health economics, education and workforce futures.

During the year, MQBS also hosted Strategy and Leadership in the Digital Age, its annual professional development program in partnership with the Reserve Bank of India's Centre for Advanced Financial Research and Learning. The week-long event saw the school host a delegation of senior officers and executives from India's major banks and financial institutions.



The launch of the Macquarie Business School signals a new approach to business education and research collaboration. PHOTOS: Nick James Fraser.

Delivering world-leading research with world-changing impact

Macquarie's Excellence in Research for Australia (ERA) 2018 ratings (released in 2019) show our innovative approach to research continues to deliver world-leading research with world-changing impact.

The results include the addition of biological sciences to the suite of Macquarie research areas rated as well above world standard with physical sciences, environmental sciences, and agricultural and veterinary sciences maintaining the ERA five rating they achieved in 2015. Macquarie has maintained consistently excellent performance in physical sciences and environmental sciences, achieving the highest ERA ratings for these areas in 2010, 2012, 2015 and 2018.

At the four-digit level, Macquarie increased its areas of research rated at outstanding performance well above world standard from 14 to 21 – an increase of 50 per cent. This includes three areas that Macquarie submitted in for the first time – macromolecular and materials chemistry, materials engineering and horticultural production, with the latter area of research excellence recently receiving a \$2.5 million state government grant to establish a biofoundry in synthetic biology (see page 20).

The University's focus on research excellence has also paid off in a number of areas at the two- and four-digit level, including biological sciences, chemical sciences, information and computing sciences, engineering, zoology, philosophy, ecological applications, banking, finance and investment, anthropology, and sociology, where the quality rating has increased between ERA 2015 and ERA 2018.

Notably, areas that have been the focus of long-term strategic investment such as medicine, engineering, computing and education have performed exceedingly well.



Outstanding results for research in areas such as clinical sciences, neuroscience, oncology and carcinogenesis, and cardiovascular medicine and haematology underpin MQ Health – our university-led fully integrated health sciences centre, which combines excellence in clinical care with teaching and research. World-leading research in linguistics, biomedical engineering, psychology and communication supports Macquarie's unique *Hearing Strategy 2030*. In addition, research in genetics, plant biology, neurosciences, applied ethics, horticultural production, analytical chemistry, microbiology, and medicinal and biomolecular chemistry provide strong foundations for Macquarie's rapidly emerging strength in bioinnovation.

Engineering, philosophy, educational studies, banking and finance, clinical sciences and neurosciences also rated strongly.

ENGAGEMENT AND IMPACT ASSESSMENT REPORT

The Australian Research Council's (ARC) 2018 Engagement and Impact Assessment report demonstrated the University's commitment to industry, community and government engagement.

Macquarie increased its areas of research rated at outstanding performance well above world standard from 14 to 21.

The results showed that more than 90 per cent of Macquarie's impact case studies, submitted for assessment by the ARC, have made a significant contribution beyond academia, while 100 per cent of Macquarie's research is characterised by effective or highly effective interactions between researchers and research end users outside academia.

We achieved the highest possible rating in diverse areas including philosophy, psychology, agricultural and veterinary sciences, biomedical and clinical sciences, Indigenous studies, earth sciences, public and allied health sciences, and education.



In particular, the richness of Macquarie's impact in bioinnovation was demonstrated by highly rated case studies on subjects ranging from surgical innovation to the provision of academic clinical care in a patient-focused setting, and from biodiversity in South East Arnhem Land to oyster breeding.

Some of the most highly rated case studies include:

PHILOSOPHY

While surgical innovation is an essential part of modern healthcare, surgical research and innovation can be risky for patients, some of whom have been harmed by their surgeons 'trying something new'.

Macquarie's research in this area has had local, national and international impact on support for safer surgical research and innovation. It has been included in professional guidance by the Royal College of Surgeons of England, led to changes in international guidance on evaluating surgical innovations, informed revisions to Australian research ethics guidelines and influenced local health district practice.

PSYCHOLOGY AND COGNITIVE SCIENCES

The Cool Kids suite of programs, developed by researchers at Macquarie, have improved the mental health of thousands of children in Australia and across the world. These programs arose from our researchers' vision to build an emotionally healthy community through science and practice. Cool Kids has also pioneered treatment services for young people in remote areas and is now accessed across the world. Children who go through the programs show positive mental health outcomes and improved quality of life with reduced rates of anxiety and depression that are sustained.

AGRICULTURAL AND VETERINARY SCIENCES

In the early 2000s, the Sydney rock oyster industry was at risk of being wiped out by disease. Today, the industry has not only survived, it has grown and diversified. Macquarie, working with oyster farmers and the NSW Department of Primary Industries, has played a significant role in discovering how QX disease causes mass collapse, and in improving selective breeding for disease resistance. Macquarie has also provided research-informed advice on the diversification of the NSW industry to include cultivation of Pacific oysters in New South Wales estuaries.

BIOMEDICAL AND CLINICAL SCIENCES

Macquarie Neurology and the MND Service at Macquarie University runs Australia's largest specialist clinic for patients with motor neuron disease (MND). The co-location of academic clinical services with Australia's largest concentration of MND researchers provides patients with bespoke, patient-focused care. This supports a translational research platform that has made important discoveries of genetic origins of familial MND, which has enabled delivery of MND pre-implantation IVF services to stop MND in families with a known genetic mutation. Our genetic discoveries have also been incorporated into standard practice diagnostic genetic testing of MND patients that are used worldwide.

INDIGENOUS

Macquarie, in collaboration with the remote community of Ngukurr in South East Arnhem Land, has integrated regional biodiversity data through a two-way relationship with the Atlas of Living Australia. Indigenous knowledge of regional biodiversity has realised cross-cultural impacts on ways of knowing and managing biodiversity.

EARTH SCIENCES

BHP Billiton, Rio Tinto, Vale, and many other companies use TerraneChron® to help them discover new mineral deposits. The technique, invented and commercialised by Macquarie, analyses grains of zircon collected from streams and riverbeds as a reconnaissance tool to rapidly identify rock systems of potential economic interest, without the time and expense of traditional mapping.

PUBLIC AND ALLIED HEALTH SCIENCES

Macquarie consults globally on e-health risks to patient safety, and confidential reports written by Macquarie inform policy changes in Australia, North America and the European Union. Macquarie works with the National Academy of Medicine and the Emergency Care Research Institute, United States; the National Health Service, United Kingdom; the Australian Digital Health Agency, and the Australian Commission for Safety and Quality in Health Care.

EDUCATION

Macquarie's research on teaching and assessing children's mathematics development has fundamentally changed how mathematics teaching and learning is approached in Australia, including in Indigenous communities. This has transformed mathematics learning and teaching worldwide, significantly impacting professional practice and family involvement in children's education.

Our focus on research excellence has paid dividends across the University.
PHOTO: Chris Stacey.

Supporting ageing and aged care

Macquarie is uniquely positioned to address some of the most complex challenges and opportunities of our ageing population and aged care sector. Through leading research and key collaborations, we are driving innovation in ageing healthcare, policy and workforce development.

Our cross-disciplinary expertise spans the sector – including the conditions and diseases of ageing and their treatment; the use of complex data to make informed policy decisions; the quality of life, workforce participation and mental health of older Australians; and the impact and efficiency of the market that services the sector.

The highlights in this area include:

In July 2019, Professor Johanna Westbrook from the National Health and Medical Research Council (NHMRC) Partnership Centre for Health System Sustainability at the Australian Institute of Health Innovation (AIHI), testified at the Royal Commission into Aged Care Quality and Safety hearings on how information technology can be used to improve aged care.

During the year, researchers were awarded significant funding from the NHMRC and Anglicare to use integrated data and applied analytics to target care improvements in community-based and residential aged care. This builds on an extensive body of groundbreaking research into the application of technology in health settings.

AIHI is also home to the Centre for Health Systems and Safety Research (CHSSR). There, we conduct translational research aimed at understanding and improving the way in which healthcare delivery and patient outcomes are enhanced through the effective use and exchange of information.

Providing community care services is central to supporting older adults, helping them to remain connected with their communities, and prevent social isolation and loneliness. A team from CHSSR collaborated with Uniting Care to develop survey tools that measure wellbeing and quality of life in older people living in the community. These

survey tools have since been incorporated into standard client assessments and translated into three major languages to gauge wellbeing, and to proactively identify opportunities for services to be delivered that keep people engaged in the community.

Our Dementia Research Centre, which brings together a team of 40 researchers from Australia and overseas, is exploring – among other focus areas – the molecular origins of memory in pursuit of a new therapeutic concept for how to retain and restore memory in Alzheimer's disease, supported by a \$1.2 million grant.

Researchers from the Department of Biomedical Sciences were awarded more than \$3 million by the Medical Research Future Fund to investigate lifestyle interventions that may reduce the risk of Alzheimer's disease.

The *Macquarie University Hearing Strategy 2030* was launched in March and unites strengths in hearing-related research, education, clinical diagnostics and engagement to tackle the prevalence and impact of hearing loss at all ages. One notable area of focus for researchers from the Australian Hearing Hub is the effect of cochlear implants on cognitive function in people aged 60 and over.

The University had a significant presence at the Australian Association of Gerontology conference and exhibition in Sydney in November. The conference is the major event in the ageing and aged care industry, and Macquarie's presence was prominent with significant interest from academics, industry and government in our research.

AGEING AND AGED CARE CAPABILITY STATEMENT

In response to the interim report of the Royal Commission into Aged Care Quality and Safety, which found that there is enormous scope for improvements and change across the sector, during 2019 we developed our *Ageing and Aged Care Capability Statement*. It provides an overview of research from across the University under three key themes: Healthy Ageing, Conditions of Ageing and Systems of Support. It is designed to initiate and enhance collaboration both within the University and with partner organisations to have real-world impact on people's lives.

For example, in the residential aged care sector, we are taking a multidisciplinary approach to driving real change, from analysing abundant data collected – but not used – in aged care facilities to identify opportunities for improvement, to improving the retention rates, career pathways and experiences of staff working in the sector.

Another area of focus is understanding what it takes to keep older Australians out of aged care, with a recent Macquarie study revealing that for every extra hour of community service received, the risk of admission to an aged care facility fell by six per cent.

Our law researchers are investigating how lawyers, financial advisers and other professionals make judgements about the capacity of older clients to make legal decisions, while experts from GenIMPACT (Macquarie Business School) focus on modelling the impacts of being a carer on workforce participation and its broader economic implications.

Macquarie is also a world leader in the economics of aged care, with the Macquarie University Centre for the Health Economy researchers exploring the impact of regulatory change in the aged care sector on providers, consumers and sector sustainability. In addition, they are providing transitional business advisory services to residential aged care providers to help navigate accommodation payment reforms and evaluating the potential impact of housing price movements on residential aged care accommodation pricing.

In addition, our researchers from the Department of Accounting and Corporate Governance, and the Centre for Workforce Futures, are exploring notions of ageing well, including financial planning and lifestyle decision making in the lead up to retirement. They are also studying how older people can retain valuable skills, and how both employees and employers can benefit from flexible work arrangements during the transition to retirement.



Researchers from the Department of Biomedical Sciences were awarded more than \$3 million by the Medical Research Future Fund to investigate lifestyle interventions that may reduce the risk of Alzheimer's disease.



Leading scientific innovation with synthetic biology

During the year, it was announced that Macquarie will host an international consortium centred around the University's Biofoundry. It will receive \$35 million in funding to create a new Australian Research Council (ARC) Centre of Excellence in Synthetic Biology (CoESB) from 2020.

The ARC funding announcement builds on support from the New South Wales Government, which also announced that it is investing \$2.5 million to support the establishment of a synthetic biology biofoundry.

Macquarie is Australia's leader in synthetic biology and its work on the international Yeast 2.0 project, in collaboration with the NSW Department of Industry, has already seen it accepted into the group of 16 internationally recognised biofoundries known as the Global Biofoundry Alliance. The new CoESB will take this leading role to new levels.

The centre will be an international collaboration between six Australian universities and 25 partners, and is one of the largest combined efforts in synthetic biology in the world. It will provide the technical innovation that will enable Australia to develop a vibrant bioeconomy built on the country's strong agricultural sector.

The centre will combine engineering with molecular biology to design and construct innovative biological systems that can convert biomass from agriculture or waste streams to biofuel, biodegradable pesticides, bioplastics and other high-value chemicals.

These novel microbial cell factories will underpin an environmentally sustainable advanced biomanufacturing industry in Australia.

This will in turn lead to significant rural investment, increased employment and new export opportunities.

In addition, the centre will train the next generation of synthetic biologists, fully conversant with industrial translation and capable of establishing the Australian bioeconomy start-up companies of the future.

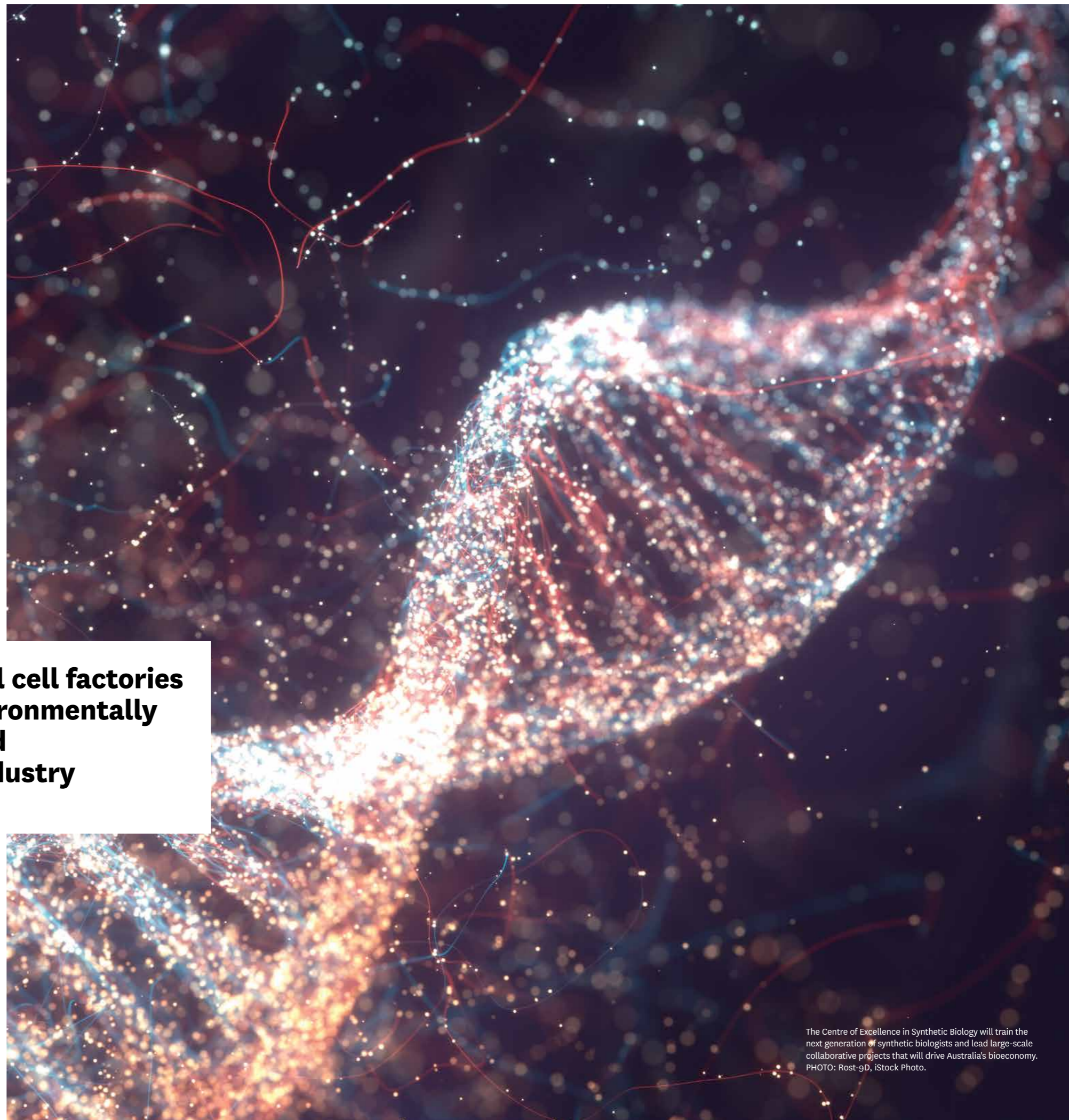
Macquarie was the only Australian university in the Yeast 2.0 international consortium, which united some of the best minds in biology, engineering, computer science, social sciences and business. The CoESB will allow the University to lead large-scale collaborative projects, including the discovery and development of biosensors, bioenergy, biodegradable pesticides, next-generation antibiotics and vaccines, personalised medicine and gene therapies.

These novel microbial cell factories will underpin an environmentally sustainable advanced biomanufacturing industry in Australia.

In addition to advances in the agricultural sector, the centre will help advance technologies in new personalised medicines, help ensure a future of adequate and nutritious foods, provide biodegradable pesticides that are environmentally friendly and can help fuel the soil for future plant growth, and find more sustainable fuels for our everyday lives.

The centre will combine expertise from science and medicine with the humanities and social sciences to create real-world solutions to some of our greatest problems.

Critically for Australia, it will provide the next generation with scientific innovations to continue to fuel the Australian economy.



The Centre of Excellence in Synthetic Biology will train the next generation of synthetic biologists and lead large-scale collaborative projects that will drive Australia's bioeconomy. PHOTO: Rost-gD, iStock Photo.

Research



RESEARCH EXCELLENCE

Macquarie was again ranked as a leading institution, moving up 13 places to 237th in the QS World University Rankings 2020, released in July. This result consolidates Macquarie's position in the top one per cent of universities worldwide.

The Australian Research Council (ARC) appointed five new Macquarie members to the ARC College of Experts. The 2020 ARC College of Experts comprises 194 academics from around Australia, with an additional five Macquarie academics remaining on the college from 2018. The college plays a key role in identifying research excellence. Members are experts of international standing drawn from across the Australian research community: from higher education, industry and public sector research organisations.

Macquarie continues to expand its research collaborations, locally and internationally. This includes more than 30 years' experience hosting cotutelle and joint PhDs.

HIGHER DEGREE RESEARCH ENROLMENTS AND COMPLETIONS

Six years into the implementation of our Strategic Research Framework, Macquarie continues to lead the sector in higher degree research completions growth.

In 2019, 561 higher degree research candidates completed their degrees, including 291 Doctor of Philosophy (PhD)/Master of Philosophy (MPhil) candidates and 270 Master of Research candidates. These numbers demonstrate the value of the University's commitment to the Master of Research.

FUNDING

We received \$85.52 million in competitive external funding in 2019 (a 22.1 per cent increase compared with 2018), the highest external income Macquarie has ever received.

In addition, Macquarie was awarded \$45.43 million in research block grant allocations funding from the Australian Government in 2019, representing an increase of 2.65 per cent. Several strategies are in place to ensure growth in external research income into future years, including strong partnerships with the University's Engagement portfolio to assist in increasing industry-funded (Category 3) research income. Highlights for the year include:

- More than \$9.6 million in ARC funding was secured for 23 Discovery Projects commencing in 2020. The successful applications were led by researchers from all five Macquarie faculties, and the projects represented a broad range of research areas. Nationally, 660 Discovery Projects were funded, with a 23 per cent success rate.
- Professor Bronwyn Carlson from the Department of Indigenous Studies was awarded \$540,786 for a Discovery Indigenous Scheme Project to investigate cyberbullying of Indigenous people. Nationally, seven projects were funded, with a 24.1 per cent success rate.
- Macquarie researchers were awarded three grants in the 2019 ARC Linkage Projects scheme. A total of \$1,174,111 was awarded to research projects that will protect coastal floodplains, improve retirement planning and make autonomous vehicles safer.
- In November, a total of \$2,327,531 was awarded by the ARC's Discovery Early Career Researcher Awards (DECRA) for research across the Departments of Philosophy, Computing, Molecular Sciences, Biological Sciences and Mathematics and Statistics in November.
- Research in quantum computing, birdsong musicology, star formation and computer image recognition were among projects awarded \$5.4 million funding in the October round of ARC Future Fellowships, with six new ARC Future Fellows named in three faculties.
- The ARC announced that a consortium centred around the University's Biofoundry will receive \$35 million in funding to create a new ARC Centre of Excellence in Synthetic Biology from 2020. The centre will advance environmentally sustainable biomanufacturing. The NSW Government invested a further \$2.5 million to support the establishment of the Biofoundry.
- A total of \$14 million in NHMRC funding was received for research projects that aim to improve the safety and quality of healthcare, and find effective treatments for Alzheimer's disease, motor neuron disease and other neurodegenerative diseases, and mental health conditions.
- Macquarie researchers from across business, engineering, medicine and science were awarded two NHMRC Ideas Grants to support innovative research for improved treatment of chronic ill health and vision impairment. These grants aim to recognise early- and mid-career researchers for innovative and creative research.

Macquarie received funding to identify the genetic code that enables elimination of female fruit flies. PHOTO: Morris McLennan.

- Researchers from Macquarie's Department of Biomedical Sciences were awarded \$3.1 million by the Medical Research Future Fund to investigate lifestyle interventions that may reduce the risk of Alzheimer's disease.
- A total of \$4.7 million in funding was received from Horticulture Innovation Australia to identify the genetic code that enables elimination of females in overseas fruit flies so that these characteristics can be reproduced in Australia's Queensland fruit fly.
- Under the Department of Defence's Strategic Policy Grants Program, researchers from the Department of Psychology received \$895,000, and the Department of Security Studies and Criminology received \$121,393.
- Distinguished Professor Katherine Demuth from the Department of Linguistics was awarded an ARC Linkage Projects scheme grant of \$472,635 for research undertaken in collaboration with Cochlear, the Royal Institute for Deaf and Blind Children, the Shepherd Centre, Hearing Australia, and Parents of Deaf Children. The research will combine basic science with hearing services providers, parents and industry to provide an innovative model for solving multidisciplinary hearing challenges.

RESEARCH INCOME BY YEAR

Year	Category 1 TOTAL	Category 2 TOTAL	Category 3 TOTAL	Category 4 TOTAL	TOTAL
2009	\$ 14,443,707	\$ 8,848,660	\$ 6,016,290	\$ 1,011,448	\$ 30,320,105
2010	\$ 15,002,488	\$ 6,018,960	\$ 12,641,898	\$ 994,095	\$ 34,657,441
2011	\$ 24,624,858	\$ 6,010,215	\$ 13,537,307	\$ 902,063	\$ 45,074,443
2012	\$ 27,705,362	\$ 3,809,617	\$ 11,521,272	\$ 1,240,812	\$ 44,277,063
2013	\$ 30,801,252	\$ 4,972,895	\$ 11,716,863	\$ 1,151,274	\$ 48,642,284
2014	\$ 38,590,396	\$ 3,726,483	\$ 14,869,211	\$ 742,748	\$ 57,928,838
2015	\$ 42,998,190	\$ 6,166,576	\$ 16,962,440	\$ 1,195,121	\$ 67,322,327
2016	\$ 37,728,703	\$ 8,299,327	\$ 17,815,542	\$ 1,683,722	\$ 65,527,294
2017	\$ 34,608,224	\$ 10,763,212	\$ 17,640,793	\$ 2,724,362	\$ 65,736,591
2018	\$ 36,940,932	\$ 6,747,584	\$ 23,387,790	\$ 2,938,601	\$ 70,044,906
2019	\$43,631,000	\$12,167,000	\$27,076,000	\$ 2,652,000	\$ 85,526,000

Figures are unaudited at the time of publication. Final audited figures will be available in April 2020.





RESEARCH OUTPUTS*

- In 2018, Macquarie researchers published 3358 research outputs (Higher Education Research Data Collection, 2019).
- The Faculty of Science and Engineering generated 44.7 per cent (total 1501 publications) of research published in 2018.
- Research published in peer-reviewed journals accounts for 80 per cent (total count 2683).
- Book-based publications made up 10 per cent of research publications in 2018.
- Conference-based publications accounted for 10 per cent of total research outputs in the same period.
- In 2018, 37.8 per cent of the publications were published in top 10 per cent journals and four per cent were published in top one per cent journals (ranking by CiteScore) (Source: SciVal).
- In 2018, 80/135 researchers published top one per cent cited publications (by citations for field and year) in 43 different four-digit field of research areas (Source: SciVal).

* Annual research output data (for research published 1 January – 31 December 2019) will be reported on 31 December 2020 to allow metadata collection and audit processes to be completed.

Macquarie attracted \$85.52 million in competitive external funding in 2019, the highest external income it has ever received.

The Australian Research Council appointed five new Macquarie members to the ARC College of Experts.
PHOTO: Joanne Stephan.

DEMENTIA RESEARCH CENTRE

Launched in May, the Dementia Research Centre brings together nearly 40 researchers and leading scientists from Australia and overseas to better understand Alzheimer's disease. The centre will focus on preclinical dementia research and drug development, and hosts seven teams specialising in very different aspects of research, from genome editing to chemistry and new cellular models of disease. See page 18 for more information.

SYDNEY QUANTUM ACADEMY

We are partners in the Sydney Quantum Academy, which is supported by \$15.4 million in funding from the NSW Government. It will help train the next generation of engineers and scientists in quantum computing, cementing Sydney's place as the leading global city for quantum technology and ensuring New South Wales is a world centre for jobs in the emerging quantum economy.

ARC CUBESATS, UNCREWED AERIAL VEHICLES AND THEIR APPLICATIONS

We are one of five academic partners in the ARC Training Centre for CubeSats, Uncrewed Aerial Vehicles and their Applications, which will boost Australia's space communications capability and provide innovative higher degree research and postdoctoral training opportunities.

CRC PROJECTS

Macquarie was named a consortium research member on two important projects funded under the Australian Government CRC Projects grants program, which supports short-term, industry-led collaborative research.

The research project 'Secondary Trading of Unlisted Financial Securities with Pre-settled Smart Contracts' was awarded \$3 million to develop next-generation security and trading technology. The consortium comprises DigiCash, Haventec Group Services, Macquarie University (Macquarie Business School), Capital Markets CRC, DT Gilbert & WR Spain & CG Condoleon & Others, MarketGrid Systems, Blackwall Property Funds and Helmsec Global Capital.

The research project 'Use of Narrow Artificial Intelligence to Detect Brain Aneurysms' was awarded more than \$2 million to use artificial intelligence to detect and highlight aneurysms on brain scans to improve patient outcomes. The consortium includes Fujitsu Australia, GE Healthcare Australia, Macquarie University and Macquarie Medical Imaging.

COLLABORATION AND PARTNERSHIPS

BLUE ECONOMY CRC

Macquarie is part of the Blue Economy Cooperative Research Centre (CRC), a \$329 million 10-year research collaboration with six Australian research agencies, 25 industry and government partners, and many international partners. Macquarie engineers will develop new technologies for ocean infrastructure, and assess and evaluate the safety, reliability and economic viability of offshore structures.

SMART SAT CRC

Macquarie is a partner in the \$245 million SmartSat CRC, led by the University of South Australia, which will support the new generation of low-cost smart satellite technology. Macquarie's contributions to the CRC will include artificial intelligence-based algorithms for satellites and Earth stations, technologies to integrate satellites with 5G phone networks, and ways to utilise satellite technology in the Internet of Things, which extends internet connectivity into physical devices and everyday objects.

Learning and teaching



DEPUTY VICE-CHANCELLOR (ACADEMIC) PORTFOLIO

The Deputy Vice-Chancellor (Academic) (DVC-A) has overall responsibility for the planning, quality and delivery of the education, services and support provided to the University's undergraduate and postgraduate students. The DVC-A Executive Committee team remained stable in 2019, with the exception of the appointment of the University Librarian, who was recruited in 2019 and will start in early 2020.

LEARNING AND TEACHING STRATEGIC FRAMEWORK: 2020 - 2024

After extensive consultation with the Macquarie community, our *Learning and Teaching Strategic Framework 2020 - 2024: Enhancing student learning to maximise future success* was finalised.

The success of our students is at the heart of the framework, which outlines a vision for our students being connected, civic-minded citizens who will be prepared for the future world of work. The framework defines the overarching aspirations that will guide learning and teaching at Macquarie for the next four years.

Many initiatives commenced in 2019 to support the implementation of the framework, including the rollout of an ePortfolio solution for Session 1, 2020, the development of a Professional Learning and Capability Enhancement (PLaCE) framework to support and develop all teaching staff, and a number of projects being facilitated through a students as partners approach. Refer to the following pages for more information.

CURRICULUM TRANSFORMATION

In 2018, we aligned all Macquarie courses, majors and specialisations with the proposed 2020 curriculum. This was followed in 2019 by work on individual units and on integrating Macquarie Curriculum Management System (CMS) data into other systems. The implementation of the new CMS provided an opportunity to run a quality improvement process on core aspects of unit design, including learning outcomes and assessments, and brought a new focus on constructively aligning courses with other Macquarie offerings in the design of our units.

We implemented curriculum architecture principles to ensure that students wishing to study for their own double degree combination are able to do so. To date, more than 130 new double degree combinations have been built in response to students' nominations. The CMS was also integrated with student administration systems along with automation related to the production of unit guides. The CMS is regarded as the single source of truth for the University's academic offerings and will be leveraged to make further improvements during 2020, including underpinning the annual course health-check process, curriculum mapping and periodic course reviews.

STUDENT SUCCESS STRATEGIC FRAMEWORK

Our *Student Success Strategic Framework* was launched in April. It responds to the changing expectations and aspirations of students, and provides a holistic and consistent approach to student success. The framework explicitly defines Macquarie as a higher education institution that exists because of, and for, the success of our students, and outlines a student-centred philosophy that connects students and staff. It will be underpinned by detailed implementation plans that capture institutional, functional and organisational priorities. It will create a distinctive, cohesive and future-focused road map for Macquarie that harnesses our energy, talent and resources to become a first-choice destination in the highly competitive and ever-changing higher education sector.

As part of this work, a range of student retention initiatives emerged in 2019. The newly established Student Retention and Success team is developing strategies to support new and continuing students through call-out campaigns. In addition, a Student Support Coordination Manager role was established to proactively coordinate support for high-risk students whose complex circumstances impact on their higher education experience.

We enhanced our service delivery model, including the implementation of new technologies that allow staff to provide integrated information, services and support. Furthermore, a range of communication campaigns have been enacted to provide students with important information through different parts

Our students' success is at the heart of everything we do.

Opportunities to apply coursework to practical applications are key to helping students achieve their employability goals while enriching their student experience. PHOTO: Joanne Stephan.

of the student life cycle. The University has also developed strategies to enhance services to ensure that students receive accurate information in a timely manner. A student diary was developed for all students starting in 2020, equipping them with the information and strategies they need to succeed at university.

Student employability continues to be treated as an integral element of our student success initiatives. The Career and Employment Service delivered the Career Accelerator Program that allowed high-achieving students to spend a week visiting industry partners to develop employability skills, participate in workshops and build professional networks. Program partners include the Commonwealth Bank, EY, the Macquarie Group, PwC Australia, Deloitte and AMP.

A key initiative of the University's *Student Success Strategic Framework* is the development of an institution-wide Jobs on Campus program. Macquarie Student Employment is a new program to build student employability and assist with the financial pressures of study. Commencing in

October 2019, the team has successfully placed 44 students within both internal and external job opportunities, and engaged 214 students through this service. In October, the Career and Employment Service also launched 'CV360', an online tool that can be used to get instant tailored feedback on a résumé with tips on how to improve it.

A number of initiatives have also been implemented to support the success of international students. Macquarie is the first university in New South Wales to offer international students access to a multilingual app. The My Legal Mate app provides free, on-demand access to general legal information in areas such as employment, education, accommodation and sexual assault. The video format and Q&A modules offer practical legal solutions in several different languages: English, Hindi, Korean, Mandarin, Portuguese, Thai and Vietnamese.

The Library-based Learning Skills Unit is working with Macquarie University International College to enhance and extend opportunities for international and postgraduate coursework students to develop academic and digital literacy skills. We recognise that these are a critical part of a student's confidence and success at University and provide additional support aligned with the *Student Success Strategic Framework*. This is one of a series of initiatives funded by the Student Services and Amenities Fee.





WELLBEING SERVICES

To align our services with our student-centred vision, Campus Wellbeing was renamed Student Wellbeing with a campaign rolled out across the campus to make students aware of the change. Disability Services is now referred to as Student Wellbeing – Accessibility, to further articulate our organisational commitment to students and their success. The accessibility service also implements adjustments for students who present with ongoing needs following Respect. Now. Always. events.

A key operational change for Student Wellbeing has been opening a second point of service. To enhance the service delivery model in line with the vision outlined in the *Student Success Strategic Framework*, Student Wellbeing advisers were appointed to help students with wellbeing support and information, and are located in the MUSE (Macquarie University Spatial Experience) building. This on-the-day support model has enhanced the triage system for at-risk students and allowed escalation of cases from faculty staff at the time of need and/or crisis. The Psychology Service is now located in the Australian Hearing Hub building.

Our UniWellbeing program was evaluated, with an article published in the *Journal of Affective Disorders* highlighting its effectiveness. The program is a five-week online therapist-guided intervention designed to support our students by teaching them practical, proven skills for managing symptoms of stress, anxiety, worry, low mood and depression.

Student wellbeing advisers help students with support and information.

RECOGNISING LEARNING AND TEACHING

Following the 2018 Vice-Chancellor's Learning and Teaching Awards (VC Awards), the Office of the Pro Vice-Chancellor (Learning and Teaching) evaluated the awards program and processes in consultation with a range of key internal and external stakeholders, and held a benchmarking exercise with other universities. In response, the VC Awards processes were modified, with new award categories introduced, including a Student-nominated Award, Sessional Staff Award, Early Career Award, Teaching Excellence Award, Learning Innovation Award and Educational Leader Award. The Student-nominated Award received more than 2000 nominations from students, which was an outstanding response. The VC Awards, along with the Research and Alumni awards, were presented at a ceremony. The 2019 Learning and Teaching Awards winners are listed on page 38.

The new award program also aligns with the national Australian Awards for University Teaching (AAUT) award scheme. Recipients of the VC Awards are being encouraged to seek further recognition through the AAUT national award scheme.



ABOVE LEFT

We offer a range of wellbeing programs to support our students. PHOTO: Joanne Stephan.

ABOVE RIGHT

Macquarie University International College and English Language Centre helps prepare both international and domestic students for undergraduate study. PHOTO: Morris McLennan.

LEFT

Macquarie's mentoring program is one of Australia's longest-running peer support programs. PHOTO: Joanne Stephan.



Dr Karen Pearlman and Dr Iqbal Barkat from the Faculty of Arts won the Outstanding Contributions to Student Learning award at the 2018 Australian Awards for University Teaching (AAUT) for their unique screen production intensive program.

PROGRAM ILLUMINATE

Program Illuminate commenced with the two key aims of finalising a university-wide ePortfolio solution, and investigating and developing a suite of micro-credentials to be added to the University's competitive suite of offerings.

Micro-credentials provide learning opportunities for students and interested professionals, support employability and lifelong learning, build Macquarie brand awareness and present opportunities to diversify revenue streams. Micro-credentials are closely aligned to Macquarie's strategic framework *Our University: A Framing of Futures* and their provision positions Macquarie as an innovation nexus, which will further strengthen the brand of the University. The first 10 micro-credentials will be available in 2020.

In 2019, the Program Illuminate team collaborated with faculties to identify marketable micro-credential offerings, investigate technology solutions to deliver the courses, identify and procure a micro-credential badging capability, and enable access to our learning management system for non-Macquarie ID-holding students. They also identified a shopfront solution that will enable prospective students to browse and sign up for our micro-credentialled courses.

An ePortfolio solution was finalised in late 2019 with the new online tool to be implemented university-wide from Session 1, 2020.

MACQUARIE UNIVERSITY INTERNATIONAL COLLEGE AND ENGLISH LANGUAGE CENTRE

In April, the Macquarie University International Language College and the English Language Centre (ELC) opened its new Student Hub, comprising a new Independent Learning Centre and 17 refurbished classrooms. Also in April, the IELTS Test Centre launched its computer-delivered test centre, which will run in parallel with the paper-based version to meet demand. Dr Pamela Humphreys was appointed Director of both the college and the ELC in July, and a streamlined management team has been put in place for 2020.

The college curriculum development project of over 40 units is nearing completion, including all changes resulting from the broader Curriculum Transformation Project, to ensure maximum articulations from the college to undergraduate courses. In Session 2, 2019, the ELC delivered a post-entry Academic Language and Learning pilot, and other selected programs, to 700 business students, with positive feedback from students and Macquarie Business School staff. A number of college and ELC staff and programs were also finalists in the Vice-Chancellor's Learning and Teaching Awards, in the Teaching Excellence category.



2019 was a year of significant achievement in Aboriginal and Torres Strait Islander higher education. PHOTO: Morris McLennan.

SCHOLARSHIPS

During the year, 620 equity scholarships were awarded to domestic students on the basis of financial need or other hardship (see page 49 for more information).

PLACE FRAMEWORK

The final draft of the Professional Learning and Capability Enhancement (PLaCE) framework was completed. The framework provides a map of the professional capabilities of all teaching staff and guides the provision of professional learning and recognition. PLaCE capabilities align with industry standards for academic development in relation to teaching as well as with Macquarie promotion criteria. PLaCE consultations took place with staff from all faculties and other key stakeholders to ensure their feedback was taken on board in finalising the framework. Professor Dominique Parrish, Pro Vice-Chancellor (Learning and Teaching), presented the PLaCE framework at the Council of Australasian University Leaders in Learning and Teaching in Brisbane in November 2019.

DIGITAL STRATEGY

Consultation with key stakeholders on the development of a university-wide digital strategy that focuses on learning and student success commenced in 2019. The strategy, to be finalised in 2020, will conceptualise how we use digital solutions to enhance learning and teaching and ultimately the student experience.

LEARNING INNOVATION HUB

During the year, the Learning Innovation Hub (LIH) has continued to support all faculties, schools and teaching units to design and deliver sound pedagogical practices based on scholarly evidence. The LIH also continued to advise on major curricular development projects, in addition to a range of professional development opportunities offered through learning technology developments, educational media project partnerships, training sessions and equipment hire.

Our Learning Management System (iLearn) was also improved throughout 2019. Several new tools were introduced to better support online assessment and feedback, produce more engaging learning content, improve security, and streamline online learning workflows. Our learning analytics tool, iLearn Insights, was developed and successfully trialled with teaching staff to analyse student learning activity, inform teaching and assist students at risk. Shamim Joarder, who led the development of the tool, won the Australasian Society for Computers in Learning in Tertiary Education 2019 Innovation Award.

The Advance Higher Education Academy Fellowship (Advance HE Fellowship) has continued to grow in 2019. Forty-nine Macquarie staff were formally recognised for their teaching and learning expertise with Advance HE Fellowships, and an additional 98 Macquarie staff commenced the fellowship application process. This year's Advance HE Fellowship incorporated five fellowship writing workshops, weekly 'Shut Up and Write' sessions, one-on-one consultations and coaching. Academics, and teaching and learning support staff from across the University, participated in the program.

Finally, following technical infrastructure development and testing throughout 2019, student evaluation of units and teaching moved from paper-based surveys to online surveys with accompanying resources to further support student engagement.

PACE (PROFESSIONAL AND COMMUNITY ENGAGEMENT)

PACE is a multi-award-winning work-integrated learning program. PACE provides all undergraduate students with practical, real-world experiences aimed at enhancing their employability and career readiness. During 2019, more than 1100 local, regional and international industry, government and not-for-profit organisations have formed learning partnerships across 76 PACE units with more than 6500 student enrolments. Since the PACE program started in 2011, there have been more than 47,000 undergraduate enrolments, providing students with opportunities to engage in a wide range of experiential learning activities.

Throughout the year, 295 students travelled overseas to work on PACE International activities with non-government organisations, social enterprises and corporate partners across Asia, Africa, Europe, North America, South America, the Middle East and the South Pacific. An additional 267 students worked on projects on campus with international PACE partners from Cambodia, India, Indonesia, the Philippines and Vietnam. More than half of the students who travelled overseas (164 students or 55.6 per cent) were supported through grant programs, such as the New Colombo Plan (Australian Government), the Endeavour Leadership Program and PACE Travel grants.

During the year, the PACE evaluation project continued to collect data to assess the impact of the program for students, partners and the University, as well as to support quality assurance for program improvement and development. The evaluation demonstrates that PACE is having a substantial impact on student/graduate outcomes and engagement, and further supports the University's goals. A key strength of the program is its long-term partnerships with industry and the community, which have multiple benefits and great potential for the broader University. Significant progress was made during 2019 on our business systems and process review project, including operationalising a new university-wide customer relationship management system for managing PACE activities and data. We anticipate full implementation of the system in 2020, which is expected to enhance operational efficiencies and provide a better experience for students, partners and staff.

PACE provides all undergraduate students with practical, real-world experiences aimed at enhancing their employability and career readiness.

COOPERATIVE EDUCATION PROGRAM

In 2019, we expanded our commitment to work-integrated learning with the launch of the University's second Cooperative Education Program (Co-op Program). The Co-op Program is a structured method of practice-based learning that involves alternating between classroom learning and learning in the workplace. Ten students are recruited through a highly competitive process, and over four years, they will each complete three vocational placements of three to six months. They are paid at market rate by co-op partners while on placements. The Accounting Co-op Program was launched in 2019 with the support of eight industry partners, two of whom are supporting student places. The Actuarial Studies Co-op Program was offered for the second time in 2019 with the support of five industry partners, with five students being supported by scholarships funded by the co-op partners for the duration of their degree.

GLOBAL LEADERSHIP PROGRAM

In 2019, the GLP facilitated or hosted 211 extracurricular activities for more than 4000 domestic and international students. These activities included workshops, keynote speaker events and experiential activities to develop cultural capital, a critical understanding of international issues, leadership and innovation capabilities, and a sense of community responsibility and global citizenship. In 2019, the GLP won the Global PIONEER Award for International Education in the category Progressive Education Delivery. The PIONEER Awards are the only global awards that celebrate innovation and achievement across the whole of the international education industry.

Student feedback continues to indicate that the GLP is contributing to employability and degree value. The 2019 GLP graduate student survey found that 75 per cent of students agreed that post the GLP, they could obtain work in an area of their own professional interest. In the same survey, 87 per cent of students agreed that at the end of the GLP, they were able to demonstrate cross-cultural skills in both community and professional contexts.

SBS MEDIA MENTORSHIP PROGRAM

Now in its eighth year, the SBS Media Mentorship Program continues to actively transform the learning experience of culturally and linguistically diverse (CALD), Aboriginal and Torres Strait Islander (ATSI) and low socioeconomic status media students at Macquarie so that they might ultimately create a more diverse Australian media. In 2019, the first-year cohort included two ATSI and eight CALD students, the second-year cohort included 11 CALD students and the third year included eight CALD students – 29 equity students in total. Students engaged in third-year placements with SBS Voices, SBS Marketing, SBS Spanish Radio, ABC Compass, ABC Radio News, NextMedia publications and Settlement Services International (SSI).

Several improvements were made to the program in 2019, including the creation of a handbook that provides detailed program information for future and current students, as well as internal and external stakeholders. Digital content creation and social media strategy skills were developed via hands-on workshops, and these were evidenced via a multimedia project and social media campaign created in association with SSI. One of the highlights was our Media Careers Talk event where media professionals Benjamin Law, Jan Fran, Miriam Corowa and alumni Dayvis Heyne shared their personal media career stories and insights.

The End of Year Showcase celebrated all of our program's achievements with industry supporters from Media Diversity Australia, the ABC, SBS, Women in Media, the Screen Diversity and Inclusion Network, and the Walkley Foundation. Nine CALD students graduated from the program at the end of 2019, and one has already started working at SBS Voices. We have high hopes for all the graduating mentees as the program boasts a 73 per cent success rate for graduates currently working in the media.



In 2019, 45,347 students were enrolled at Macquarie.

Supporting our students

In April 2019, Macquarie's *Student Success Strategic Framework* green paper was launched, outlining our focus not only on achieving academic success but also on supporting and empowering students to realise their individual potential. Some of the student transition, support and success activities undertaken in 2019 included:

ORIENTATION

Orientation activities helped more than 7300 students find their feet in 2019. Across the year, the Orientation events app was again used and downloaded on more than 8200 devices. The app incorporates a personalised schedule and provides information on student services, student clubs, learning platforms, emergency management and contacts. It also includes an integrated map function and gamification, allowing students to navigate their way around the campus, as well as an interactive social media feed.

MACQUARIE UNIVERSITY MENTORS

The Macquarie mentoring program is one of Australia's longest-running peer support programs, offering students advice on settling in and finding their way around campus, and tips on adapting to university life. The program supported 4000 new students in 2019, who were mentored and encouraged by more than 180 mentors both face to face and online from Session 2.

MACQUARIE BUDDIES

Facilitating a sense of belonging and peer support when students commence study at Macquarie, the Buddy Program makes students feel welcome through the 50+ events held throughout the year. With more than 75 student volunteers leading activities around the local community and beyond, Macquarie Buddies encourage students to have fun and meet new friends.

STUDENT GROUPS AND SPORTING CLUBS

Macquarie's approximately 130 student groups and sporting clubs are created and run by students. In 2019, they helped students connect with people with similar passions and interests throughout the year.

MACQUARIE UNIVERSITY LIBRARY

Our Library is an essential resource for students and researchers, providing access to more than 1.7 million electronic and print books (including 1.2 million physical volumes and almost 950,000 electronic titles) and 76,000 journal titles. Staff, students and other users access the Library's electronic and print collections more than 28 million times each year. The state-of-the-art sustainable library building features a range of study spaces, including presentation practice pods, individual quiet rooms, laptop kiosks, computing spaces and more than 2200 seats. Each year the Library space has more than 2.3 million visitors.

LEARNING SKILLS

To develop the academic, digital and information literacies needed to succeed at University and in the workplace, the Library offered students innovative programs delivered by expert librarians and learning skills advisers. Supported by collaboratively developed online resources, learning advisers provided 648 face-to-face or online individual consultations to students. Learning skills advisers also oversaw the re-implementation of the Studiosity online learning support service in 2019, with 1335 students having a total of 4741 consultations.

The StudyWISE iLearn Module engaged 20,525 active users through its online academic skills resources. The Academic Integrity Module, which is aimed at increasing students' understanding of acceptable academic practice, was piloted as a compulsory module for all first-year students in the Faculty of Arts and the Faculty of Human Sciences. Maths and statistics support is offered by the Numeracy Centre.

MUSE AND MAZE

Student spaces are key to building a sense of belonging. MUSE (Macquarie University Spatial Experience) provides social learning spaces that combine the atmosphere of a group hangout and the quiet study ambience of the Library. MAZE (Macquarie Active Zone Experience) offers student groups access to large, bookable, customisable areas with exceptional facilities that are ideal for facilitating teamwork and student group activities.

ACCOMMODATION

A range of safe, supportive and diverse accommodation options are offered to students on and near the University campus. These include share apartments or studios in university housing, residential colleges, university partner housing blocks, homestays with local families and local private housing. The Accommodation Office continued welcoming new students with their free airport pickup service, delivering them safely to their accommodation in Sydney.

FITNESS

Our sport facilities are some of the best university facilities in the country. We offer a state-of-the-art health club, 50-metre and 25-metre swimming pools, sports fields, squash courts, sports halls, a martial arts area and a gymnastics hall. Students can also participate in a range of sports including AFL, cheerleading, cricket, dance, fencing, hockey, quidditch, rowing, rugby union, rugby league, skiing and snowboarding, soccer, squash, swimming, table tennis, ultimate frisbee, volleyball and water polo.

CAREER SERVICES

The Career and Employment Service helps students prepare résumés and identify career options, and connects students and graduates with employers and industry bodies. During the year, 8925 students attended career fairs, employer presentations and skills workshops; 172 students attended résumé writing sessions; and 8652 students were supported by faculty curriculum-based employability sessions.

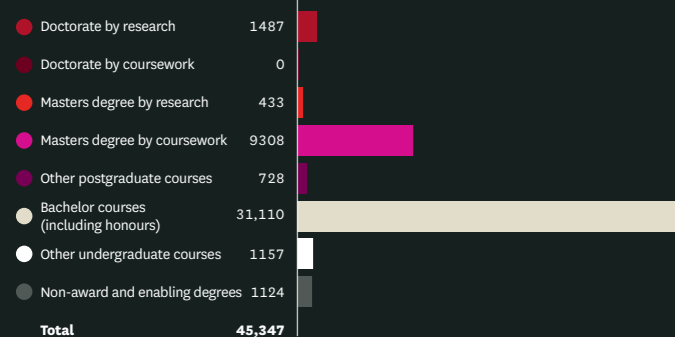
STUDENT HEADCOUNT

In 2019, 45,347 students were enrolled at Macquarie, an increase of 800 (1.8 per cent) students compared with 2018. There was an increase of 492 international students compared with 2018, while domestic student enrolments increased by 308 over the same period.

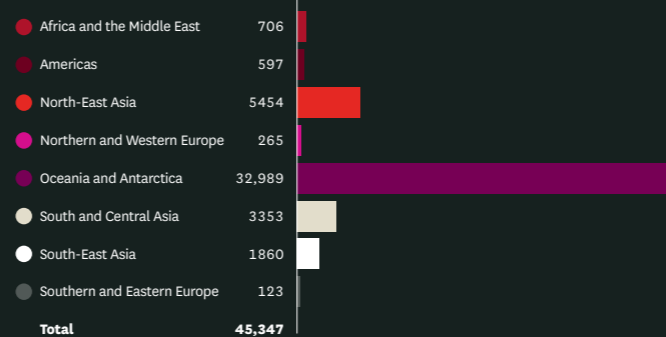
There were 12,222 international students from more than 120 countries, making up 27 per cent of students. Of those, 983 students were enrolled in the University's pathway college and 266 students in offshore programs in China, Hong Kong, Korea and Singapore.

The University's total equivalent full-time student load in 2019 was 33,132.1, an increase of 351.9 (1.07 per cent) over 2018. Of the total student load, 77.5 per cent were in undergraduate degrees and 22.5 per cent in postgraduate degrees.

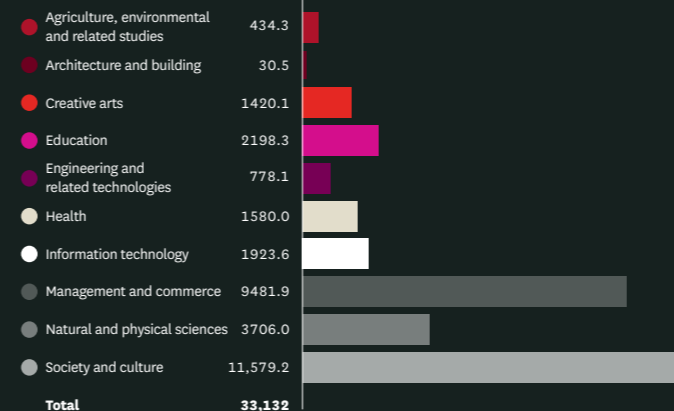
Enrolments by program level 2019



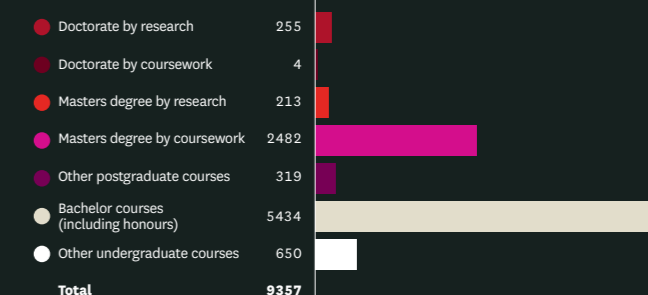
Enrolments by home location 2019



Student load by discipline 2019



Student awards 2019



Engagement



BRAND AND RENOWN

Our brand and recruitment campaign, using the (YOU)SM creative, focuses on employability, internships, research strengths and our new curriculum. This campaign has been active across a range of advertising mediums: cinemas, train stations, sides of trains and buses, digital, search engine, social media and online publishers.

Additionally, several highly targeted sub-campaigns were launched during the year, which specifically included catchment adjustment points, science and business scholarships, and an alumni postgraduate loyalty scheme.

Brand health and campaign tracking research completed in December 2019 indicate that on the key measures of brand awareness, consideration and recommendation (ACR), and brand linkage and recall, the brand campaign has had a positive impact in all measures. ACR scores have been maintained and stabilised across Greater Sydney. Within Macquarie's key feeder region, the campaign has successfully defended our brand health, and, over time, has improved perceptions of studying at Macquarie as both leading to quality jobs and helping students' career prospects.

These key aspects are driving consideration of Macquarie as a place to study. Overall, the brand and recruitment campaign delivered an increase of 28 per cent on leads compared with the same time last year.

PHILANTHROPY

Philanthropy continued to go from strength to strength in 2019 with more than \$20 million raised. This continued growth in philanthropic engagement puts Macquarie in a great position to meet its goal of raising \$200 million by 2023.

Over the last 12 months, our generous donors continued to support our mission to drive innovation, undertake life-changing research, change lives and make a difference. A gift of \$5 million has been committed to enhance our world-leading research and teaching in hearing

neurosciences, particularly hearing loss and its link to dementia and other cognitive problems. More than \$3 million was raised to support mobility scholarships. These scholarships provide a unique level of support that empowers students not only to realise their full potential, but also to go further, aim higher and push boundaries, geographically and personally. And more than \$3 million has been raised through our trusts and foundations work to support Macquarie's research, with a particular highlight being a \$750,000 philanthropic grant towards the Macquarie University Cancer Biobank.

Leaving a legacy to the University continued to grow in appeal for a number of our alumni, with 10 confirmed bequests secured in 2019 and the Lincoln Legacy Society growing to 78 members.

The broader community continued to support Macquarie's efforts in raising much-needed funds for motor neuron disease research and clinical trials. In particular, the firefighting community again played an enormous role with their climb to the top of the Sydney Tower Eye. Despite the significant operational demand on firefighting resources, more than 490 fires climbed the tower, with many having arrived directly from the bushfire frontlines to participate in the climb. With their efforts, we raised a new record of \$849,000.

The Macquarie University Art Collection is integral to on-campus community life, with artworks displayed across campus for the enjoyment of students, staff and visitors. We continued to receive generous gifts of artwork through the Cultural Gifts Program, with more than \$2 million in donations in 2019 enriching the University's cultural assets not only for aesthetic purposes but also for learning and teaching engagement. The Macquarie University Art Gallery hosted seven exhibitions showcasing the variety and depth of the University's collections and, in partnership with the Australian History Museum, continued the successful Art and Object Engagement Program for people living with dementia and their carers.

ALUMNI

Our focus for 2019 was creating a community for Macquarie alumni, which has seen the number of new alumni networks grow by 15, and the number of active groups double to 27 across the world. These groups and the broader community of 196,000 alumni were supported by more than 40 events held globally. Nine received Alumni Awards during the year (see page 38), while engagement also increased through regular newsletters and social media. These activities help build the University's reputation by supporting career opportunities and student recruitment, and providing a platform for philanthropy.

We also offer an array of alumni benefits, including unlimited library borrowing and complementary access to over 150 online research databases. This was again the most accessed alumni benefit in 2019.

CORPORATE ENGAGEMENT

The Corporate Engagement team continued to develop and facilitate partnerships with business and industry in 2019. Key achievements for the year included:

MACQUARIE PARK INNOVATION DISTRICT

The Macquarie Park Innovation District (MPID) undertook a strategic change in 2019 to focus on shaping significant investment in new physical assets in Macquarie Park that promote collaboration and entrepreneurship.

- Launched in February 2019, the Venture Café partnership was established to activate the MPID. Venture Café operates a flagship Thursday evening networking program to build our local community of innovators. Throughout 2019, it delivered more than 40 events comprising about 300 sessions, 600 presenters and 3000 visitors, with attendance steadily building over time. Partners include the NSW Government, the City of Ryde, EY, Konica Minolta, NAB, Orix, Stockland and Visionary.
- We joined the Boston-based Massachusetts Institute of Technology's Regional Entrepreneurship Acceleration Program (MIT REAP). As part of our participation, we have refocused the MPID to take advantage of more than \$5 billion investment in developments that are creating new spaces for collaboration.

STRATEGIC PARTNERSHIPS

COCHLEAR

The University's collaborative partnership with Cochlear grew significantly in 2019. Cochlear was involved in the development of the University's *Hearing Strategy 2030*, and a number of co-funded research projects are in progress. There has also been a renewed focus on improving the interaction between the Faculty of Science and Engineering, and Cochlear's R&D team. We continue to coordinate our activities around audiology in China with those of Cochlear.

OPTUS

The University continued to build its multifaceted relationship with Optus, which includes the Optus-Macquarie University Cyber Security Hub.

Other key strategic partnerships developed during the year included:

- A partnership with Tata Consultancy Services supports several PhDs and may be expanded to include international internships.
- Cisco engaged Macquarie to run its MentorMe program. We provided mentors for approximately 50 female students studying mainly STEM subjects.
- We worked with Fujitsu Australia to establish its Digital Transformation Lab on campus.
- Our new five-year memorandum of understanding with the NSW Department of Planning, Industry and Environment builds on more than \$6 million in research and more than 40 PACE projects over the past seven years.

Other significant achievements included:

- Delivering the Macquarie Park Outreach Program in which Corporate Engagement met with approximately 60 significant businesses in Macquarie Park to develop new relationships.
- Assisting the Faculty of Arts engage with 25 major employers, including Accenture, EY, Deloitte, Hays Recruitment, not-for-profit organisations and government, to redevelop the Bachelor of Arts to focus on in-demand workforce skills.

- Participation by a multidisciplinary team in the Australian Association of Gerontology conference in Sydney. This allowed Macquarie to demonstrate our expertise in this area and launch our capability statement in ageing and aged care. See page 18.

- Coordinating the participation of Macquarie academics in major defence industry events such as the Avalon Airshow and the Defence Science and Technology Group's SCINDICATE partnership event.

- Piloting the Engagement Support Program with all faculties, which provides academics with training on engagement with business and industry. Over 45 academics were assisted, many of whom were early-career researchers.

COMMUNITY EVENTS

In 2019, the events team supported 283 events that were open to members of the community, and partners and friends of Macquarie. Approximately 42,000 people attended activities during the year, with the most popular events again being Art Gallery openings, the Astronomy Open Night, Open Day and alumni-led activities.

MEDIA REACH

The University continued to focus on raising the reputation and reach of its research through a robust external communication strategy. The centrepiece of that strategy is *The Lighthouse* – the University's online publishing platform – which, since inception, has increased unique page views by 74 per cent from 134,814 in 2018 to 292,869 in 2019.

It does this by focusing on telling the stories of the world-changing research undertaken at the University by publishing evidence-based opinion pieces in a format that is often reproduced, in full, by national media outlets, including ABC digital platforms, TV (SBS and Nine), radio and newspapers such as *The Sydney Morning Herald* and *The Age*.

In addition, *Lighthouse* content is also sought after by specialist media outlets across education, legal, IT and science publications. As its own reputation for quality content grows, *The Lighthouse* has received

requests for content partnership arrangements. Chief among those was *New Scientist* which, in 2019, republished three *Lighthouse* articles. That increased *The Lighthouse's* international reach and subscriber base with almost 10,000 new readers from Europe, the United Kingdom and the United States. *Lighthouse* articles received international media coverage in Egypt, India, Indonesia and the United Kingdom. During the year, the top three stories averaged 9902 unique page views each, more than tripling the previous year's numbers.

The Lighthouse works in conjunction with a newsroom strategy, and together they delivered 1377 individual tier-one media stories in 2019, with a total of 9976 news pieces, an increase of 36 per cent year on year. On average, 17.7 million people were exposed to a news story about the University each month in 2019.

Social media is a large contributor to strategic success, and in 2019 Macquarie focused on amplifying quality research stories and topical articles from *The Lighthouse* as well as video content, both for publication on our owned social media channels. In total, 2211 social media posts were published across the University's core social media channels. The total number of University 'fans' across all channels is now 985,240, and our key statistics across channels included 23,775,800 impressions, 479,017 engagements and 196,965 link clicks. The focus on video content saw video views grow 400 per cent year-on-year to 514,285 minutes viewed. Posting links to *Lighthouse* stories on social media platforms now drives 40 per cent of the readership, further demonstrating the value of our strong social media strategy.

Positive media coverage has had a broader impact on reach and reputation. For example, 64 per cent of those academics surveyed following a media appearance saying it was a direct contributor to invitations to speak at conferences and write book chapters, as well as helping attract candidates to the higher degree research program and more. It also has real impact in the community, with work to publicise new clinics at Macquarie University Hospital resulting in huge spikes in patient enquiries.



Investing in our future

The outdoor pavilion creates a sense of cultural togetherness and community and features native landscaping.

TRANSFORMING OUR CAMPUS

In 2019, the University continued to progress works that will deliver more than \$500 million and around 80,000 square metres of key transformational buildings plus infrastructure upgrades over the next few years – including the Central Courtyard and the Arts Precinct redevelopments – as the 2014 *Campus Master Plan* is brought to life.

The Central Courtyard project, which includes the first 340 student beds, a 750-seat graduation hall and adjacent function space, 16 state-of-the-art teaching/tutorial rooms, a food court, a revitalised courtyard and refurbished Lincoln Building was substantially underway by December 2019, with a staged delivery through to the end of 2020. It has been designed and will be built to a five-star Green Star rating.

The new Arts Precinct is substantially complete, with fit-out works underway for an opening in April/May 2020. The new buildings will provide a refocused cultural centre for arts for both the University and the broader community, and enable the Faculty of Arts to achieve its strategic goals.

The Clinical Education building, which commenced construction in the first quarter of 2019 and is scheduled for completion in the first quarter of 2020, will also benefit from the renovated public shared zone on Research Park Drive. The design phase for the planned new Macquarie Law School building was finalised in late December 2019. Pending statutory approvals, construction of the building is due to commence in late 2020 or early 2021, following completion of the Central Courtyard project.

Construction was completed for the new research and teaching facility for the Department of Earth and Planetary Sciences and the Department of Environmental Sciences through conversion of the dark basement of 11 Wally's Walk into state-of-the-art laboratories. This represented the final upgrade work for that building.

Jannawi, the gathering place for Aboriginal and Torres Strait Islander students, staff and visitors, was completed and an inauguration ceremony held to recognise its opening. The outdoor pavilion creates a sense of cultural togetherness and community, and features native landscaping.

Additionally, reinvigorated teaching, study/breakout and outdoor courtyard areas were unveiled at the Macquarie University International College and the English Language Centre. Hundreds of students occupy these buildings each term, and the spaces are in use almost year-round. The teaching spaces are equipped with operable wall panels and state-of-the-art audio-visual technology. The Independent Learning Centre offers opportunities for independent study, individual academic language and learning advice, and workshops, while the addition of a computer-delivered IELTS Test Centre brings Macquarie up to date with the latest English language proficiency testing.

WORKPLACE DIVERSITY AND INCLUSION

Macquarie has seen significant progress towards equality, diversity and inclusion this year. We were recognised by several national bodies for our work, and we have seen the development and implementation of University-wide diversity strategies and action plans.

In 2019, Macquarie launched the second iteration of the *Workplace Gender Equity Strategy – Towards Gender Equity 2.0*. This strategy builds on the progress to date across the six priority areas of the first Gender Equity strategy, with an action plan for the next two years designed to further embed inclusivity into the University's systems and culture. Several areas of the strategy have been strengthened to align Macquarie with leading practice benchmarks, including the SAGE Athena SWAN program and the Employer of Choice for Gender Equality citation.

In recognition of Macquarie's progress and commitment to gender equity, the University received a SAGE Athena SWAN Bronze accreditation. This is an internationally recognised acknowledgement of actions and commitment to advancing the careers of staff from diverse backgrounds and addressing the under-representation of women in STEMM. Macquarie also became a *Women in STEM Decadal Plan* Champion – showing our ongoing commitment to supporting the recruitment, retention and progression of women in STEMM, and aligning our actions with the national decadal plan.



The University launched its new *Access and Inclusion Plan 2020 – 2023* for consultation and worked in collaboration with the Australian Network on Disability to align Macquarie with leading workplace practice on inclusion for people with disability. The plan builds on our progress to date and identifies actions in four key focus areas to strengthen our culture of diversity and inclusion:

- Culture: Accessibility and inclusion should be meaningfully integrated within our culture, strategies, policies, processes and communications.
- Access: Our physical and digital environments must be accessible, safe and dignified.
- Learning and teaching: Provide a stronger, more consistent and connected approach to supporting students with disability.
- Employment: Provide an environment that is flexible and adaptive to support individual requirements so that all staff can progress and achieve.

For the second consecutive year, Macquarie was awarded Silver Employer status in the annual Australian Workplace Equality Index (AWEI) awards. The AWEI drives best practice for LGBTQ+ workplace inclusion and sets a comparative benchmark for Australian employers across all sectors. Recognition as a Silver Employer affirms Macquarie's commitment and action on creating a safe and supportive culture for all LGBTQ+ members of our community through inclusive workplace policies and processes, education and engagement activities, and a network of allies. The University also became a key partner in the Australian Pride in Sport program, committing to further develop and enhance LGBTQ+ participation across all its Campus Life sport and recreation departments. A steering committee was established to provide strategic planning and coordination of the University's LGBTQ+ Ally Network.

The University continued to enhance support available to staff with caring responsibilities, including the launch of the new Carers Hub website, which provides resources, information and support for staff before, during and after parental leave, and ongoing support and provisions for carers. Parents' rooms on campus were updated, and Macquarie was once again accredited as a Breastfeeding Friendly Workplace by the Australian Breastfeeding Association. The University was named Australia's best university workplace for new dads in the second annual Top 20 Workplaces for Dads study.

As an institution that values diversity, inclusion and collaboration, we are committed to preventing acts and behaviours of bullying, discrimination or harassment, and to fostering a culture of safety and respect for all members of our community. A mandatory all-staff training module was launched to ensure staff know their rights and responsibilities, and feel confident to report and respond to incidents of inappropriate behaviour. The University also launched a new Staff Sexual Harassment Prevention and Response Policy, which has associated support and reporting procedures.

Jannawi is a new gathering place for Aboriginal and Torres Strait Islander students, staff and visitors. PHOTO: Morris McLennan.

We have taken steps to further embed diversity and inclusion, with diversity and inclusion committees established to represent every faculty and portfolio. This new structure allows tailored approaches and actions at local levels that will ensure our strategies are effectively implemented and embedded in the fabric of the University. These committees will be represented on a university-wide committee, which reports to the Executive Group.

Diversity and inclusion goals for 2020 include:

- Support for and development of the new network of diversity and inclusion committees to drive cultural change at the local level.
- Retain our Australian Workplace Equality Index Silver award, and continue to foster an inclusive and equitable workplace culture for LGBTQ+ staff.
- Create the governance and operational structure required to implement actions outlined in our *Access and Inclusion Plan 2020 – 2023*.
- Build diversity and inclusion capability through leadership and manager development programs.



Awards, honours and rankings

VICE-CHANCELLOR'S LEARNING AND TEACHING AWARDS

VICE-CHANCELLOR'S LEARNING AND TEACHING STUDENT NOMINATED AWARD

- Associate Professor Tiffany Mary Jones, Faculty of Human Sciences
- Alexandra Bhatti, Faculty of Medicine and Health Sciences
- Dr Bruno Alves Buzatto, Faculty of Science and Engineering

VICE-CHANCELLOR'S LEARNING AND TEACHING SESSIONAL STAFF AWARD

- Lauren Ehrenfeld, Faculty of Human Sciences

VICE-CHANCELLOR'S LEARNING AND TEACHING EARLY CAREER AWARD

- Alexandra Bhatti, Faculty of Medicine and Health Sciences

VICE-CHANCELLOR'S AWARD FOR TEACHING EXCELLENCE

- Associate Professor Matt Bower, Faculty of Human Sciences

VICE-CHANCELLOR'S AWARD FOR LEARNING INNOVATION (TEAM AWARD)

- Associate Professor Kira Westaway, Faculty of Science and Engineering; Michael Rampe, Faculty of Arts; Matthew Cabanag, Macquarie University International College

VICE-CHANCELLOR'S EDUCATIONAL LEADER AWARD

- Professor Catherine Dean, Faculty of Medicine and Health Sciences

RESEARCH EXCELLENCE AWARDS

THE JIM PIPER AWARD FOR EXCELLENCE IN RESEARCH LEADERSHIP

- Professor Roger Chung, Faculty of Medicine and Health Sciences

EXCELLENCE IN RESEARCH: FIVE FUTURE-SHAPING RESEARCH PRIORITIES

HEALTHY PEOPLE

- Dr Celia Harris, Faculty of Human Sciences

RESILIENT SOCIETIES

- Associate Professor Kate Lloyd, Associate Professor Sandie Suchet-Pearson, Bawaka Collective – Faculty of Arts

PROSPEROUS ECONOMIES

- Professor Deborah Schofield, Macquarie Business School

SECURE PLANET

- Professor Phillip Taylor, Faculty of Science and Engineering

INNOVATIVE TECHNOLOGIES

- Professor Karu Esselle, Dr David Bulger, Dr Maria Kovaleva – Faculty of Science and Engineering

EXCELLENCE IN HIGHER DEGREE RESEARCH

SUPERVISOR OF THE YEAR AWARD

- Professor Jennie Hudson, Faculty of Human Sciences

MACQUARIE UNIVERSITY EARLY CAREER RESEARCHER OF THE YEAR – HASS

- Dr Katrina Hutchison, Faculty of Arts

MACQUARIE UNIVERSITY EARLY CAREER RESEARCHER OF THE YEAR – STEMM

- Dr Bingyang Shi, Faculty of Medicine and Health Sciences

EXCELLENCE IN HIGHER DEGREE RESEARCH – HASS

- Nicholas Everett, Faculty of Human Sciences

EXCELLENCE IN HIGHER DEGREE RESEARCH – STEMM

- Stephanie Rayner, Faculty of Medicine and Health Sciences

VICE-CHANCELLOR'S EXCELLENCE AWARDS FOR PROFESSIONAL STAFF

COLLABORATION AND CONNECTION

- Penelope Huisman, Manager, Student Equity and Diversity, Student Life

INNOVATION AND IMPROVEMENT

- Dinorah Cortes, Scholarship (Coursework) Officer, Student Administration

LEADERSHIP EXCELLENCE

- Dr Brad Windon, Director, Student and Academic Business Transformation

OUTSTANDING SERVICE

- Roneil Latchman, Senior Learning Designer, Macquarie Business School

MACQUARIE UNIVERSITY ALUMNI AWARDS

INTERNATIONAL ACHIEVEMENT

- Bradley Jakeman

MEDICINE AND HEALTH

- Dr Dharmica Mistry

PUBLIC AND COMMUNITY SERVICE

- Greg Mullins AO, AFSM

SCIENCE AND TECHNOLOGY

- Dr Larry Marshall

SPORT

- Tina McKenzie

ARTS AND CULTURE

- Liane Moriarty

EDUCATION

- Distinguished Professor Marcia Langton AM

INNOVATION AND ENTERPRISE

- Elizabeth Gaines

RISING STAR

- Joshua Ross

BLUES AWARDS

Twelve athletes were awarded the highly prestigious Blue Award, and eight received a Half Blue Award.

BLUE WINNERS

- Nick Andrews, Mattias Braach-Maksvytis, Adam Camerlengo, Clare Costanzo, Dominique Du Toit, Thomas Green, Jessica Henderson, Aleksandra Kotevski, Jacob McCorry, Tri-Anh Nguyen, Tess O'Connor, Jess Sewastenko

HALF BLUE WINNERS

- Kiera Austin, Ewan Belgrove, Ciaran Fitz-Gerald, Maggie Price, Olivia Price, Madeleine Proud, Carla Tremolada, Elena Zhao

CHANCELLOR'S AWARD

- Tom Trbojevic

EXTERNAL AWARDS AND HONOURS

- Three researchers from the Faculty of Science and Engineering were named as Science & Technology Australia's Superstars of STEM: Dr Lizzy Lowe, Dr Devika Kamath and Dr Kate Selway.

- Dr Michael Donovan, Academic Director, Indigenous Teaching and Learning, was awarded a Fulbright scholarship to study unique education models that are empowering Indigenous students in Hawaii.

- Rhett Loban, Associate Lecturer in the Department of Educational Studies, won the CSIRO Aboriginal and Torres Strait Islander STEM Professional Career Achievement Award for his work 'Torres Strait Virtual Reality'.

- Dr Leanne Holt, Pro Vice-Chancellor (Indigenous Strategy), was recognised by the World Indigenous Nations Higher Education Consortium for her work in the educational emancipation movement for Indigenous peoples.

- Former Deputy Chancellor, Elizabeth Crouch AM, was awarded a Member of the Order of Australia (AM) for her significant service to higher education and to the rail transport industry.

- The Honourable Dr Annabelle Bennett AC, SC was awarded a Companion of the Order of Australia for eminent service to the law and to the judiciary, particularly in the field of intellectual property, to higher education and to sports arbitration.

- Professor James Guthrie AM, Macquarie Business School, was awarded a Member of the Order of Australia in recognition of his significant service to higher education in the field of accounting.

- Honorary Senior Lecturer Helen Ramsay AM was awarded a Member of the Order of Australia in recognition of her significant service to plant science.

- Dr Ronika Power, Associate Professor of Bioarchaeology in the Department of Ancient History, received the Australian Academy of the Humanities' prestigious 2019 Max Crawford Medal.

- Macquarie's groundbreaking MultiLit program featured in the Universities Australia #UniResearchChangesLives campaign.

- Professor Lesley Hughes, Professor in Biological Sciences and Pro Vice-Chancellor (Research Integrity and Development) received the Australian Museum Research Institute's Lifetime Achievement Award for her work on climate change.

- Eureka Prizes were won by the National Indigenous Science Education Program (NISEP), coordinated by Associate Professor Joanne Jamie, Dr Ian Jamie and Honorary Associate Professor Subramanyam Vemulpad (all from the Department of Molecular Sciences); and by the Blue Carbon Horizons project, led by Professor Neil Saintilan (Department of Environmental Sciences), which reveals why coastal wetlands are an important element of climate change mitigation.

- NSW Tall Poppy Awards were won by four researchers: Dr Chris Reid for complex biological systems, Dr Ronika Power for ancient human mortality, Dr Noushin Nasiri for breath tests that detect disease, and Dr Simon Clulow for conservation biology.

- Postgraduate student Callum McDiarmid, Department of Biological Sciences, was awarded a Fulbright Future Scholarship that he will undertake at the Cornell Lab of Ornithology.

- Macquarie was awarded SAGE Athena SWAN Bronze accreditation in recognition of the action we have taken to address gender inequity in STEMM disciplines and achieve tangible outcomes across the University.

- In *The Australian's* 2019 research magazine, 13 Macquarie researchers were honoured as field leaders, while the University was credited as the leading institution across five research fields: special education, foreign language learning, animal behaviour and ethology, otolaryngology, and plastic and reconstructive surgery.
- Professor Lucy Taksa, Director of the Centre for Workforce Futures, was among the 2019 *The Australian Financial Review* (AFR) 100 Women of Influence award winners (Diversity and Inclusion category).
- Dr Vanessa Pirotta, marine biologist and science communicator from the Department of Biological Sciences, was among the 2019 AFR 100 Women of Influence award winners (Young Leader category).
- Widening Participation's LEAP UP Macquarie Mentoring (Refugee Mentoring) Program was named the winner of the Equity and Opportunity category in the 2019 AFR Higher Education Awards.
- Associate Lecturer Amy Thunig, Department of Educational Studies, was named joint winner of the Emerging Leader in the Government or Public Sector category at the 2019 Women's Agenda Leadership Awards.
- Dr Simon Gross, a leading optics and telecommunications expert from Modular Photonics – a start-up that uses IP created at Macquarie – was one of three winners of the Menzies Foundation Science Entrepreneur Fellowship Program.
- Dr Mutsa Gumbie, Macquarie University Centre for the Health Economy, was selected as one of four winners of the national GrantEd Research Impact Showcase Competition who have demonstrated real research impact.
- Macquarie's Global Leadership Program received the Progressive Education Delivery Award at the 2019 PIEoneer Awards in London.
- Macquarie was recognised for its strong global partnerships, winning a Premier's New South Wales Export Award in the category of International Education and Training.
- Associate Professor Munjed Al Muderis, orthopaedic surgeon from Macquarie University Hospital, was named 2020 NSW Australian of the Year, for his groundbreaking surgical work in limb amputation and complex limb reconstruction.
- Dr Melanie Zeppel, Macquarie Business School, won the Excellence in Research Impacting a Sustainable Future category in the 2019 Scopus Researcher Awards.
- Two Macquarie teams – Redback Systems and HydGene Renewables – were selected for the CSIRO's coveted ON Accelerate program, a three-month accelerator supporting ventures with significant potential impact.
- Two Macquarie University Incubator entrepreneurs were named Tomorrow Makers after securing grants from AMP's Tomorrow Fund: chemist and dementia researcher Dr Adam Martin, Department of Biomedical Sciences at Macquarie; and Anne Thompson, Sustainable Schoolwear.
- The recently refurbished Student Hub space within the Macquarie University International College and the English Language Centre was named Best Learning Environment (New Building or Renovation under \$2 million) in the Association for Learning Environments Australasia NSW Chapter Awards.
- Associate Professor Chandra Balachandran, MQ Health ophthalmologist and senior lecturer, won three prestigious awards – across Europe, Japan and the United States – for his unique patented Descemet's membrane endothelial keratoplasty (DMEK) punch corneal transplant.
- Five researchers were accepted into the Australian Research Council (ARC) College of Experts: Professor David Coutts, Faculty of Science and Engineering; Professor Stephen Crain, Faculty of Human Sciences; Professor Paul Haynes, Faculty of Science and Engineering; Professor Annabelle McIver, Faculty of Science and Engineering; and Associate Professor Kristian Ruming, Faculty of Arts.
- The *Yanama budyari gumada* 'walk with good spirit' research collective – led by Darug custodians, in conjunction with Macquarie staff and students and other partners – won the Benefitting Society category in the 2019 Green Gown Awards.
- Macquarie was named Australia's best university workplace for new dads in the second annual Top 20 Workplaces for Dads study.
- A record five Macquarie students were selected among the 125 New Colombo Plan 2020 scholars – the highest number of Macquarie scholars in a single year.
- Macquarie won the Educational Services category at the 2019 Australia Bangladesh Business Council Awards in recognition of the University's outstanding engagement with Bangladeshi students and the Bangladeshi community.
- Dr Iqbal Barkat and Dr Karen Pearlman – Department of Media, Music, Communication and Cultural Studies – received a Citation for Outstanding Contribution to Student Learning at the Australian Awards for University Teaching.
- Professor Philomena Leung, Macquarie Business School, was awarded the Bob McDonald Award by the Institute of Internal Auditors Australia for her contribution to the auditing profession.
- The Biostatistics Collaboration of Australia – a consortium of six Australian universities currently led by Macquarie – was awarded the 2019 President's Award for Leadership in Statistics by peak national body the Statistical Society of Australia.

- Dr Leanne Holt, Macquarie's inaugural Pro Vice-Chancellor (Indigenous Strategy), was named as a state finalist in the 2019 Telstra Business Women's Awards in the Public Sector and Academia category.
- Professor Wendy Rogers, Professor of Clinical Ethics in the Department of Philosophy, won the Ethics Award at the NHMRC 2019 Research Excellence Awards.
- The Department of Educational Studies' Rhett Loban was awarded the CSIRO's Indigenous STEM Award for teaching Torres Strait Islander culture through virtual reality technology.
- Macquarie University Accommodation Service was recognised at the Asia-Pacific Student Accommodation Excellence Awards with four awards including the Excellence in Student Experience Award (under 500 beds) for Dunmore Lang College and the Excellence in Facility Development or Management (under 500 beds) for Robert Menzies College.
- Professor Maroš Servátka, Macquarie Business School, was awarded the Ronald Coase Institute Award for Outstanding Achievement.
- The memoir *Do Oysters Get Bored? A Curious Life* by Dr Rozanna Lilley, Department of Educational Studies, was shortlisted in the 2019 National Biography Award.
- Professor Daryll Hull, Macquarie Business School, was named Faculty Adviser of the Year by global student organisation Enactus Australia at their 2019 National Conference.
- The Department of Physics and Astronomy received the Silver Pleiades Award from the Inclusion, Diversity and Equity in Astronomy Chapter of the Astronomical Society of Australia.
- Associate Professor Ronika Power received an Early Career Award from the Union Académique Internationale.
- Walanga Muru's new *Jannawi* pavilion received a Gold Award in the Educational category at the 2019 Australian Institute of Landscape Designers and Managers Awards.
- Macquarie was named Organisation of the Year in the Macquarie Park category of Transport for NSW's 2019 Travel Choices Awards. The awards recognise organisations that have positively contributed to travel behaviour in Sydney.
- Professor Gilles Guillemin, Faculty of Medicine and Health Sciences, was made a *Chevalier de l'Ordre Mérite* [Knight of the National Order of Merit] by the French Government.

HIGHLY CITED RESEARCHERS

Six Macquarie researchers were recognised in the Web of Science annual list of Highly Cited Researchers:

- Professor Rick Kefford, Cancer Medicine, Department of Clinical Medicine
- Professor Colin Prentice, Ecology and Evolution, Department of Biological Sciences
- Professor Mark Connor, Associate Dean, Higher Degree Research, Faculty of Medicine and Health Sciences; Professor, Pharmacology, Department of Biomedical Sciences
- Professor Anita Ho-Baillie, Photovoltaic and Renewable Energy, School of Engineering
- Professor Hendrik Poorter, Plant Ecologist, Department of Biological Sciences
- Distinguished Professor Ian Wright, Department of Biological Sciences

Macquarie University ranked #63 internationally in the THE World University Impact Ranking 2019. This global performance table assesses universities against the United Nations' Sustainable Development Goals (SDGs) – 17 overarching objectives to be achieved by 2030 as agreed by 193 UN member states in 2015.

We ranked most highly for SDG 13: Climate Action with a rank of #17, #18 globally for SDG 5 (Gender Equality), and #20 globally for SDG 8 (Decent Work and Economic Growth).

We are continuing to improve our performance by working on a sustainability strategy for 2020 and beyond to ensure sustainability stays embedded in all that we do.

RANKINGS

Macquarie ranks 101–110 in the QS Employability Ranking. On the Graduate Employment rate indicator (one of five that make up the ranking), Macquarie are 28 in the world and first in Australia.

Macquarie was again ranked as a leading institution in the 2020 QS World University Rankings, being named among the top one per cent of universities worldwide and moving up 13 places to 237.

We were ranked in the top 250 universities worldwide in the 2019–20 THE World University Ranking. These are assessed on five pillars, each of which represents a key area of higher education excellence: teaching, industry income, research, citations and international outlook.

In the 2019 ARWU Subject Rankings of World Universities, earth sciences, ecology, education, geography, psychology and telecommunication engineering entered the top 100 globally. Of note, this places education in the top 100 world rankings in all three major global rankings (ARWU, QS and THE).

The Global Ranking of Academic Subjects 2019 ranks more than 4000 universities around the world across 54 subjects. Six Macquarie subjects ranked in the top 100 globally, including earth sciences, ecology, education, geography, psychology and telecommunications engineering.

Statutory reporting



MACQUARIE UNIVERSITY COUNCIL

Macquarie University Council is the governing authority of the University, established under Part 3 of the *Macquarie University Act 1989* (NSW). Under Part 4 of the Act, the Council acts for and on behalf of the University in the exercise of the University's functions, has the control and management of the affairs and concerns of the University, and may act in all matters concerning the University in such manner as appears to the Council to be best calculated to promote the objectives and interests of the University. The Council comprises 15 members who contribute a blend of commercial, governance, legal, academic, administrative and public sector expertise to the business and operation of the Council. Members are elected or appointed in accordance with the provisions of the *Macquarie University Act 1989* and the Macquarie University By-law 2005.

MEMBERS OF COUNCIL

CHANCELLOR

Elected pursuant to Section 10(1) of the Act

The Hon Michael Egan, AO, BA (Syd), FAICD
Retired 24 October 2019, *ex officio*

Dr Martin Parkinson, AC, PSM, BEc (Adel),
BEc Hons (Adel), MEd (ANU), MA (Princeton),
PhD (Princeton), FASSA, FIPAA
Current term to 24 October 2023, *ex officio*

DEPUTY CHANCELLOR

Elected pursuant to Section 11(1) of the Act

Louise Mason, BA, LLB (Hons) (Macq)
Current term to 31 December 2020

VICE-CHANCELLOR

Appointed pursuant to Section 12(1) of the Act

Professor S Bruce Dowton, MBBS (Syd), MD (Syd),
FACMG, FRACP, FAICD, FRSN
Appointed 3 September 2012, *ex officio*

CHAIR OF THE ACADEMIC SENATE

Appointed pursuant to Section 8(H)(c) of the Act

Professor Mariella Herberstein, BSc (Syd), Hons
(UNSW), Mag Rer Nat (University of Vienna), Dr
Rer Nat (University of Vienna)
Current term to 30 June 2020, *ex officio*

APPOINTED BY THE MINISTER FOR EDUCATION AND TRAINING

Pursuant to Section 8G of the Act

Louise Mason, BA, LLB (Hons) (Macq)
Current term to 31 December 2020

The Hon Patricia Forsythe, AM, BA, DipEd
(Newcastle), FAICD
Retired 21 February 2019

Michael Book, BEc (Macq)
Current term to 10 November 2023

ELECTED BY AND FROM THE ACADEMIC STAFF

Pursuant to Section 8D of the Act

Professor Catherine Dean, BAppSc (Phty) (CCHS),
MA (Columbia), PhD (Syd)
Current term to 31 December 2022

Associate Professor Wylie Bradford, BEc(Hons)
(Newcastle), MPhil (Cambridge), PhD (Cambridge)
Current term to 31 December 2022

ELECTED BY AND FROM THE

NON-ACADEMIC STAFF

Pursuant to Section 8D of the Act

Dr Evianne Grosvenor, BA (Roosevelt), MPhil
(Cambridge), PhD (Cambridge)
Current term to 31 December 2020

ELECTED BY AND FROM THE STUDENTS OF THE UNIVERSITY

Pursuant to Section 8D of the Act

Cissy Shen
Retired 31 May 2019

Alexander Hablutzel
Current term to 31 May 2021

GRADUATE MEMBERS APPOINTED BY COUNCIL

Pursuant to Section 8E of the Act

Chum Darvall, AM, BA (Macq), F Fin, FAICD
Current term to 31 December 2020

John Wigglesworth, BEc (Macq), CA
Current term to 28 February 2023

Frank Zipfinger, BAcc, BEc (Macq), LLB, LLM,
MBA, MAICD
Current term to 28 February 2023

APPOINTED BY COUNCIL

Pursuant to Section 8F of the Act

Deborah Hadwen, BA, MA, MCommLaw (Macq),
MAICD
Current term to 29 February 2020

Jingmin Qian, BEc, MBA, CFA, FAICD
Current term to 28 February 2023

Council membership as at 31 December 2019

Note: One vacancy under Section 8F of the Act held over to 2020

MEMBERS' ATTENDANCE AT MEETINGS

Council	A	B
The Hon Michael Egan	5	2*
Dr Michael Parkinson	1	1
Louise Mason	6	6
Professor S Bruce Dowton	6	6
Professor Mariella Herberstein	6	6
Michael Book	1	0
Associate Professor Wylie Bradford	6	6
Chum Darvall	6	5
Professor Catherine Dean	6	6
The Hon Patricia Forsythe	1	0
Dr Evianne Grosvenor	6	6
Alexander Hablutzel	4	4
Deborah Hadwen	6	6
Jingmin Qian	6	6
Cissy Shen	2	2
John Wigglesworth	6	5
Frank Zipfinger	6	6

A – Number of meetings eligible to attend

B – Number of meetings attended

* Council approved leave of absence from 22 February 2019 until 23 October 2019

PRINCIPAL ACTIVITIES

Principal continuing activities of the consolidated entity during 2019 consisted of:

- the provision of facilities for education and research of university standard
- the encouragement of the dissemination, advancement, development and application of knowledge informed by free enquiry
- the provision of courses of study or instruction across a range of fields, and the carrying out of research to meet the need of the community
- participation in public discourse
- the conferring of degrees, including those of bachelor, master and doctor, and the awarding of diplomas, certificates and other awards
- the provision of teaching and learning that engages with advanced knowledge and enquiry
- the development of governance, procedural rules, admission policies, financial arrangements and quality assurance processes that are underpinned by the values and goals referred to in the functions set out in the *Macquarie University Act 1989*, and that are sufficient to ensure the integrity of the University's academic programs.

There were no significant changes in the nature of the University's activities during the year.

REVIEW OF OPERATIONS

Activities of the Macquarie University Council during 2019 included:

- receipt of the Vice-Chancellor's report at each meeting of Council, covering major strategic items, external developments and general issues of note, including selected projects and goals related to the objectives contained in the University's strategic plan
- receipt of regular reports on health and safety across the University
- regular review of key risks
- approval of key compliance reports including the *Macquarie University Annual Report 2018*
- approval of the 2020 Consolidated Budget and 2020 Capital Management Plan
- approval of the conferral of various honorary awards
- approval of updated Delegations of Authority
- receipt of presentations on learning and teaching, student experience, Indigenous strategy, research strategy and performance, nature and size of the University, finance (annual budget and financial forecast), campus development strategy, IT transformation, marketing and brand strategy, alumni and philanthropy, corporate engagement, international engagement strategy, hearing, people and culture, our five faculties (Arts, Business and Economics, Human Sciences, Medicine and Health Sciences, and Science and Engineering), MQ Health, the University budget and capital plan, year-end strategic position review.

CHANGES TO UNIVERSITY RULES

Revised University Rules that reflect decisions of the University Council included:

- Academic Senate Rules, to reflect update of membership position from Dean; HDR to PVC, HDRT and Partnerships, to implement procedures to elect one member from the Indigenous staff; and to amend the reference to the *Macquarie University Act 1989* (Preamble section).
- General Coursework Rules, to align terminology with the 2020 curriculum architecture, effective 1 January 2020.

COMPLIANCE WITH THE VOLUNTARY CODE OF BEST PRACTICE FOR THE GOVERNANCE OF AUSTRALIAN UNIVERSITIES

In accordance with Clause 14 of the Voluntary Code of Best Practice for the Governance of Australian Universities (the Code), the University advises that it is in full compliance with the Code. This is reviewed on an annual basis.

Key governance changes during the year included:

- retirement of the Chancellor and election of a new Chancellor for a four-year term that commenced on 25 October 2019
- use of Council and committee skills matrices to ensure adequate skills are represented on Council and each committee and to assist in succession planning
- review of Council Committee terms of reference
- review of the governance and oversight of controlled entities.

LEGAL AFFAIRS

CHANGES TO ACTS AND SUBORDINATE LEGISLATION

There were no changes to the *Macquarie University Act 1989* or to its subordinate legislation.

REGULATION IN RELATION TO THE BUILT AND PHYSICAL ENVIRONMENT

The significant legislation and regulations to which the University is subject includes, but is not limited to, the following:

ACTS

- *Biodiversity Conservation Act 2016* (NSW)
- *Contaminated Land Management Act 1997* (NSW)
- *Disability Discrimination Act 1992* (Cwlth)
- *Environmental Planning and Assessment Act 1979* (NSW)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth)
- *Heritage Act 1997* (NSW)
- *Local Government Act 1993* (NSW)
- *National Greenhouse and Energy Reporting Act 2007* (Cwlth)
- *Protection of the Environment Operations Act 1997* (NSW)
- *Pesticides Act 1999* (NSW)
- *Rural Fires Act 1997* (NSW)
- *Water Management Act 2000* (NSW)

REGULATIONS

- Environmental Planning and Assessment Regulation 2000 (NSW)
- National Greenhouse and Energy Reporting Regulations 2008 (Cwlth)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Cwlth)
- Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW)
- Protection of the Environment Operations (Waste) Regulation 2014 (NSW)

HUMAN RESOURCES

At Macquarie, we invite our staff to bring their professional knowledge and dedication to a campus that is powered by human collaboration. We strive to create a culture of transformative learning, expand horizons and nurture individual and collective capabilities.

STRATEGY AND SERVICE

In 2019, Human Resources (HR) continued to provide transactional, advisory and strategic HR services to the University and its entities.

This year, we saw the successful implementation of Professional and Academic Staff enterprise agreements, with the Academic Staff Implementation Committee and Professional Staff Implementation Committee established and operating, consistent with interest-based bargaining. The University implemented an innovative academic job families scheme, with 40 academic staff appointed into the new Teaching and Leadership job family by the end of 2019. In addition, four new faculty workload models were developed in line with an interest-based approach.

The University managed the acquisition of Macquarie Medical Imaging with a transfer of 70 staff to MQ Health. This was a significant acquisition that will further enhance the MQ Health brand and service offerings.

We also completed procurement of a new Human Capital Management System and appointed an implementation partner, with work on the new system implementation commencing in 2020.

A number of HR policies and procedures were developed and reviewed, including the new Staff Sexual Harassment Prevention and Response Policy, Academic Promotions Policy and Conflict of Interest Policy.

DEVELOPMENT

Following a successful pilot launch of the bespoke leadership program 'Inspire', a second cohort of leaders commenced in 2019 and are due to graduate in March 2020. This program is designed to create connections across the University and

build the managerial and leadership capability of frontline professional staff managers.

Macquarie's academic promotion scheme continued to be a successful initiative with high levels of engagement. In its third year of operation, the scheme attracted more than 100 applications across all academic levels. Based on Boyer's four areas of scholarship, the scheme recognises the diversity of academic work and creates flexible career pathways that allow academic staff to work to their strengths. The success rate in 2019 was 86 per cent, an increase from previous years.

The University continued participation in the Franklin Women Mentoring Program. This is a structured mentoring program for the health and medical research sector that brings together participants at two levels: women looking to progress their career in health and medical research, and senior leaders and decision makers (both men and women), who can help build a culture of greater diversity within this field. This has been a very successful initiative with eight mentees and six mentors completing the program since 2017.

A large number of team development sessions were facilitated across key areas of the University with a focus on strengthening team collaboration and effectiveness.

The University continued to offer staff development grants and scholarships, with 21 staff sponsored in 2019. The University also offered a broad suite of online and face-to-face skill development courses for staff.

STAFF ENGAGEMENT AND CULTURE

For the first time in 2019, the University's Staff Wellbeing Week was extended to a month to encourage greater inclusion and participation. There were more than 2500 registrations for the month's calendar of events, which included lunchtime seminars, campus walks, art classes and 69 free exercise classes provided by the Macquarie University Sport and Aquatic Centre. A health kiosk was open on campus for the whole month, which proved to be popular with both staff

and students. Aside from the dedicated month for staff in 2019, the University ran a broader annual program of wellbeing support for staff, coordinated by the Wellbeing Action Group. The group includes representatives from MQ Health, Campus Life, the Centre for Emotional Health, Sustainability, Campus Wellbeing, Health and Safety, and Human Resources.

The 'Your Say' staff engagement survey opened for feedback in May 2019 and had a high response rate of 83 per cent. Overall, results show that performance and engagement scores remain favourable and on par with the results from the last survey in 2016. A new addition in 2019 was the inclusion of a separate survey for sessional/casual academic staff. Survey results were distributed to staff in faculties and divisions, and action planning commenced.

The Vice-Chancellor's Professional Staff Awards opened in June 2019 with 45 nominations submitted, comprising both individuals and teams. A ceremony was held in November to recognise the winners and highly commended for each of the four categories: Collaboration and Connection, Innovation and Process Improvement, Leadership Excellence, and Outstanding Service.

The Staff Anniversary Celebration, which recognises long-standing service to the University, was held in April 2019. Twenty-six staff were recognised for their 25-year contribution, and for the first time, two staff were recognised for their 50-year contribution.

VOLUNTEERING

The University actively supports community volunteering by providing up to two days leave for full-time and part-time staff. In 2019, Macquarie staff contributed to the largest corporate donation received by North Ryde Community Aid for their annual Christmas Hamper Drive since it started in 2000. Staff also used their volunteering leave to sort, pack and deliver the hamper donations. The hamper deliveries provide much-needed assistance and support for the most vulnerable within the local area, including the elderly, and those who are socially and financially isolated.



STAFF NUMBERS (FTE)¹

Category	2017	2018	2019
Academic	1709	1771.3	1731.1
Professional	1834	1960.8	2034.7
Total	3543	3732.1	3765.8

¹ Includes continuing, fixed-term and casual staff FTE as at 31 March (government-submitted numbers).

NUMBER OF SENIOR EXECUTIVE STAFF²

	2017		2018		2019	
	M	F	M	F	M	F
Band 3 (Vice-Chancellor)	1	0	1	0	1	0
Band 2 (Deputy Vice-Chancellor)	3	0	4	0	4	0
Band 1 (Executive Group)	4	3	3	4	4	2
Subtotal	8	3	8	4	9	2
Total	11		12		11	

² Numbers as at 31 December 2019

AVERAGE SENIOR EXECUTIVE SALARY

Band	Range	2018	2019
Band 3 (Vice-Chancellor)	\$700,000–\$1,100,000	\$1,010,000	\$1,050,000
Band 2 (Deputy Vice-Chancellor)	\$400,000–\$699,999	\$480,000	\$500,000
Band 1 (Executive Group)	\$300,000–\$599,999	\$380,000	\$350,000

In terms of employee-related expenditure, 1.04 per cent of expenditure was related to senior executives in 2019, compared with 0.89 per cent in 2018 and 1.11 per cent in 2017. Professional and academic staff covered by an enterprise agreement received a wage increase of two per cent. The recommended increase for staff employed on individual contracts was two per cent. There were no other exceptional movements in wages, salaries or allowances.

TRENDS IN THE REPRESENTATION OF EEO GROUPS (%)¹

	Benchmark or target	2017	2018	2019
Professional staff				
Women	50	67.5	67.8	69.4
Aboriginal and Torres Strait Islander peoples ²	2.6	1.2	1.5	1.5
People whose first language is not English	19	33.8	34.5	35.4
People with a disability	N/A	4.9	5.3	5.7
People with a disability requiring work-related adjustment	1.5	0.9	1.1	0.9
Academic staff				
Women	50	44.6	45.1	44.9
Aboriginal and Torres Strait Islander peoples ²	2.6	0.7	1.0	1.2
People whose first language is not English	19	31.7	32.6	33.0
People with a disability	N/A	3.5	3.4	3.8
People with a disability requiring work-related adjustment	1.5	0.9	0.7	1.3

TRENDS IN THE DISTRIBUTION OF EEO GROUPS³

	Benchmark or target	2017	2018	2019
Professional staff				
Women	100	94	94	94
Aboriginal and Torres Strait Islander peoples ²	100	94	99	112
People whose first language is not English	100	85	86	85
People with a disability	100	110	104	103
People with a disability requiring work-related adjustment	100	N/A	140	N/A
Academic staff				
Women	100	78	80	80
Aboriginal and Torres Strait Islander peoples ²	100	N/A	N/A	N/A
People whose first language is not English	100	78	79	82
People with a disability	100	110	118	100
People with a disability requiring work-related adjustment	100	N/A	N/A	N/A

¹ Headcount of all permanent and fixed-term contract, full-time and part-time staff as at 31 March.

² Based on the responses to a voluntary self-service staff equity survey.

³ If there was no relevant information, then the staff member was excluded from the relevant EEO calculation.

⁴ A distribution index of 100 indicates that the centre of distribution of the EEO group across salary levels is equivalent to that of other staff. Values less than 100 mean that the EEO group tends to be more concentrated at lower salary levels than is the case for other staff. The more pronounced this tendency is, the lower the index will be. An index more than 100 indicates that the EEO group is less concentrated at the lower salary levels. 'N/A' denotes where numbers are too small for the distribution index figure to be reliable (ie less than 10).

ACCESS AND INCLUSION INITIATIVES**PATHWAYS**

The University has a range of entry schemes and pathway options for prospective students. These take into account a broader range of factors than just educational attainment to date. Macquarie entry pathways consider a variety of criteria, ranging from adjustment factors (formerly known as ATAR bonus points) to academic results in relevant HSC subjects, to local community engagement activities, to previous study or work experience.

This year, the following entry pathways were offered to students:

- Academic Entry Program
- Selection Rank (ATAR plus adjustment factors – Academic Advantage, Educational Access Scheme, Rural Bonus Scheme, Elite Athletes and Artistic Performers Scheme, Big History Scheme, Catchment Adjustment Factors)
- Schools Recommendation Scheme
- Macquarie Leaders and Achievers Early Entry Scheme
- Gifted and Talented Entry Program
- Next Step Program
- Macquarie University International College – diplomas, foundation and intensive programs
- Aboriginal and Torres Strait Islander Entry Program
- Walanga Muru Critical Thinking Entry Pathway
- Open Universities Australia
- Special Tertiary Admissions Test

MACQUARIE LEADERS AND ACHIEVERS

After extensive market research in 2018 with prospective students, schools and career advisers, the Global Leadership Entry Program (GLEP) was relaunched as Macquarie Leaders and Achievers Early Entry Scheme in 2019 to better reflect its criteria.

The scheme is for Year 12 students who participate in extracurricular activities in Year 11 and 12, and demonstrate leadership skills and service to their community. These activities, together with a student's Year 11 academic performance, are assessed for eligibility to receive an early offer to study at Macquarie.

The new scheme has been well received by career advisers and has led to a large number of offers of places being accepted by prospective students. Fifteen scholarships have been offered to outstanding applicants who demonstrated extensive engagement or significant achievement in service to their community, as well as outstanding academic achievement. Further scholarships were awarded to high-achieving students in the fields of science, health and engineering.

SCHOLARSHIPS

Macquarie offers a range of generous equity scholarships that are awarded on the basis of financial need or other hardship. Since their introduction in 2008, more than 2750 students have received funding. Refer to the table below for more information.

RESPECT. NOW. ALWAYS.

We continued our efforts to improve organisational and individual capacity to prevent and respond to sexual assault and sexual harassment experienced by students.

Initiatives delivered in 2019 included:

- The Macquarie University Student Sexual Assault and Sexual Harassment Policy was developed following extensive consultation with the Macquarie community. This policy provides a framework for giving and receiving support, as well as guidance on lodging a report relating to incidents of sexual assault/sexual harassment involving students.
- The Respect. Now. Always. (RNA) online reporting system was implemented, allowing students and staff who report incidents involving students to choose whether they wish to report anonymously or to provide their contact details.
- The RNA Peer Education program was also expanded in order to substantially increase provision of face-to-face education opportunities for students. This expansion included the addition of two sports peer educators funded by U@MQ. Face-to-face training was delivered to 359 students including mentors, residential advisers, university sports representatives, and student leaders. Approximately 7000 students completed the online course Consent Matters, which was made mandatory for all students at Macquarie in 2019. A further 136 staff in student-facing roles also completed training.
- In 2019, the University launched the new Staff Sexual Harassment Prevention and Response Policy. The policy enhances our existing policy framework around appropriate workplace behaviours by placing specific focus on sexual harassment in the workplace.

EQUITY-RELATED SCHOLARSHIP RECIPIENTS 2017–2019

Scheme	2017	2018	2019
Macquarie Accommodation Scholarships	65	69	72
Macquarie Education Costs Scholarships	214	200	191
Indigenous Commonwealth Accommodation Scholarships	10*	3*	1
Indigenous Commonwealth Education Costs Scholarships	23*	10*	3
Macquarie Higher Study Scholarships	59	64	51
Macquarie University Indigenous Grant Program	124	155	175
Merit Scholarships	36	37	39
Non-current School Leaver Scholarships	4	2	1
Refugee Scholarships	4	9	11
Macquarie University Dunmore Lang College Indigenous Incentive Scholarship	13	12	13
Macquarie University Dunmore Lang College Regional and Rural Scholarship	15	14	18
ISSP Indigenous Commonwealth Accommodation Scholarships	4	7	17
ISSP Indigenous Commonwealth Education Costs Scholarships	16	28	28
Total	587	610	620

*Discontinued at the end of 2016 and replaced by ISSP Indigenous Commonwealth Accommodation Scholarships and Indigenous Commonwealth Education Costs Scholarships



MULTICULTURAL POLICIES AND SERVICES

We are committed to ensuring that staff and students from culturally and linguistically diverse (CALD) backgrounds have equal opportunity. More than a third of our staff identify as coming from CALD backgrounds. Our domestic and international students also represent a wide array of cultures and languages. We collect and analyse comprehensive data to ensure that initiatives are supported by evidence and specific needs are identified.

ENGAGING CULTURALLY DIVERSE COMMUNITIES

LEAP (Learning, Education Aspiration, Participation) programs are delivered by the Widening Participation Unit. Working with communities, schools, teachers and parents, LEAP aims to raise aspirations, create possibilities and actively support students from equity backgrounds to successfully participate in higher education. In total the unit's programs engaged 425 primary and secondary schools across New South Wales (up 34 per cent on 2018), involved 1104 parents and community members, and reached more than 25,460 students overall (more than double the previous year).

LEAP programs in 2019 included roadshows to regional and remote areas to increase the participation of students from these areas. Outreach initiatives engaged new community groups in areas of Greater Western Sydney, as well as regional districts and townships across New South Wales. These relationships enable the University to develop connections with potential students and communities who face disadvantage. Challenges for remote and regional students are addressed during the roadshows, with scholarships and accommodation both being important areas of focus. This year there were full roadshows to the Mid North Coast and the Upper Hunter regions, plus mini roadshows to the Hunter Region and the Riverina. The inRoads program brought students from Broken Hill and the Riverina to experience the Macquarie campus. In total, the LEAP roadshow and inRoads programs made a connection with 1482 students across 19 schools, as well as more than 200 community members, parents and teachers.

Macquarie's mentoring program is focused on students from low socioeconomic backgrounds, including those from refugee and asylum seeker backgrounds. This program involves Macquarie students going to high schools across the metropolitan area and mentoring high school students from these backgrounds. The high standards of the program led to a recent win in the Equity and Opportunity category at the *Australian Financial Review* Higher Education Awards for 2019. Mentor programs engaged with 12 secondary schools across New South Wales, with over 100 Macquarie mentors reaching more than 99 mentees.

Evaluations of the unit's programs have revealed a positive impact in the following areas: educational engagement and motivation to study, student confidence, student awareness of and motivation towards attending university, and preparation for university. The programs also helped students develop a sense of belonging to a learning community (as well as to Macquarie), supporting students' experiences and their impetus to study and engage in co-curricular activities with peers. The program develops skills that empower students to feel more confident about their future goals and employability and includes student influencers (family and friends).

Finally, the initiatives helped raise greater awareness among institutional and external stakeholders and partners on issues of equity that different student cohorts face. That greater awareness enables the building and strengthening of a collaborative community of practice and broadens the load of responsibility across the institution to realise optimum benefits. This is exemplified by partnerships with faculties and offices to deliver programs and activities such as the Junior Science Academy, the National Indigenous Science Education Project, the Higher Education Participation and Partnerships Program Lunch and Learn meetings involving external stakeholders, and the Sweetest Memory High Tea at the Art Gallery of NSW.

SUPPORTING OUR CULTURALLY DIVERSE STUDENTS AND STAFF

In 2019, the Library's Learning Skills Unit (LSU) continued to expand its academic literacy and language services and resources to assist undergraduate and postgraduate coursework students, including CALD students, to develop their academic reading and writing skills. The LSU offered 99 academic literacy workshops across the year to a total of 4168 students.

The WriteWISE peer writing support program provided a further 1215 students with feedback on their draft assignments. WriteWISE has been very successful in improving first-year students' confidence levels in relation to their academic writing, and in 2019 the program expanded its mentoring initiatives to include services aimed specifically at assisting Indigenous, Pasifika and refugee students. LSU introduced another peer support service, iGuides, to assist students with digital literacy issues. This program saw 250 students receive help with online tools for learning.

The Library's Conversion Services provide support to students with disabilities who have been referred by Student Wellbeing. In 2019, 44 students were provided with 165 digital textbook PDFs, 45 converted textbooks and other files created by the Library.

The Library also converted three strategic University reports into an accessible format.

The Macquarie Mentoring Program (see also 'Supporting our students' on page 32) continued to support a smooth transition into university for new and returning students through peer mentoring in 2019. Macquarie's Buddy Program, co-designed with students, delivered complimentary social events and activities throughout the year to help create a sense of belonging for new students. Volunteering opportunities in the program also provided students with valuable communication and leadership skills.

Throughout 2019, students were encouraged to join student groups and discover new and exciting developmental activities outside the formal classroom. A range of student-led events were held throughout the year with highlights including the R U OK? day and Wellbeing Week that engaged staff and students across the campus. Student groups also continued to promote cultural diversity and inclusion through a range of events such as:

- The Bangladeshi Students Association held their annual cultural night to celebrate Bangladeshi culture, with 500 attendees in the Macquarie Theatre.
- The Muslim Students Association held their annual Grand Iftaar to celebrate the end of Ramadan, with more than 700 staff and students attending.
- The Queer Collective held two major events in each session. In Session 1, IDAHOBIT (International Day Against Homophobia, Biphobia, Intersexism and Transphobia) was recognised with a full-day program including discussion panels and group sessions, ending with trivia at Ubar. In Session 2, Queer Week focused on queer people of colour.
- The Women's Collective hosted the Network of Women Students Australia Conference, which attracted more than 600 female students from around Australia.
- The Filipino Student Society of Macquarie, the Vietnamese Students Association, the Sri Lankan Students Society, the Myanmar Students Club and the Bangladeshi Students Association organised the first-ever Macquarie United event on Wally's Walk, which saw more than 300 students tasting a variety of foods from Northeast Asia to Southeast Asia, and the Indian subcontinent.

Macquarie also supports staff from CALD backgrounds by offering paid education leave to undertake approved English language courses and cultural leave. A suite of professional development workshops, postgraduate study scholarships and the postgraduate MGSM Scholarship Scheme are available to all staff.

Under the *Workplace Gender Equity Strategy*, the University works to address the particular cultural challenges faced by some people as a result of their gender, recognising the intersection of attributes such as gender, age, cultural background, sexual orientation and disability.

The University continued to offer domestic and family violence prevention and support to its staff, including a new provision for 20 days of paid domestic violence leave, flexible work options, safety planning and referral to support services.



INDIGENOUS STRATEGY

It was a significant year in the University's history of Aboriginal and Torres Strait Islander higher education. Across all areas – from learning and teaching to workforce, research and student engagement – we witnessed significant growth and development towards Aboriginal and Torres Strait Islander success. This success was highlighted by the University's implementation of the *Manawari* Aboriginal Cultural Training Program for all staff, the launch of *Mudang Dali*, the Indigenous Connected Curriculum framework, and our most successful year of Aboriginal and Torres Strait Islander secondary school engagement programs.

Dr Leanne Holt completed her first full year as the University's Pro Vice-Chancellor (Indigenous Strategy), providing the University with a number of innovative opportunities to enrich our campus with Aboriginal culture and engagement for Aboriginal and Torres Strait Islander higher education success. Dr Holt's leadership and Walanga Muru's achievements were recognised with a nomination as a finalist in the Institution of the Year category at the national Dreamtime Awards 2019. Additionally, postgraduate Indigenous student Claire Sadler was a finalist in the Student of the Year category at the same awards.

It was an outstanding year of Aboriginal and Torres Strait Islander higher education achievements for many individuals at Macquarie. Dr Michael Donovan, Academic Director of Indigenous Learning and Teaching, received a 2019 Fulbright scholarship; Dr Leanne Holt received the Order of the Circle of Scholars of Indigenous Knowledge from the World Indigenous Nations Higher Education Consortium; and Amy Thunig, an Associate Lecturer in the Department of Educational Studies was recognised as an Emerging Leader in the Government or Public Sector category in the 2019 Women's Agenda Leadership Awards.

In addition, Associate Professor Sandie Suchet-Pearson and Dr Marnie Graham, academics in the Department of Geography and Planning working with the Darug community, won a Green Gown Award (Benefitting Society category); Madi Day, administrator in the Department of Indigenous Studies, received a Highly Commended Award for Outstanding Service at the Vice-Chancellor's Excellence Awards; and Rhett Loban, Associate Lecturer in the Department of Educational Studies, was awarded the CSIRO Aboriginal and Torres Strait Islander STEM Professional Career Achievement Award.

Our Aboriginal and Torres Strait Islander student engagement programs continue to positively impact retention and progression of Aboriginal and Torres Strait Islander students. The Aboriginal and Torres Strait Islander Entry Pathway's approach, combined with a tailored first-year advisory program, has led to the University's highest-ever first-year Aboriginal and Torres Strait Islander student retention rate. Overall, a total of 419 Aboriginal and Torres Strait Islander students studied at Macquarie during Session 1 and/or Session 2, 2019, including undergraduate, postgraduate and non-award programs.

To further foster Aboriginal and Torres Strait Islander student and community engagement, Walanga Muru's new outdoor space, *Jannawi* (meaning 'for me, for you' in Darug language) was launched in 2019 to provide a culturally affirming and intellectually engaging space for Aboriginal and Torres Strait Islander peoples.

A record number of Aboriginal and Torres Strait Islander secondary school students also engaged with Macquarie in 2019, which will positively impact enrolment outcomes and Aboriginal and Torres Strait Islander success in future years. Walanga Muru led a number of targeted programs that engage Aboriginal and Torres Strait Islander secondary students in academic, cultural and leadership activities. These activities include Camp Aspire; the Rising Stars Leadership Camp; the Critical Thinking Program; campus tours; regional school visits; the Aboriginal and Torres Strait Islander Entry Pathway; and the Culture, Leadership and Scholarship In-School Engagement Program.

Manawari, the University's first Aboriginal cultural training program, commenced implementation in 2019, with more than 800 University staff trained, and received significant praise and outstanding evaluations. This led to our cultural trainer Phillip Duncan receiving a nomination in the Vice-Chancellor's Excellence Award for Professional Staff. This program provides a comprehensive overview of Aboriginal history, culture and peoples, which sends a clear message of cultural safety and applicability into the University community. To complement the training and augment learning and teaching resources, an Aboriginal cultural tour app, Walking on Darug Country, was launched to provide University staff, students and visitors with a walking guide to the University's Aboriginal cultural landmarks and sites of significance across campus.

Mudang Dali, the Indigenous Connected Curriculum framework was launched in 2019 to support the embedding of Indigenous knowledge, principles and perspectives into the curriculum. The framework provides the opportunity for faculties and departments to educate our students in the development of positive attitudes, knowledges, understanding and skills that impact diversity, inclusiveness and cultural contexts and contribute to building competent global citizens.

The Wuyagiba Bush Hub continued to provide opportunities for remote Aboriginal students to access tertiary education. The 2018 cohort of Wuyagiba Bush Hub students relocated to Sydney from South East Arnhem Land to commence undergraduate study at Macquarie, with four of these students continuing their studies in 2020. A new cohort of nine students commenced a cross-cultural bridging course on Country to

prepare for tertiary study. Five of these students have been made offers to study at Macquarie University in 2020 (the other students will be studying at other institutions based on their study aspirations).

Some outstanding events were also held in 2019 to contribute to Aboriginal and Torres Strait Islander higher education success. The annual Patyegarang Oration continues to be a key component of the University's event calendar, with more than 150 attendees praising this year's orator Professor Marcia Langton, AM, for her insights as an Indigenous Macquarie University alumna. Further, the third annual Reconciliation cocktail and fundraiser event was held to celebrate Reconciliation Week 2019 and commend Macquarie's achievements towards reconciliation to date. Professor Joanne Jamie and Brian Hurd received the 2019 Macquarie University Reconciliation Award for their ongoing contributions to Aboriginal people and communities. And finally, the inaugural Cultural Knowledge Exchange Forum, developed from the Manawari Aboriginal Cultural Training Program, was held to share and exchange ideas, stories and plans.

WORK HEALTH AND SAFETY

The Macquarie University Health and Safety Management System promotes good health and prevents injury and illness through regular monitoring and continual improvement. The University operates in a wide range of work environments, and, to ensure it remains effective, the Health and Safety Management System is regularly updated in consultation with the University community.

2019 PRIORITY HEALTH AND SAFETY INITIATIVES

The following key strategic initiatives were undertaken in 2019 to further enhance the Health and Safety Management System.

ONGOING OFFICER POSITIVE SAFETY DUE DILIGENCE

University officers continued their involvement in activities that demonstrate proactive leadership in health and safety. Such activities included:

- monitoring the uptake of the online training module for managers
- sponsoring key projects
- engaging with health and safety performance information.

ONLINE HEALTH AND SAFETY TRAINING FOR MANAGERS

- Targeted online health and safety training for managers was developed and launched in 2019.
- The program was implemented throughout the University and monitored by the University Executive.

MENTAL HEALTH FIRST AID TRAINING

- Investment in staff professional development to deliver mental health first aid training in 2020.

CHEMICAL MANAGEMENT

- Investment in specialised chemical management software to an enterprise level, supplementing the existing chemical management database.

REMOTE PILOTED AIRCRAFT

- Commitment and authorisation to obtain a Civil Aviation Safety Authority Operator's Certificate to safely fly remotely piloted aircraft (drones) for research and operation activities.
- Dedicated investment in training internal staff who oversee remotely piloted aircraft operations across the University.

SMOKING ON CAMPUS POLICY

- Revitalised Smoking on Campus Policy in consultation with the University community. Consideration was provided to safe distances from sensitive areas and community expectations.

WORK HEALTH AND SAFETY 2016 – 2019

Performance measure	2016	2017	2018	2019
Incidents reported (staff) ¹	132	143	138	157
Number of casual, fixed-term and contract staff	4702	5117	5403	5504
Incidence rate per 100 University employees ²	2.81	2.79	2.55	2.85
Workers compensation claims (% of incidents reported) ³	22%	29%	30%	33%

¹University staff only. Controlled entity staff are not used in this calculation.

²Incidence rate is calculated by dividing the total number of reported staff injury/illness by the head count, multiplied by 100.

³The percentage may vary compared to previous annual reports. This occurs when historic injuries progress to workers compensation claims that are reported in later years.

WORKERS COMPENSATION

The University Health and Safety Management System includes a program to promote safe and prompt recovery at work. Dedicated return to work officers are employed to liaise with injured staff, managers and other University stakeholders to coordinate effective return to work plans.

In 2019, the Macquarie University Group (including controlled entities) remained in the Loss Prevention Recovery program, which enables lower premium costs for organisations that implement proactive recovery at work programs.

The existing Recovery at Work Program continues to encourage positive outcomes by providing the necessary support services to facilitate a safe return to work.

WORKERS COMPENSATION PERFORMANCE MEASURE

The average cost of a worker's compensation claim is an indicator of injury severity and proactive recovery at work. The average cost of claims has decreased progressively since 2016.

WORKERS COMPENSATION PERFORMANCE MEASURE	2016	2017	2018	2019
Average cost of workers compensation claim	\$26,011	\$20,651	\$19,727	\$8449

Note: Gross incurred claims costs (actual and insurer estimates) are used in this calculation.



STUDENT ENROLMENTS

In 2019, 45,347 students were enrolled at the University, representing a increase of 1.8 per cent (800 students) compared with 2018. Domestic enrolments increased by 0.94 per cent (308 students) and international enrolments increased by 492 students (4.2 per cent) in 2019.

STUDENT ENROLMENTS

Type of attendance	2019
Full time	32,715
Part time	12,632
Gender	
Male	21,839
Female	23,508
Domestic/international	
Domestic	33,125
International	12,222
Total*	45,347

*2019 student enrolment numbers as at 31 December 2019 are preliminary. Final figures to be confirmed in line with Australian Government reporting requirements.

HIGHER DEGREE RESEARCH STUDENTS

By consolidating research training into a two-phase Master of Research (MRes)/Doctor of Philosophy (PhD) structure, Macquarie provides a highly supportive introduction to candidates' research careers. With the MRes now in its sixth year, the University has seen the flow on of MRes graduates into the PhD. They continue to be better equipped for undertaking a major research project, such as a PhD, than students who enter directly into PhD research.

HIGHER DEGREE RESEARCH COMPLETIONS 2016-2019

	2016	2017	2018	2019
Total	538	576	556	561

HIGHER DEGREE RESEARCH ENROLMENTS 2016-2019

	2016	2017	2018	2019
Total	2302	2311	2252	2120

STUDENT FEEDBACK AND CONSUMER RESPONSE

The Executive Director, Student Engagement and Registrar, is responsible for handling student complaints and allegations of student misconduct. The outcome of a review of these services in late 2019 proposed the establishment of a Complaints, Appeals and Discipline Unit (CADU), with a senior manager reporting directly to the executive director. The CADU will be implemented during 2020 and provide a specialist student and community complaints resolution service.

Complaints are submitted via a website where information is provided to assist our staff, students and community to provide feedback, raise issues, lodge complaints, and access information about rights of review.

STUDENT AND COMMUNITY COMPLAINTS

The University continues to enhance its capacity to identify and capture both student complaints and misconduct – particularly cases of fraud and academic dishonesty. This and increased awareness of resolution services contributed to an increased caseload for 2019.

In 2019, the University handled a total of 829 cases: 131 complaints and 703 misconducts.

The complaint themes included failure to provide timely responses to enquiries especially when seeking advice on course progression and enrolment plans, unit enrolments and the lack of classes (tutorials) offered, and unfair treatment. Misconduct themes included assault, collusion, fraud (including forgery, cheating, and plagiarism) and breaches of the student code of conduct.

The University also managed 425 appeals against academic decisions and five appeals against sanctions for misconduct. The largest category of appeals was against decisions to exclude or suspend students from the University, followed by appeals against recognition of prior learning and credit entitlements.

SERVICE IMPROVEMENTS

Macquarie is working to deliver seamless academic support services and establish a student-centred resolution to issues associated with unit offerings and class availability. Root-cause analysis of other complaints has highlighted a need to ensure that procedural fairness is embedded in key academic policies. During 2020, we will implement strategies to enhance the capabilities of our frontline staff to resolve complaints early and via local resolution pathways. Key policy suites will be updated (including academic progression and student discipline). We have also updated our academic integrity module, and we are exploring a range of other initiatives to address contract cheating, collusion and plagiarism.

It is expected that these improvements and the implementation of a new incident management system will bring greater responsiveness and transparency to the University's resolution services in 2020.



CYBER SECURITY

The University collects and handles a wide range of information to support its functions of learning and teaching, research, administration, and related services, and is committed to protecting the privacy of students, staff and those external to the University. A risk-based approach is employed to protect sensitive and valuable information from unauthorised access or damage. Protection measures in use by the University include network segmentation, firewalls, intrusion protection systems, advanced email filtering, network and file encryption, antivirus initiatives, security testing, vulnerability management, incident response and central log monitoring and alerting.

To continuously improve the security measures in use by the University and reduce the risk of a cyber security incident, a three-year cyber security strategy was established in July 2018. The cyber security strategy aligns with the University's strategic priorities identified in *Our University: A Framing of Futures*. The *Macquarie University Cyber Security Strategy* focuses on four key strategic areas:

1. Digital visibility – centrally logging and responding to cyber attacks.
2. Engagement and awareness – building a security-aware culture within staff and student communities.
3. Security testing and perimeter reduction – identifying and remediating weaknesses in our internet-exposed systems.
4. High-risk user protection – providing advanced security controls for users who handle sensitive information.

The University will continue to strive to achieve a balance between protecting the valuable information in its care and enabling the University community to benefit from the technology at its disposal.

PRIVACY

The University is committed to respecting the privacy rights of its students, staff, patients and third parties.

In 2019, the University received no formal requests for an internal privacy review. A data breach notification was sent to the Information and Privacy Commission NSW. No action was required. Other complaints and identified breaches were investigated and dealt with and did not require notification.

PUBLIC INTEREST DISCLOSURES

The Reporting Wrongdoing – Public Interest Disclosures Policy (PID) contains the University's procedures for receiving, assessing and dealing with reports of fraud, corruption and other serious wrongdoing. The number of public interest disclosures is set out in the tables below.

REPORT TO NSW OMBUDSMAN (UNDER SECTION 6CA OF THE PUBLIC INTEREST DISCLOSURES ACT 1994 (NSW)) 2017-2019

	2017	2018	2019
Number of public officials who made public interest disclosures to the University's public authority	1	4	2
Number of public interest disclosures received by the University's public authority	1	4	2

PRIMARY SUBJECT OF PUBLIC INTEREST DISCLOSURES RECEIVED 2017-2019

	2017	2018	2019
Corrupt conduct	1	3	0
Maladministration	0	1	2
Serious and substantial waste	0	0	0
Government information contravention	0	0	0
Local government pecuniary interest contravention	0	0	0
Total	1	4	2
Number of public interest disclosures (received since 1 January 2012) that have been finalised in this reporting period	1	3	3

PROMOTION AND TRAVEL

In 2019, the University spent \$22.8 million on travel and staff development in support of its teaching and research activities (\$23.7 million in 2018). The University conducted an extensive review of its travel protocols, maintaining its focus on the safety and wellbeing of its travellers, while also reviewing value for money and process simplicity. A new Travel Policy and Process will be introduced during 2020.

PAYMENT OF ACCOUNTS

The University's terms of credit in respect to its creditors are 30 days. In 2019, 76 per cent of invoices were paid in accordance with these terms. During the year, 99.9 per cent of Australian dollar payments were made by electronic funds transfer with the balance being made by cheque.

AGED ANALYSIS AT THE END OF EACH QUARTER

Quarter	Current (within due date) \$'000	Less than 30 days overdue \$'000	30-60 days overdue \$'000	61-90 days overdue \$'000
March	8359	541	84	47
June	6851	203	284	85
September	9235	622	377	172
December	11,253	5408	188	261

INVOICES DUE OR PAID WITHIN EACH QUARTER

Measure	March	June	September	December
Number of invoices due for payment	11,785	12,950	13,218	13,727
Number of invoices paid on time	7590	9929	10,390	11,111
% of invoices paid on time (based on number)	64%	77%	79%	81%
Dollar amount of invoices due for payment	120,162,159	122,260,482	131,524,227	169,291,061
Dollar amount of invoices paid on time	79,601,251	90,411,707	104,445,108	136,638,776
% of accounts paid on time (based on value)	66%	74%	79%	81%

INTERNAL AUDIT, RISK MANAGEMENT AND INSURANCE ACTIVITIES

INSURANCE

The University has a comprehensive insurance program to provide protection for loss or damage to assets, revenue, staff and vehicles, and to statutory and medical liabilities. The program is supported by a number of specialist providers including Unimutual, Lloyd's of London, Chubb, AIG and QBE Insurance.

Following a review of our insurance cover in 2019, the University tendered for insurance broking services and Willis Towers Watson was appointed. In a very difficult insurance market where premiums and excesses are increasing and cover is reducing, the University was able to maintain a high level of cover for 2019 renewals with premiums at affordable levels.

The University retains its valuable partnership with International SOS and Control Risks, leaders in medical assistance, international healthcare and security assistance, to support the ongoing safety needs of our students, volunteers and staff travelling overseas.

RISK MANAGEMENT

The University's risk management framework focuses on identifying, evaluating and managing strategic and operational risk and opportunities. A key element of the framework is understanding and analysing uncertainty inherent in achieving objectives and obligations, as well as identifying practical controls and mitigation strategies that reduce our risk exposures.

Key activities for 2019 included increasing our risk-based approach to travel approvals, assisting MQ Health and U@MQ with the development and review of their risk registers, making enhancements to our online risk management system and further strengthening relationships between risk professionals and University staff.

A workshop was held with the Executive Group in September to review and update the University's enterprise risks, and regular reports were provided to the Audit and Risk Committee throughout the year to keep them abreast of our enterprise risk profile and associated controls and mitigation strategies.

INTERNAL AUDIT

At Macquarie, the relationship between risk management and internal audit is close and interactive. This interaction is demonstrated by the feedback loop internal audit provides by:

- ensuring scheduled reviews are linked to the key strategic risks as identified by the enterprise risk profile
- providing assurance over key controls mitigating key strategic risks
- ensuring the enterprise risk profile is updated to reflect the findings of the internal audits.

In 2019, the internal audit provider, PwC (PricewaterhouseCoopers), conducted the scheduled internal audits that provided both management insights and compliance assurance. Following standard procedure, internal audit reports were discussed with relevant University staff, submitted to key stakeholders and reported to the Audit and Risk Committee. The closure of audit recommendations is monitored by the Audit and Risk Committee and operationally supported by the Office of General Counsel.

In December 2019, the University's Audit and Risk Committee endorsed the focus of audits for 2020.

GOVERNMENT INFORMATION (PUBLIC ACCESS) ACT 2009 (NSW)

The University actively makes information available on its website and through media releases and always seeks to provide information in a manner that is consistent with the *Government Information (Public Access) Act 2009* (GIPA Act).

Information held by the University is available by either searching the University's website or by contacting the University. Macquarie then assesses the request and decides whether the information requested is readily available, could be disclosed as part of a proactive release of information, could be disclosed through informal release, or requires a formal access application.

The fee for a formal GIPA Act application in 2019 was \$30.

GIPA Act responsibilities were subject to organisational change during the reporting year. From 1 January 2019 to 24 July 2019 responsibility for GIPA Act compliance was assigned to the Executive Information Policy Officers within the University Library Archives and Collections portfolio. From 25 July 2019 responsibility for GIPA Act compliance was assigned to the Manager Records and Archives within the Office of General Counsel portfolio.

During the period from 1 January 2019 to 31 December 2019, the University received eight formal access applications for information (refer to Table B). All applications were determined in line with statutory timeframes and or with agreement from the applicant. For three applications, access to information was granted in full. Five applications resulted in a partial release of information.

A further three applications were assessed and responded to as informal requests for information.

In 2019, there were three third-party consultations with the NSW Office of Environment and Heritage, the City of Ryde and the University of Technology Sydney respectively.

The University is obliged to report on GIPA Act applications received that are then transferred to another agency, either at the University's or the applicant's initiation. During the period from 1 January 2019 to 31 December 2019, no GIPA Act applications received by the University were transferred to another agency.

The statistical reports that follow (tables A to H) correspond to Schedule 2 of the Government Information (Public Access) Amendment Regulation 2010. Assistance for any matter concerning the GIPA Act is available from:

The Right to Information Officer

T: (02) 9850 7362

E: gipa@mq.edu.au

GIPA Act Access Application Forms can be accessed from the University's website at mq.edu.au/about/gipa-request

For lodgement of applications in person or by post:

The Right to Information Officer

Room 120, The Chancellery, 19 Eastern Road

Macquarie University NSW 2109

TABLE A: NUMBER OF APPLICATIONS BY TYPE OF APPLICANT AND OUTCOME

	Access granted in full	Access refused in full	Access granted in part	Information not held	Information already available	Refuse to deal with application	Refuse to confirm/deny whether information is held	Application withdrawn
Media	0	0	2	0	0	0	0	0
Members of Parliament	0	0	0	0	0	0	0	0
Private sector business	0	0	0	0	0	0	0	0
Not-for-profit organisations or community groups	0	0	0	0	0	0	0	0
Members of the public (application by legal representative)	2	0	0	0	0	0	0	0
Members of the public (other)	1	0	3	0	0	0	0	0

TABLE B: NUMBER OF APPLICATIONS BY TYPE OF APPLICATION AND OUTCOME

	Number of applications
Personal information applications	3
Access applications (other than personal information applications)	5
Access applications (partly personal and partly other information applications)	0

TABLE C: INVALID APPLICATIONS

	Number of applications
Application does not comply with formal requirements (Section 41 of the Act)	0
Application is for excluded information of the agency (Section 43 of the Act)	0
Application contravenes restraint order (Section 110 of the Act)	0
Total number of invalid applications received	0
Invalid applications that subsequently became valid applications	0

TABLE D: CONCLUSIVE PRESUMPTION OF OVERRIDING PUBLIC INTEREST AGAINST DISCLOSURE: MATTERS LISTED IN SCHEDULE 1 OF THE ACT

	Number of times consideration used
Overriding secrecy laws	0
Cabinet information	0
Executive Council information	0
Contempt	0
Legal professional privilege	1
Excluded information	0
Documents affecting law enforcement and public safety	0
Transport safety	0
Adoption	0
Care and protection of children	0
Ministerial code of conduct	0
Aboriginal and environmental heritage	0

TABLE E: OTHER PUBLIC INTEREST CONSIDERATIONS AGAINST DISCLOSURE: MATTERS LISTED IN TABLE TO SECTION 14 OF THE ACT

	Number of occasions when application not successful
Responsible and effective government	0
Law enforcement and security	0
Individual rights, judicial processes and natural justice	2
Business interests of agencies and other persons	1
Environment, culture, economy and general matters	0
Secrecy provisions	0
Exempt documents under interstate freedom of information	0

TABLE F: TIMELINESS

	Number of applications
Decided within the statutory timeframe (20 days plus any extensions)	6
Decided after 35 days (by agreement with applicant)	2
Not decided within time (deemed refusal)	0

TABLE G: NUMBER OF APPLICATIONS REVIEWED UNDER PART 5 OF THE ACT (BY TYPE OF REVIEW AND OUTCOME)

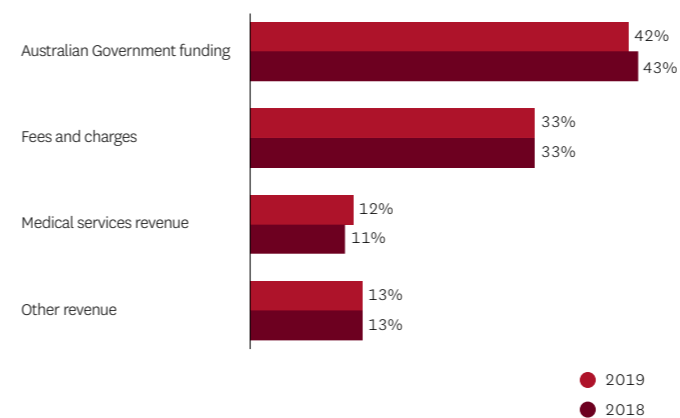
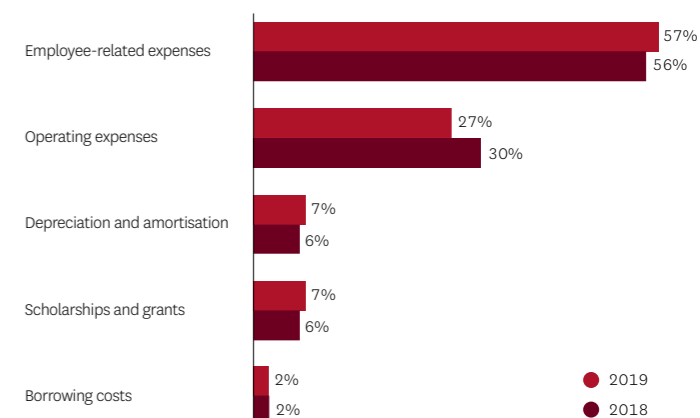
	Total
Internal review	0
Review by the Information Commissioner	0
Internal review following recommendation under Section 93 of the Act	0
Review by the Administrative Decisions Tribunal	0

TABLE H: APPLICATIONS FOR REVIEW UNDER PART 5 OF THE ACT (BY TYPE OF APPLICANT)

	Number of applications for review
Applications by access applicants	0
Applications by persons to whom information the subject of access application relates (see Section 54 of the Act)	0

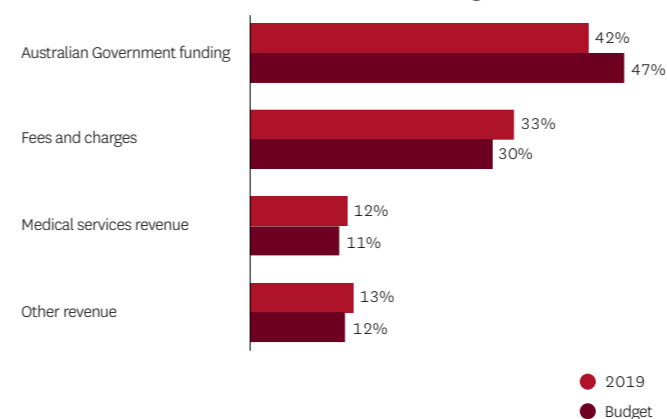
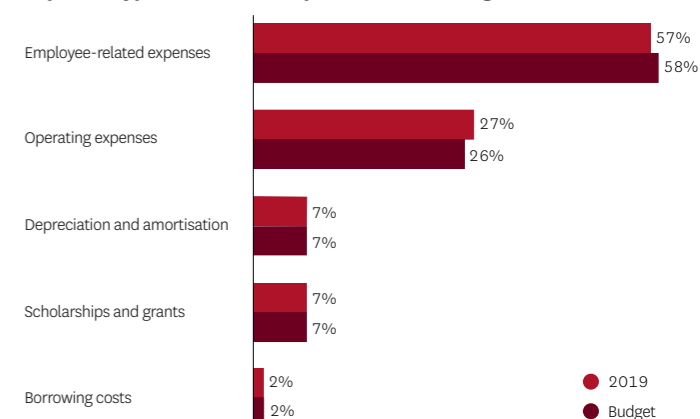
FINANCIAL PERFORMANCE

Statements in this section are unaudited.

Revenue source as % of total income: 2019 v 2018**Expenses type as % of total expenses: 2019 v 2018**

Total income from continuing operations grew by 4.5 per cent to \$1,179 million, driven by slightly higher international teaching revenue and growth in research activity. Major income streams remain stable year-on-year.

Expenses totalled \$1,188 million, an increase of 6.2 per cent. Growth was driven by employment-related costs and by depreciation and amortisation, reflecting the significant investment in the University's physical and digital assets in recent years.

Revenue source as % of total income: 2019 v budget**Expenses type as % of total expenses: 2019 v budget**

The Group assesses performance against detailed budgets, which are formally approved by Council. Performance against targets is reviewed by senior management each month.

Results for 2019 are close to Budget, as evidenced in the above graphs.

SUBSIDIARIES

The following five subsidiaries were trading in 2019.

ACCESS MACQUARIE LTD

Access Macquarie Ltd (AccessMQ) is a not-for-profit public company limited by guarantee and wholly owned by Macquarie University. AccessMQ manages consulting projects for the University, providing a vital link between academics and industry.

MGSM LTD

MGSM Ltd (MGSM) is a not-for-profit public company limited by guarantee and wholly owned by Macquarie University. The principle activity of MGSM Ltd is to operate the hotel and conference centre facilities that support the mission of Macquarie University.

MQ HEALTH PTY LTD

MQ Health Pty Ltd is a not-for-profit company limited by shares and wholly owned by Macquarie University. The objectives of MQ Health Pty Ltd are to provide clinical services that are patient-centred, high quality, evidence-based, and efficient. MQ Health provides clinical placements for medical and allied health students, as well as junior doctors undergoing their postgraduate clinical training. It supports medical research in conjunction with Macquarie University and other high-quality affiliated medical and research institutions.

MACQUARIE UNIVERSITY HONG KONG FOUNDATION LTD

Macquarie University Hong Kong Foundation Ltd is a not-for-profit public company limited by guarantee and wholly owned by Macquarie University. The principal activities of the Macquarie University Hong Kong Foundation are to advance, promote and develop higher education. It focuses on the advancement of education and exchange of knowledge between Macquarie University, Hong Kong and China, providing mobility scholarships and support for students, researchers and academics.

U@MQ LTD

U@MQ is a not-for-profit public company limited by guarantee and wholly owned by Macquarie University. The objective of U@MQ is to provide facilities for the members of the University community, including staff and students, which complement and support the academic activities of the University. Services include sporting and recreational facilities, food, beverage and retail services, and the provision of childcare.

Financial statements

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Statement of appointed officers

In accordance with a resolution of the Council of Macquarie University, pursuant to Section 41C (1B) and (1C) of the *Public Finance and Audit Act 1983*, we state that to the best of our knowledge and belief:

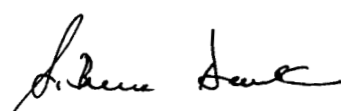
- The financial statements present a true and fair view of the University and Consolidated Entity's financial position at 31 December 2019 and the results of its operations and transactions for the year then ended.
- The financial statements have been prepared in accordance with the provisions of the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulation 2015* and the Financial Statement Guidelines for Australian Higher Education Providers for the 2019 Reporting Period issued by the Australian Government (Department of Education).
- The financial statements have been prepared in accordance with Australian Accounting Standards, which include Australian Accounting Interpretations.

We are not aware of any circumstances which would render any particulars included in the financial statements to be misleading or inaccurate.

To the best of our knowledge and belief, the amount of Australian government financial assistance expended during the reporting period was for the purposes for which it was intended and Macquarie University has complied with applicable legislation, contracts, agreements and programme guidelines in making expenditure.

The University charged Student Services and Amenities Fees strictly in accordance with the *Higher Education Support Act 2003* and the Administration Guidelines made under the Act. Revenue from the fee was spent strictly in accordance with the Act and only on services and amenities specified in subsection 19-38(4) of the Act.

There are reasonable grounds to believe that the University will be able to pay its debts as and when they fall due.



Professor S Bruce Downton
Vice-Chancellor and President



Dr Martin Parkinson AC PSM
Chancellor

Sydney

2 April 2020

Income statement

Note	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Income from continuing operations				
Australian Government financial assistance				
Australian Government grants	2	286,810	287,114	277,719
Higher Education Loan Programs	2	205,709	197,451	205,709
State and local government financial assistance	3	6,268	5,721	6,268
HECS-HELP - Student payments		18,405	18,016	18,405
Fees and charges	4	375,650	356,398	374,930
Net investment revenue	5	27,368	20,370	27,253
Consultancy and contracts	6	43,272	40,481	41,271
Medical services revenue		134,790	118,990	2,473
Other revenue	7	80,368	83,718	70,861
Total income from continuing operations		1,178,640	1,128,259	1,024,889
Expenses from continuing operations				
Employee related expenses	9	670,831	629,778	579,856
Depreciation and amortisation	10	86,329	68,606	85,339
Repairs and maintenance		18,642	18,019	17,569
Borrowing costs	11	25,677	20,587	26,134
Impairment of assets	14(a)	1,807	2,826	1,411
Losses on disposal of assets		63	68	49
Consultants and contractors		40,926	40,286	39,346
Scholarships and grants		84,706	78,961	84,601
Medical consumables		61,440	61,657	581
Other expenses	12	197,173	197,731	188,591
Total expenses from continuing operations		1,187,594	1,118,519	1,023,477
Net result for the period		(8,954)	9,740	1,412
Net result attributable to members of Macquarie University		(8,954)	9,740	1,412

The above Income Statement should be read in conjunction with the accompanying notes.

Statement of comprehensive income

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Net result for the period		(8,954)	9,740	1,412	53,451
Items that will not be reclassified to profit or loss					
Unrealised gain on revaluation of property, plant and equipment	19	77,155	71,407	77,155	71,407
Net Actuarial gains / (losses) recognised in respect of Defined Benefits Plans	34(g)	862	(977)	862	(977)
Total items that will not be reclassified to income statement		78,017	70,430	78,017	70,430
Total other comprehensive income		78,017	70,430	78,017	70,430
Total comprehensive income attributable to members of Macquarie University		69,063	80,170	79,429	123,881

The above Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

Statement of financial position

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
ASSETS					
Current assets					
Cash and cash equivalents	13	188,586	183,300	165,367	167,165
Receivables	14	82,950	84,519	69,727	64,902
Inventories	15	5,251	5,063	329	316
Other financial assets	16	244,732	196,720	244,732	196,720
Other non-financial assets	18	28,906	22,478	28,234	21,231
Total current assets		550,425	492,080	508,389	450,334
Non-current assets					
Receivables	14	529,180	514,815	529,180	514,815
Other financial assets	16	50,604	34,404	50,604	34,404
Other non-financial assets	18	13,325	18,174	13,325	18,089
Investments in controlled entities	17	-	-	98,799	98,799
Property, plant and equipment	19	2,673,972	2,437,072	2,672,852	2,435,344
Right-of-use assets	20	39,242	-	37,857	-
Intangible assets	21	80,944	60,099	80,924	59,761
Total non-current assets		3,387,267	3,064,564	3,483,541	3,161,212
Total assets		3,937,692	3,556,644	3,991,930	3,611,546
LIABILITIES					
Current liabilities					
Trade and other payables	22	100,894	100,311	77,637	79,295
Borrowings	23	250,371	1,729	264,321	25,634
Provisions	24	128,335	117,040	120,247	109,635
Other liabilities	25	71,490	67,763	66,810	65,475
Lease liabilities as a lessee	20	9,022	-	8,448	-
Total current liabilities		560,112	286,843	537,463	280,039
Non-current liabilities					
Borrowings	23	495,708	497,944	495,708	497,844
Provisions	24	541,264	516,281	538,429	513,475
Other liabilities	25	149	11,066	-	11,066
Lease liabilities as a lessee	20	31,583	-	30,742	-
Total non-current liabilities		1,068,704	1,025,291	1,064,879	1,022,385
Total liabilities		1,628,816	1,312,134	1,602,342	1,302,424
Net assets		2,308,876	2,244,510	2,389,588	2,309,122
EQUITY					
Parent entity interest					
Asset revaluation reserve		1,013,283	936,128	1,013,283	936,128
Retained earnings		1,295,593	1,308,382	1,376,305	1,372,994
Parent interest		2,308,876	2,244,510	2,389,588	2,309,122
Total equity		2,308,876	2,244,510	2,389,588	2,309,122

The above Statement of Financial Position should be read in conjunction with the accompanying notes.

Statement of changes in equity

	Consolidated				Parent			
	Asset revaluation reserve \$'000	Available-for-sale investment reserve \$'000	Retained earnings \$'000	Total \$'000	Asset revaluation reserve \$'000	Available-for-sale investment reserve \$'000	Retained earnings \$'000	Total \$'000
Balance as at 1 January 2018	864,981	25,983	1,273,376	2,164,340	864,721	25,983	1,294,537	2,185,241
Effect of adoption of new accounting standard (AASB 9)	-	(25,983)	25,983	-	-	(25,983)	25,983	-
Balance as at 1 January 2018 restated	864,981	-	1,299,359	2,164,340	864,721	-	1,320,520	2,185,241
Net result for the period	-	-	9,740	9,740	-	-	53,451	53,451
Unrealised gain on revaluation of property, plant and equipment	71,407	-	-	71,407	71,407	-	-	71,407
Transfer from revaluation reserve to retained earnings for asset disposals	(260)	-	260	-	-	-	-	-
Net actuarial losses on defined benefit plans	-	-	(977)	(977)	-	-	(977)	(977)
Total comprehensive income	71,147	-	9,023	80,170	71,407	-	52,474	123,881
Balance at 31 December 2018	936,128	-	1,308,382	2,244,510	936,128	-	1,372,994	2,309,122
Balance at 1 January 2019	936,128	-	1,308,382	2,244,510	936,128	-	1,372,994	2,309,122
Effect of adoption of new accounting standard (AASB 15)	-	-	(12,702)	(12,702)	-	-	(6,968)	(6,968)
Effect of adoption of new accounting standard (AASB 16)	-	-	8,005	8,005	-	-	8,005	8,005
Balance as 1 January 2019 Restated	936,128	-	1,303,685	2,239,813	936,128	-	1,374,031	2,310,159
Net result for the period	-	-	(8,954)	(8,954)	-	-	1,412	1,412
Unrealised gain on revaluation of property, plant and equipment	77,155	-	-	77,155	77,155	-	-	77,155
Net actuarial losses on defined benefit plans	-	-	862	862	-	-	862	862
Total comprehensive income	77,155	-	(8,092)	69,063	77,155	-	2,274	79,429
Balance at 31 December 2019	1,013,283	-	1,295,593	2,308,876	1,013,283	-	1,376,305	2,389,588

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Statement of cash flows

		Consolidated		Parent	
	Note	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Cash flows from operating activities					
Australian Government Grants	35(a)(b)(c)(e)(f)	491,320	485,644	482,229	473,436
OS-HELP (net)	35(g)	2	113	2	113
Superannuation supplementation receipts	35(h)	28,336	26,246	28,336	26,246
State and local Government Grants	3	6,268	5,721	6,268	5,721
HECS-HELP - Student payments		18,405	18,016	18,405	18,016
Receipts from student fees and other customers (inclusive of GST)		546,519	540,628	387,020	399,036
Dividends received		1,958	6,203	1,958	6,203
Interest received		8,183	8,275	8,068	8,117
Payments to suppliers and employees (inclusive of GST)		(1,027,996)	(991,067)	(856,493)	(803,334)
Superannuation supplementation payments	35(h)	(28,336)	(26,246)	(28,336)	(26,246)
Interest and other cost of finance		(27,660)	(18,579)	(28,158)	(19,399)
GST recovered		33,312	26,988	29,397	24,242
Net cash provided by operating activities	31	50,311	81,942	48,696	112,151
Cash flows from investing activities					
Proceeds from sale of property, plant and equipment		141	122	155	164
Payments for property, plant and equipment		(207,081)	(143,767)	(207,340)	(143,708)
Payments for intangible assets		(30,010)	(26,365)	(30,316)	(26,365)
Proceeds from sale of financial assets		307,077	65,070	307,077	64,964
Payments for financial assets		(352,732)	(228,625)	(352,732)	(228,625)
Funds loaned to (repaid by) parent to related parties		-	-	-	(4,000)
Distributions from/ (contributions to) related parties		-	-	(4,703)	(22,494)
Net cash (used in) investing activities		(282,605)	(333,565)	(287,859)	(360,064)
Cash flows from financing activities					
Net proceeds from borrowings		247,926	247,981	247,926	247,981
Repayment of borrowings		(1,576)	(1,467)	(1,576)	(1,467)
Repayment of finance leases		(245)	(140)	-	-
Funds received from (repaid to) related parties to parent Central Treasury Agreement		-	-	(1,100)	(260)
Repayment of lease liabilities		(8,525)	-	(7,885)	-
Net cash from/ (used in) financing activities		237,580	246,374	237,365	246,254
(Decrease) in cash and cash equivalents held		5,286	(5,249)	(1,798)	(1,659)
Cash and cash equivalents at beginning of the financial year		183,300	188,549	167,165	168,824
Cash and cash equivalents at end of financial year		188,586	183,300	165,367	167,165
Financing arrangements	13 23(d)				

The above Statement of Cash Flows should be read in conjunction with the accompanying notes.

Notes to the financial statements

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1 Summary of Significant Accounting Policies

The principal accounting policies adopted in the preparation of the financial statements are set out below and where applicable, throughout the notes to the accounts (these can be identified as italicised text). These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements include separate financial statements for Macquarie University as a parent entity and the consolidated entity consisting of Macquarie University and its controlled entities (the 'Group').

The financial statements for the year ended 31 December 2019 were authorised for issue by the Macquarie University Council on 2nd April 2020.

(a) Basis of Preparation

The financial statements are general purpose financial statements which have been prepared on an accrual basis in accordance with Australian Accounting Standards and Interpretations, the *Public Finance and Audit Act 1983*, the *Public Finance and Audit Regulations 2015*, the *Higher Education Support Act 2003* and the Financial Statement Guidelines for Australian Higher Education Providers, as issued by the Australian Government (Department of Education).

Macquarie University applies Tier 1 reporting requirements.

Macquarie University is a not-for-profit entity and these statements have been prepared on that basis. Some of the Australian Accounting Standards requirements for not-for-profit entities are inconsistent with the IFRS requirements.

The financial statements are presented in Australian dollars, which is Macquarie University's functional currency, and all values are rounded to the nearest thousand dollars (\$'000).

(i) Historical cost convention

These financial statements have been prepared under the historical cost convention, as modified by the revaluation of certain financial assets and liabilities and certain classes of property, plant and equipment.

(ii) Critical accounting estimates

The preparation of these financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying Macquarie University's accounting policies. All significant estimates or assumptions made in the preparation of the financial statements are described in the accounting policy notes.

(iii) Comparative amounts

Where necessary, comparative information is reclassified to enhance comparability in respect of changes in presentation adopted in the current year.

(iv) Foreign currency transactions and balances

Foreign currency transactions are translated into Australian dollars at rates of exchange prevailing at the dates of the transactions. Foreign currency cash balances, as well as amounts receivable and amounts payable in foreign currency at the reporting date or at settlement date, are translated at the rates prevailing on that date, with exchange differences brought to account as exchange gains or losses in the Income Statement.

(b) Basis of consolidation

The consolidated financial statements represent the financial statements of the parent entity, being Macquarie University and the assets, liabilities and results of all entities it controlled in accordance with AASB 10 *Consolidated Financial Statements* at the end of or during the financial year. Control is established when the parent is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the relevant activities of the entity.

Transactions, balances and unrealised gains on transactions between Group entities are eliminated. Where necessary, accounting policies of controlled entities have been changed to ensure consistency with the policies adopted by the Group.

A list of controlled entities is contained in note 27(b) to the financial statements.

(c) Income Tax Exemption

Macquarie University and its controlled entities have received an endorsement by the Australian Taxation Office to access the income tax exemption from 1st July 2000 under the Income Tax Assessment Act 1997, with the exception of Macquarie University Property Investment Company, which did not have an income tax charge or payment in 2019 (2018: Nil).

1 Summary of Significant Accounting Policies (continued)

(d) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of goods and services tax (GST), except where the GST incurred is not recoverable from the Australian Taxation Office (ATO). In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the Statement of Financial Position.

Cash flows are included in the Statement of Cash Flows on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the ATO are classified as operating cash flows.

(e) New Accounting Standards and Interpretations - overview

Effective for the first time

Certain new Accounting Standards and Interpretations became mandatory for the 31 December 2019 reporting period. Macquarie University has adopted AASB 16 *Leases* and partially adopted AASB 15 *Revenue from Contracts* and AASB 1058 *Income of Not-for-profit entities*. Macquarie University has elected to defer the application of AASB 15 *Revenue from Contracts with Customers* and AASB 1058 *Income of Not-for-profit entities* (the 'Revenue Standards') to research grant revenue until 1 January 2020 as permitted by AASB 2019-6 *Amendments to Australian Accounting Standards-Research Grants and Not-for-profit entities*.

Refer to note 1(f) for disclosure of the impacts of the Revenue Standards for non-research revenue and income and AASB 16.

Issued but not yet effective

Certain new Accounting Standards and Interpretations have been published that may be applicable to the Group but are not mandatory for the 31 December 2019 reporting period.

With the exception of the Revenue Standards described below, the University estimates that the adoption of these pronouncements when effective will have no material financial impact on future reporting periods.

Revenue Standards - Research Grant Revenue

The University has assessed that the majority of research grants will shift from recognising revenue when the University obtains control of the right to receive the grant to recognising revenue over time, in line with the completion of the contractually identified performance obligations.

The University will apply the Revenue Standards for research grant revenue on a modified retrospective basis. Under this approach, on the date of initial application being 1 January 2020, certain retained earnings balances will be relocated on the Statement of Financial Position and shown as unearned revenue. This balance represents research grant revenue received and recognised in the Income Statement under current accounting policies up to 31 December 2019, but the University has not satisfied the performance obligations under the new Revenue Standards.

This balance will be released to the Income Statement as the University delivers on the contractual performance obligations. The phased release of the 1 January 2020 opening unearned revenue adjustment is considered likely to largely offset the delay in revenue recognition for new research grant revenue in 2020. The University does not expect the Income Statement in 2020 to be materially impacted by the application of the revenue standards to research grant revenue.

Standard or interpretation	Application date
AASB 1059-Service Concession Arrangements: Grantors	1 Jan 2020
Amendments to Australian Accounting Standards – Definition of a Business	1 Jan 2020
Amendments to Australian Accounting Standards – Definition of material	1 Jan 2020
Amendments to Australian Accounting Standards – References to the Conceptual framework	1 Jan 2020
Sale or Contribution of Assets between an Investor and its Associate or Joint Venture (Amendments to AASB 10 and AASB 128)	1 Jan 2020

1 Summary of Significant Accounting Policies (continued)

(f) Impact of implementation of new accounting standards

The Group adopted AASB 16 Leases and partially adopted the Revenue Standards. The nature and effect of the changes as a result of the adoption of these standards are described below.

Set out below are the amounts by which each financial statement line item is affected as at 1 January 2019 as a result of the adoption of above noted accounting standards. The adoption of these standards did not have a material impact on Other Comprehensive Income or the Group's operating, investing and financing cash flows at that date.

	Ref	Consolidated			Parent		
		Balance as at 1 January 2019	Adjustment	Restated as at 1 January 2019	Balance as at 1 January 2019	Adjustment	Restated as at 1 January 2019
		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
ASSETS							
Right-of-use asset	iii	-	45,984	45,984	-	43,970	43,970
Lease Incentive Assets	iii	3,500	(3,500)	-	3,500	(3,500)	-
Total Assets		3,500	42,484	45,984	3,500	40,470	43,970
Liabilities							
Unearned Revenue Student fees	i	55,576	4,552	60,128	55,576	4,552	60,128
Unearned Revenue Other		6,771	5,734	12,505	4,483	-	4,483
Financial liabilities	ii	-	2,416	2,416	-	2,416	2,416
Lease Incentive Liability	iii	11,500	(11,500)	-	11,500	(11,500)	-
Lease liability	iii	-	45,984	45,984	-	43,970	43,970
Total Liabilities		73,847	47,186	121,033	71,559	39,438	110,997
Total adjustments to Equity							
Retained earnings	i - iii	1,308,382	(4,697)	1,303,685	1,372,994	1,037	1,374,031

The nature of the adjustments as at 1 January 2019 and the reasons for the significant changes in the Statement of Financial Position on transition are listed below; the italicised roman numeral notes cross refer to the roman numeral references in the table above.

The Revenue Standards

The Group has assessed how each financial statement line item is affected as at and for the year ended 31 December 2019 as a result of the adoption of AASB 15 and AASB 1058 (excluding research grants, as noted in Note 1(e)). Based on this assessment the adoption of the Revenue Standards did not have a material impact on Other Comprehensive Income or the Group's operating, investing and financing cash flows.

The Group adopted these Revenue Standards from 1 January 2019, using the modified retrospective method of transition. The Group recognised the cumulative effect of applying the Revenue Standards as an adjustment to opening retained earnings of \$12.7m as at 1 January 2019. Consequently, the comparative information presented has not been restated.

The new accounting policies for revenue and income in accordance with the Revenue Standards are provided in notes 2 to 7.

i) Revenue from Contracts with Customers

Commonwealth Grants

The University received funds from the Commonwealth Grants Scheme (CGS) to deliver tuition services to Commonwealth Supported students. The revenue recognition requirement in 2018 was to recognise these funds on receipt of cash. At date of initial application, a portion of the funding received in 2018 related to courses to be completed in 2019 which resulted in the University recognising unearned revenue of \$4.6m. This unearned revenue was released to the Income Statement as the tuition services were delivered.

1 Summary of Significant Accounting Policies (continued)

Controlled Entities

Management assessed the revenue streams of controlled entities and concluded that a majority of the revenue streams are recognised as the entity satisfies the performance obligation of either delivering services (e.g. childcare facilities) or providing goods (e.g. food and retail sales). For these revenue streams there is usually a non-material period between cash received from the customer and satisfaction of performance obligations.

Access Macquarie Ltd received grant funding for the provision of mental health services. As at the date of initial application, there were unspent funds relating to this grant funding of \$5.7m, comprising of cash received in advance of \$2.8m and performance obligations not satisfied of \$2.9m.

The aggregate of the above results in unearned revenue of \$10.3m, recognised as at the date of initial application for the Group.

ii) Financial Liabilities

The University ceased recognising funds received where the University has a contractual obligation to transfer these funds to an identified third party in accordance with AASB 9 *Financial Instruments*.

From 1 January 2019, these funds are recognised entirely on the Statement of Financial Position as a financial liability and are derecognised as the funds are remitted to the third party.

Two types of contracts identified as impacted are set out below:

Research Funding due to research partners

The University received cash from funding bodies in which there is a contractual obligation to transfer the funds to a collaborating research organisation. There can be a timing difference between the receipt of funds by the University and the on-payment to the collaborating research organisation. As at 1 January 2019, the University assessed \$1.6m of funds that had been received and had not yet been on-paid to a collaborating research organisation.

Scholarships

The University received funds from funding bodies in which there is a contractual obligation to transfer the funds to a student in the form of a cash scholarship or stipend. As at 1 January 2019, \$0.8m of funds had been received for this purpose, but yet to be fully paid to the recipient.

The aggregate of the above results in a financial liability of \$2.4m recognised as at the date of initial application for the Parent entity and the Group.

AASB 16 Leases

The Group adopted AASB 16 using the modified retrospective method of transition, with the date of the initial application of 1 January 2019. The Group recognised the cumulative effect of applying AASB 16 as an adjustment to opening retained earnings of \$8m as at 1 January 2019 and the comparative information presented has not been restated. This balance relates to derecognition of lease assets of \$3.5m and lease liabilities of \$11.5m with respect to lease incentives received for leased property. Further the Group recognised a right of use asset and lease liability of \$45.9m for leases existing as at 1 January 2019.

The italicised roman numeral note (iii) cross refers to the roman numeral reference in the table on page 9.

iii) Leases

Leases previously classified as operating leases under AASB 117

On transition to AASB 16, the Group recognised lease liabilities for leases previously classified as operating leases by discounting the remaining lease payments using the incremental borrowing rate as at the date of initial application, i.e. 1 January 2019. The right-of-use assets were recognised at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the Statement of Financial Position immediately before the date of initial application.

1 Summary of Significant Accounting Policies (continued)

The University has applied the following practical expedients in transitioning existing operating leases:

- (a) Grandfathered the assessment of which transactions are leases on the date of transition;
- (b) Applied a single discount rate to a portfolio of leases with reasonably similar characteristics (such as leases with a similar remaining lease term for a similar class of underlying asset in a similar economic environment);
- (c) Applied the exemption not to recognise right-of-use assets and lease liabilities where the remaining leases term is 12 months or less from the date of initial application;
- (d) Applied the exemption not to recognise right-of-use assets and lease liabilities where the remaining lease term is 12 months or less from the date of initial application;
- (e) Relied on its assessment of whether leases are onerous applying AASB 137 immediately before the date of initial application, as an alternative to undertaking an impairment review;
- (f) Used hindsight in determining the lease term where the contract contains options to extend or terminate the lease;
- (g) Excluded initial direct costs from the measurement of right-of-use asset at the date of initial application;
- (h) Elected to account for concessionary (below-market) leases at cost. No adjustment has arisen on transition for these lease types;

The Group has recognised \$42.5m of right of use assets and lease liabilities for property and a further \$3.4m for equipment.

The aggregate of the above results in both a lease liability and a right of use asset of \$45.9m recognised as at the date of initial application for the Group.

The new accounting policies for leases where the University is a lessee are provided in note 20.

Leases previously classified as finance leases under AASB 117 Leases

On the date of initial application, right-of-use assets and lease liabilities were recognised for leases previously classified as finance leases at the same carrying amounts of the leased assets and finance lease liabilities recognised in accordance with AASB 117 immediately before the date of initial application.

The new accounting policies for leases where the University is a lessee to a finance lease are provided in note 14 and 20.

The Group as a lessor

The Group is not required to make any adjustments on transition to AASB 16 where it is a lessor.

Reconciliation of previously reported operating lease commitments under AASB 117 and lease liabilities under AASB 16

	Consolidated	Parent
	1 January 2019	
	\$'000	\$'000
Operating lease commitments as lessee disclosed at 31 December 2018	55,056	53,098
Add: Arrangements that have been assessed to contain a lease as at 1 January 2019	3,160	3,160
(Less): Effect of discounting using the University's weighted average incremental borrowing rate of 2.45% to 3.06%	(4,892)	(4,736)
Add: Finance lease liabilities recognised as at 31 December 2018	245	-
(Less): Low value leases recognised on a straight-line basis as an expense	(7,585)	(7,552)
Lease liability recognised as at 1 January 2019	45,984	43,970

2 Australian Government financial assistance

		Consolidated		Parent	
	Note	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Commonwealth Grants Scheme (CGS) and Other Education Grants	35(a)	182,336	180,360	182,336	180,360
Research Training Plan	35(c)	28,464	27,889	28,464	27,889
Research Support Plan	35(c)	15,795	16,026	15,795	16,026
Other Capital Funding	35(e)	460	645	460	645
Australian Research Council	35(f)	17,664	16,933	17,664	16,933
Total CGS, Scholarship and Research Grants		244,719	241,853	244,719	241,853
Other Australian Government financial assistance		42,091	45,261	33,000	34,237
Total Australian Government Grants		286,810	287,114	277,719	276,090
Higher Education Loan Programs	35(b)	205,709	197,451	205,709	197,451
Total Australian Government financial assistance		492,519	484,565	483,428	473,541

The following policy is applicable for notes 2 to 4 and 6 to 7.

Accounting Policy

AASB 15 Revenue from Contracts with Customers

In assessing the revenue recognition requirements, the Group will firstly determine whether an enforceable agreement exists and whether the promise to transfer goods and services to the customer are sufficiently specific. If these conditions are met the Group will apply the principles of AASB 15 to determine the appropriate revenue recognition. Should these conditions not be met the transaction will not be in scope of AASB 15 and the Group will apply AASB 1058 and/or other accounting standards for other related amounts.

The Group will consider the terms of the contract and funding agreements to determine the consideration the Group is expected to receive; this amount is then allocated to the identified performance obligation(s).

At contract inception, the Group will determine whether it satisfies the performance obligations over time or at a point in time. Typically, performance obligations are satisfied over time for services when the customer receives and consumes the benefits of the services.

For revenue assessed to be recognised over time, the Group has determined the input method as an appropriate method of measuring progress towards satisfaction of the performance obligations. These input methods are further described below for each major revenue stream of the Group.

If a performance obligation is not satisfied over time, it is deemed to be satisfied at a point in time. The Group determines the point in time by reference to when control of the good/service has been transferred to the customer. Examples of indicators of transfer of control include; a present right to payment, delivery of goods and/or when the customer has accepted the good/service. At contract inception the Group will allocate the total consideration to the performance obligations and will recognise the revenue when the control has been transferred to the customer.

AASB 1058 Income from not-for-profit entities

For contracts and agreements assessed as in scope of AASB 1058, the Group will recognise income when the funds are received.

For grants received to enable the Group to acquire or construct a specified non-financial asset to be controlled by the Group, a liability will be recognised for the grants received and revenue will be recognised as or when the Group acquires or constructs the asset under the terms of the grant.

2 Australian Government financial assistance (continued)

Set out below is the application of the Revenue Standards for major revenue streams across the Group

Commonwealth Grants Scheme and Other Education Grants including Higher Education Loan Programs (HELP)

The University has determined that these grants and programs are in scope of AASB 15 as an enforceable agreement exists with sufficiently specific performance obligations regarding the provision of tuition services.

Revenue is recognised over time in line with the calendar days over a teaching period. For funds received during the year pertaining to tuition services not delivered at the end of the reporting period, the University recognises unearned revenue, which are disclosed in note 25.

Research Training and Support Plan

These grants do not contain sufficiently specific performance obligations, therefore these grants are recognised under AASB 1058 and income is recognised at the time the University receives the grant.

Research Revenue

The Group has elected to defer the application of the Revenue Standards to research grants until 1 January 2020.

The Group recognises contributions and grants received for research purposes at the time the University receives the grant.

Medical Services Revenue

Medical services revenue as represented on the face of the Income Statement is recognised at a point of time when medical services have been provided to the patient. Other services ancillary to the provision of medical services are recognised at a point in time and are based on the price specific in contracts and at point of sale, net of discounts and returns at time of sale.

3 State and local government financial assistance

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Non-capital state and local government assistance	6,268	5,721	6,268	5,721
Total State and Local Government financial assistance	6,268	5,721	6,268	5,721

4 Fees and charges

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Course Fees and Charges				
Fee-paying onshore overseas students	315,994	305,280	315,994	303,809
Fee-paying offshore overseas students	7,694	5,471	7,694	5,471
Continuing education	987	1,208	987	1,208
Fee-paying domestic postgraduate students	12,115	12,685	12,115	12,685
Fee-paying domestic undergraduate students	4,149	2,786	4,149	2,786
Fee-paying domestic non-award students	4,984	5,103	4,984	5,103
Other domestic course fees and charges	7,942	6,442	7,942	6,442
Total Course Fees and Charges	353,865	338,975	353,865	337,504
Other Non-Course Fees and Charges				
Parking fees	8,188	6,319	7,468	6,410
Student accommodation	1,392	1,273	1,392	1,273
Student Services and Amenities Fees from students	5,372	4,123	5,372	4,123
Service fees and other charges	6,833	5,708	6,833	5,988
Total Other Fees and Charges	21,785	17,423	21,065	17,794
Total Fees and Charges	375,650	356,398	374,930	355,298

Accounting Policy

Course Fees and Charges revenue relates to undergraduate and graduate programs, continuing education and executive programs. Revenue is recognised over time based on the number of calendar days of a teaching period for each specific course.

Non-Course Fees and Charges revenue relates to parking fees, student services and amenities fees and other services. Revenue is recognised either:

(a) Over time as and when the services are provided and consumed by the customer, or;

(b) At a point in time when control of the goods or services have been transferred to the customer.

5 Net investment revenue

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Interest income				
Cash and term deposits at amortized cost	8,183	6,497	8,068	6,339
Interest on loans to controlled entities at amortised cost	-	-	-	2,203
Total interest income	8,183	6,497	8,068	8,542
Fair value gains				
Equity instruments at fair value through the Income Statement	18,557	5,770	18,557	5,770
Dividends				
Dividends from equity instruments at fair value through the Income Statement	628	8,103	628	8,103
Total investment revenue	27,368	20,370	27,253	22,415

Accounting Policy

Interest income is recognised as it is earned, which is comparable to the effective interest method.

Dividends are recognised when

(a) the University's right to receive the payment is established, which is generally when shareholders approve the dividend; and

(b) it is probable that the economic benefits associated with the dividend will flow to the entity; and

(c) the amount of the dividend can be measured reliably.

6 Consultancy and contracts

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Consultancy	8,253	6,580	6,252	4,611
Contract research	35,019	33,901	35,019	33,716
Total consultancy and contracts	43,272	40,481	41,271	38,327

Accounting Policy

The Group has elected to defer the application of the Revenue Standards to research grants until 1 January 2020 which has an impact on contract research revenue.

Consultancy in scope of AASB 15 and assessed as revenue over time is measured using the input method of costs incurred as to most appropriately reflect the satisfaction of the underlying performance obligation i.e. the transfer of services to the customer.

For those contracts where revenue is assessed as point in time revenue recognition, revenue is recognised when the Group transfers control of the goods or services to the customer.

7 Other revenue

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Child care fees	5,815	5,531	-	-
Commission income	1,334	1,451	905	867
Donations and bequests	18,083	9,827	18,083	9,772
Distribution from Controlled Entities	-	-	12,298	30,867
Education and training revenue	-	2,896	-	-
Food sales, hotel and retail	7,304	8,493	-	-
Finance lease income	1,658	1,778	1,658	1,778
Gain on acquisition	-	5,816	-	5,816
Recoveries	2,325	3,202	5,237	8,026
Rental charges	26,686	26,647	22,791	31,115
Royalties, trademarks and licences	631	454	631	454
Scholarships and prizes	641	504	641	504
Sports and event fees	9,344	9,701	-	-
Other revenue and income	6,547	7,418	8,617	5,396
Total other revenue	80,368	83,718	70,861	94,595

Accounting Policy

(i) Other revenue and income

Other revenue and income includes donations, bequests and income from on-campus non-academic services including food, childcare, retail, hotel and sports facilities.

The Group considered the revenue recognition criteria under AASB 15 for other revenue. Generally, the revenue recognition for these revenue streams will be recognised at a point in time when the Group transfers control of the goods or services to the customer. For these revenue streams there is usually a non-material period between cash received from the customer and satisfaction of performance obligations.

Donation income is recognised upon receipt of the asset donated, to the extent that there are no specific performance obligations identified in the contract.

(ii) Rental charges

Income from leases is recognised in the Income Statement on a straight line basis over the lease term, taking into account any lease incentives provided to the lessee and minimum known rental increases over the term of the lease.

(iii) Distribution from Controlled Entities

Distributions from controlled entities to the University are recognized in the Income Statement of each entity when the right to receive the dividend or distribution by the University is established.

(iv) Finance lease income

Finance lease income is recognised in the Income Statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the receivable for each period.

8 Disaggregation of revenue

Disaggregation

Set out below is the disaggregation of the Group's revenue based on AASB 15 Revenue from Contracts to customers and AASB 1058 Income from not-for-profit entities. The basis of disaggregation is based on the different activities performed by the Group.

The table also includes research income recognised under AASB 1004 Contributions, investment income recognised under AASB 9 Financial Instruments and lease income recognised under AASB 16 Leases.

	Consolidated			Parent		
	2019 \$'000	2019 \$'000	2019 \$'000	2019 \$'000	2019 \$'000	2019 \$'000
	Note	Teaching	Research	Other	Total	Total
Commonwealth Grants Scheme (CGS) and Other Education Grants	2	182,336	-	-	182,336	182,336
Research Training Plan	2	-	28,464	-	28,464	28,464
Research Support Plan	2	-	15,795	-	15,795	15,795
Other Capital Funding	2	-	460	-	460	460
Australian Research Council	2	-	17,664	-	17,664	17,664
Other Australian Government financial assistance	2	-	42,091	-	42,091	42,091
Higher Education Loan Programs	2	205,709	-	-	205,709	205,709
Non-capital state and local government assistance	3	-	6,268	-	6,268	6,268
HECS-HELP	4	18,405	-	-	18,405	18,405
Fees and Charges	4	353,865	-	21,785	375,650	374,930
Net investment revenue	5	-	-	27,368	27,368	27,253
Consultancy and contracts	6	-	35,019	8,253	43,272	41,271
Medical services revenue	6	-	-	134,790	134,790	2,473
Other revenue	7	-	-	80,368	80,368	70,861
Total income from continuing operations		760,315	145,761	272,564	1,178,640	1,024,889

9 Employee related expenses

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Academic				
Salaries	245,941	231,054	245,941	231,054
Contributions to superannuation and pension schemes				
Contribution to funded schemes ¹	33,755	32,246	33,755	32,246
Contribution to unfunded schemes ²	427	502	427	502
Payroll tax	19,941	14,529	19,941	14,529
Workers' compensation	568	436	568	436
Long service leave expense	8,835	5,310	8,835	5,310
Annual leave expense	1,151	820	1,151	820
Total academic	310,618	284,897	310,618	284,897
Non-academic				
Salaries	292,484	287,045	210,611	199,372
Contributions to superannuation and pension schemes				
Contribution to funded schemes ¹	37,894	37,601	30,803	29,491
Contribution to unfunded schemes ²	410	467	410	467
Payroll tax	17,838	14,125	17,360	12,612
Workers' compensation	916	872	488	385
Long service leave expense	5,908	3,188	5,396	3,150
Annual leave expense	2,006	1,176	1,413	1,062
Total non-academic	357,456	344,474	266,481	246,539
Total employee related expenses	668,074	629,371	577,099	531,436
Deferred superannuation expense	2,757	407	2,757	407
Total employee related expenses, including deferred employee benefits for superannuation	670,831	629,778	579,856	531,843

Refer to note 24 for policies on employee benefits.

¹ Funded schemes include UniSuper and Self-Managed Super Funds.

² Unfunded schemes include the State Authorities Superannuation Scheme (SASS), State Authorities Non-contributory Superannuation Scheme (SANCS) and State Superannuation Scheme (SSS). Cash payments to these schemes relating to employer contributions for current employees are shown in this note.

Reimbursement arrangements relating to SASS, SANCS and SSS from the Commonwealth and State Government under the Higher Education Superannuation Program (HESP) are explained in note 34(a) and quantified in note 34(f). In accordance with Department of Education and Training Guidelines, these cash payments are not included in income or expenses.

10 Depreciation and amortisation

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Depreciation					
Buildings		34,313	30,757	34,313	30,757
Plant and equipment ¹		22,778	21,514	22,429	20,712
Infrastructure		4,784	5,360	4,784	5,360
Library Collection - General		1,734	1,747	1,734	1,747
Leasehold improvements		3,270	648	3,270	648
Total depreciation	19	66,879	60,026	66,530	59,224
Amortisation					
Patents and trademarks		31	31	31	31
IT software		6,532	5,098	6,520	4,700
Digital library collections		4,316	3,451	4,316	3,451
Total intangible amortisation	21	10,879	8,580	10,867	8,182
Buildings		7,321	-	6,853	-
Computer equipment		1,250	-	1,089	-
Total right of use assets amortisation	20	8,571	-	7,942	-
Total depreciation and amortisation		86,329	68,606	85,339	67,406

Refer to note 19 for policies on depreciation and note 20 and 21 for policies on amortisation.

¹ Includes motor vehicles

11 Borrowing costs

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Interest expense on lease liabilities	1,317	-	1,276	-
Interest and other costs on University-issued bonds	27,286	20,129	27,286	20,129
Bank Facility and other costs	1,313	1,388	1,811	2,208
Borrowing costs	29,916	21,517	30,373	22,337
Less: Amount Capitalised	(4,239)	(930)	(4,239)	(930)
Total Borrowing costs expensed	25,677	20,587	26,134	21,407

Accounting Policy

Borrowing costs are recognised as expenses in the period in which they are incurred (except where they are included in the costs of qualifying assets, in which case the borrowing costs directly attributable to the acquisition, construction or production of the asset is capitalised as part of the cost of that asset).

12 Other expenses

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Advertising, marketing and promotions	12,650	13,540	12,034	12,211
Agents commission	25,456	20,652	25,406	19,307
Audit fees, bank charges, legal costs and insurance	6,799	5,452	5,715	4,065
Computing, IT and software	33,637	28,857	30,814	25,320
Contributions to controlled entities	-	-	8,001	32,338
General consumables and materials	21,397	17,765	15,739	12,120
Non-capitalised equipment	4,911	5,424	3,780	3,935
Payments to research partners	6,648	15,359	6,648	15,359
Rental, hire and other leasing fees	9,190	15,983	8,865	15,485
Security	4,735	4,418	5,013	4,166
Subscriptions and copyright	12,598	11,860	12,431	11,469
Travel and training	22,767	23,662	22,367	22,617
Tuition services	6,405	4,350	6,405	7,037
Utilities and cleaning	20,173	19,619	20,156	18,035
Miscellaneous expenses	6,815	10,790	5,217	3,531
Loss on acquisition	2,992	-	-	-
Total other expenses	197,173	197,731	188,591	206,995

During 2019, the Group acquired businesses resulting in a loss on acquisition of \$3m. In December 2019, the Group purchased the business of Macquarie Medical Imaging Pty Ltd for a total consideration of \$2.2m. As part of the business purchase agreement, the Group assumed the rights to assets including business names, future obligations and contracts. Further the Company assumed employee leave entitlements provisions of \$0.7m for those staff novated to the Group on transition. The resulting net loss on this acquisition is \$2.9m.

During 2019, the Group also purchased the business and assets of Macquarie Neurology Pty Ltd for a consideration of \$0.5m. The Group assumed the rights to assets including business names and equipment and assumed employee leave entitlement provisions of \$70k. After settlement of outstanding amounts due, the resulting net loss on this acquisition is \$0.1m.

Accounting Policy*(ii) Repairs and Maintenance*

Repairs and maintenance costs are shown on the face of the Income Statement. Repairs and maintenance are recognised as expenses as incurred, except where they relate to the replacement of a component of an asset, in which case the carrying amount of those parts that are replaced is derecognised and the cost of the replacing part is capitalised if the recognition criteria are met. Other routine operating maintenance, repair and minor renewal costs are recognised as expenses, as incurred.

(iii) Medical consumables

Medical consumables are shown on the face of the Income Statement. Medical consumables are recognised as expenses as incurred.

(iv) Scholarships and grants

Scholarships and grants are shown on the face of the Income Statement. Scholarship and grants are recognised as expenses as incurred.

(iv) Rental, hire and other leasing fees includes lease charges incurred on low-value leases of \$6.5m for the Group. Refer to Note 20 for the definition of low value leases.

All other expenses disclosed in Note 12 are recognised as expenses as incurred.

13 Cash and cash equivalents

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Cash at bank and on hand	57,693	53,741	34,474	37,606
Short term deposits	130,893	129,559	130,893	129,559
Total cash and cash equivalent in the statement of financial position and statement of cash flows	188,586	183,300	165,367	167,165

Accounting Policy

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions and other short-term and highly liquid investments with original maturities of 90 days or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Consolidated cash and cash equivalents have a weighted average interest of 1.25% at 31 December 2019 (2018: 2.19%).

(a) Restricted Funds

Included in the cash at bank and on hand is an amount of \$112k as at 31 December 2019 (2018: \$113k) for the purpose of meeting the objectives of the estate of the late F.J. Walsh bequest.

Included in the cash at bank and on hand is an amount of \$143k as at 31 December 2019 (2018: \$96k) for the purpose of meeting the objectives of the Nippon Foundation Fund.

14 Receivables

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current					
Related parties receivables		-	-	4,556	1,616
Trade receivables		38,749	30,465	24,553	18,333
Student fees receivables		3,736	3,631	3,736	3,631
Less: Provision for expected credit losses	14(a)	(4,097)	(2,915)	(1,690)	(1,181)
Total net receivables		38,388	31,181	31,155	22,399
Accrued income		10,404	19,482	4,414	8,647
Finance lease receivables	14(b)	637	597	637	597
Deferred government benefit for superannuation	34(f)	33,521	32,730	33,521	32,730
Other employment related receivables		-	529	-	529
Total current receivables		82,950	84,519	69,727	64,902
Non-current					
Finance lease receivables	14(b)	19,960	20,597	19,960	20,597
Deferred government benefit for superannuation	34(f)	508,345	484,762	508,345	484,762
Other employment related receivables		-	8,581	-	8,581
Other receivables		875	875	875	875
Total non-current receivables		529,180	514,815	529,180	514,815
Total receivables		612,130	599,334	598,907	579,717

Refer to Note 34 for details of the deferred government benefit for superannuation receivable.

Accounting Policy

Trade and student fee receivables are non-interest bearing. Trade receivables are generally on terms of 30 days. Student receivables are due in accordance with a published payment date for each enrolled course unit.

For trade and student fee receivables the University applies a simplified approach in calculating expected credit losses ("ECLs"), recognising a loss allowance based on lifetime ECLs at each reporting date. The University has established a provision matrix that is based on its historical credit loss experience, adjusted for forward looking factors specific to the debtors and the economic environment.

The Group recognises accrued income when a contractual performance obligation has been satisfied but has not yet been invoiced to the customer or funding received from the customer.

14 Receivables (continued)

(a) Provision for expected credit losses

Set out below is the movement in the allowance for expected credit losses for receivables:

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
At 1 January	14	2,915	6,076	1,181	1,136
Provision for impaired debtors		1,807	2,826	1,411	1,175
Receivables written off during the year as uncollectible		(625)	(5,987)	(902)	(1,130)
At 31 December	14	4,097	2,915	1,690	1,181

(b) Finance Lease Receivables

(i) Finance leases

Accounting Policy

The University is lessor to a small number of long term leases of land to external organisations. These leases have been classified as finance leases as substantially all the risks and rewards of use of the land have been transferred to the lessee at inception of the lease.

Finance leases are recognised at the lease's inception at the lower of fair value of the leased asset and the present value of future minimum lease payments. The corresponding rent receivables, net of finance income, are included in receivables. Each lease receipt is allocated between the receivable and finance lease income.

(ii) Macquarie University Village

The University entered into a finance lease with Campus Living Pty Ltd to manage and operate the student accommodation known as Macquarie University Village Stage 1. The period of the lease is 30 years which commenced in December 2006 and the carrying value of the student accommodation was written down to nil at 1 January 2007 on the basis that there is no future economic benefit to the University from the student accommodation.

The University entered into a Public Private Partnership with Campus Living Pty Ltd to build, manage and operate the student accommodation known as Macquarie University Village Stage 2.

The period of the agreement is 30 years which commenced in December 2006 and at the end of that time the student accommodation will revert to the University. At the end of the concession agreement no right to receive an asset has been recognised as the University believes the buildings will have reached the end of their useful life.

(iii) Macquarie University Research Park

The University has issued a finance lease to a third party organisation over land in the Macquarie University Research Park. At the end of the lease period, the building constructed by the lessees will revert to University ownership without consideration to the lessee.

(iv) Future minimum lease payments to the University under all non-cancellable finance leases

		Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Within one year		1,995	1,995	1,995	1,995
Between one year and five years		7,978	7,978	7,978	7,978
Later than five years		39,840	41,835	39,840	41,835
Minimum lease payments		49,813	51,808	49,813	51,808
Less: Future finance charge		(29,216)	(30,614)	(29,216)	(30,614)
Total future minimum lease payments	14	20,597	21,194	20,597	21,194

15 Inventories

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current				
Medical supplies	4,451	4,232	-	-
Other inventories	800	831	329	316
Total current inventories	5,251	5,063	329	316

Accounting Policy

Inventories are valued at the lower of cost and net realisable value.

16 Other financial assets

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current					
Term deposits held at amortised cost		240,000	192,000	240,000	192,000
Restricted assets - term deposits held at amortised cost		4,732	4,720	4,732	4,720
Total current other financial assets		244,732	196,720	244,732	196,720
Non-current					
Third party equity investments held at fair value and revalued through the Income Statement		50,604	34,404	50,604	34,404
Total other financial assets		295,336	231,124	295,336	231,124

Funds are invested in accordance with the Macquarie University Act.

Accounting Policy**(a) Definition**

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(b) Initial recognition and measurement

Financial assets are classified, at initial recognition, as either:

- (i) subsequently measured at amortised cost, or;
- (ii) fair value through Other Comprehensive Income (OCI), or ;
- (iii) fair value through the Income Statement.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the University's business model for managing them. With the exception of trade receivables that do not contain a significant financing component, the University initially measures a financial asset at its fair value plus (in the case of a financial asset not at fair value through the Income Statement) transaction costs.

(c) Subsequent measurement

For purposes of subsequent measurement, financial assets are classified as follows:

16 Other financial assets (continued)**(c) Subsequent measurement (continued)**

- (i) Financial assets at amortised costs.
- (ii) Investments in equity instruments designated at fair value through Other Comprehensive Income.
- (iii) Financial assets at fair value through the Income Statement.

(i) Financial assets at amortised cost

The University measures financial assets at amortised cost if both of the following conditions are met:

- (a) The financial asset is held to hold financial assets in order to collect contractual cash flows, and;
- (b) The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in the Income Statement when the asset is derecognized, modified or impaired.

The University has trade receivables and term deposits in this category.

(ii) Investments in equity instruments designated at fair value through OCI

Upon initial recognition, the University can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under AASB132 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to the Income Statement. Dividends are recognised as other income in the Income Statement when the right of payment has been established, except when the University benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment allocation.

The University made an irrevocable election, on adoption of AASB 9 Financial Instruments, to classify its equity investments in Controlled Entities under this category. These assets are shown in Note 17.

(iii) Financial assets at fair value through the Income Statement

Financial assets at fair value through the Income Statement are carried in the Statement of Financial Position at fair value with net changes in fair value recognised in the income statement. The University holds all third-party equity investments in this category. Dividends on these third-party equity investments are also recognised in the Income Statement, when the right of payment has been established.

(d) Derecognition

A financial asset is usually derecognised when the rights to receive cash flows from the asset have expired.

(e) Offsetting

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated Statement of Financial Position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

17 Investments in Controlled Entities

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Non-current				
Investment in MQ Health Pty Ltd - investment: Class B Funding Shares	-	-	98,799	98,799
Total non-current investment in controlled entities	-	-	98,799	98,799

Accounting Policy

Investments in all controlled entities are measured at fair value. Fair valuation techniques for this asset are discussed in Note 33.

The University has irrevocably elected to reflect changes in the fair value of this asset class via the Statement of Other Comprehensive Income. The University believes this has the effect of improving stability and understandability of the parent Income Statement, which is helpful for external users of the accounts. It also more accurately reflects the long-term nature of these investments.

18 Other non-financial assets

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current				
Prepayments	26,946	19,612	26,274	18,510
Lease asset - lessee	-	667	-	667
Lease asset - lessor	1,960	2,199	1,960	2,054
Total current other non-financial assets	28,906	22,478	28,234	21,231
Non-current				
Lease asset - lessee	-	2,803	-	2,803
Lease asset - lessor	13,325	15,371	13,325	15,286
Total non-current other non-financial assets	13,325	18,174	13,325	18,089
Total other non-financial assets	42,231	40,652	41,559	39,320

As part of the adoption of AASB 16 Leases, the Group derecognised lease assets- lessee disclosed above, refer to Note1(f) for further details.

Accounting Policy

Lease assets where the Group is the lessor relates to assets recognised where the Group has offered lease incentives to lessees. An asset is recognised at commencement date for the value of the incentive and is amortised over the lease period.

18 Other non-financial assets (continued)**(a) Operating lease commitment - as lessor**

Future minimum lease payments to be received under non-cancellable operating leases:

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Within one year	24,790	28,977	24,145	25,718
Between one year and five years	72,062	78,305	71,234	76,329
Later than five years	18,466	31,654	18,466	31,654
	115,318	138,936	113,845	133,701

Macquarie University leases out various strategically held properties, including the Hearing Hub, the Cochlear building, and several properties within the Macquarie University Research Park.

Accounting Policy

Future minimum lease payments under non-cancellable operating leases are shown undiscounted, and inclusive of GST liability.

19 Property, plant and equipment

Parent	Note	Construction in progress \$'000	Land \$'000	Buildings equipment ¹ \$'000	Plant and Leasehold improvements ¹ \$'000	Library General \$'000	Library Special \$'000	Works of Art \$'000	Infrastructure \$'000	Total \$'000
At 1 January 2018										
- Cost		70,376	-	-	224,913	2,825	12,072	-	-	310,186
- Valuation		-	766,250	1,213,765	-	-	-	6,711	100,106	2,114,770
Accumulated depreciation		-	-	(3,229)	(139,212)	(2,083)	(6,224)	-	(651)	(151,399)
Net book amount		70,376	766,250	1,210,536	85,701	742	5,848	6,711	99,455	2,273,557
Year ended 31 December 2018										
Opening net book amount		70,376	766,250	1,210,536	85,701	742	5,848	6,711	99,455	2,273,557
Additions		110,206	-	-	16,711	16,544	857	-	2,880	153,136
Recognised in Other Comprehensive income		-	78,495	3,511	-	-	-	-	(10,599)	71,407
- Revaluation surplus on property, plant and equipment		-	-	-	(125)	-	-	-	-	(125)
Disposals		-	-	-	-	-	-	-	-	-
Recognised in the Income Statement - Depreciation charge	10	-	-	(30,757)	(20,712)	(648)	(1,747)	-	(5,360)	(59,224)
Transfer between asset classes/reclassification		(61,171)	-	47,919	9,845	-	-	-	-	(3,407)
Closing net book amount		119,411	844,745	1,231,209	91,420	16,638	4,958	6,711	89,434	2,435,344
At 31 December 2018										
- Cost		119,411	-	-	242,942	19,369	12,929	-	-	394,651
- Valuation		-	844,745	1,234,195	-	-	-	6,711	89,788	2,206,257
Accumulated depreciation		-	-	(2,986)	(151,522)	(2,731)	(7,971)	-	(354)	(165,564)
Net book amount		119,411	844,745	1,231,209	91,420	16,638	4,958	6,711	89,434	2,435,344

19 Property, plant and equipment (continued)

Parent	Note	Construction in progress \$'000	Land \$'000	Buildings equipment ¹ \$'000	Plant and Leasehold improvements ¹ \$'000	Library General \$'000	Library Special \$'000	Works of Art \$'000	Infrastructure \$'000	Total \$'000
Year ended 31 December 2019										
Opening net book amount		119,411	844,745	1,231,209	91,420	16,638	4,958	6,711	30,818	2,435,344
Additions		209,393	-	-	12,521	801	556	-	3,872	227,148
Recognised in Other Comprehensive income		-	34,630	38,384	-	-	-	45	2,699	77,155
- Revaluation surplus on property, plant and equipment		-	-	-	(265)	-	-	-	-	(265)
Disposals		-	-	-	-	-	-	-	-	-
Recognised in the Income Statement - Depreciation charge	10	-	-	(34,313)	(22,429)	(3,270)	(1,734)	-	(4,784)	(66,530)
Transfer between asset classes		(72,410)	-	50,682	4,863	9,829	-	-	7,036	-
Closing net book amount		256,394	879,375	1,285,962	86,110	23,998	3,780	6,756	37,389	2,672,852
At 31 December 2019										
- Cost		256,394	-	-	256,862	29,849	13,485	-	-	556,590
- Valuation		-	879,375	1,291,868	-	-	-	6,756	37,389	2,309,238
Accumulated depreciation		-	-	(5,906)	(170,752)	(5,851)	(9,705)	-	(762)	(192,976)
Net book amount		256,394	879,375	1,285,962	86,110	23,998	3,780	6,756	37,389	2,672,852

¹ Plant and equipment include motor vehicles.

19 Property, plant and equipment (continued)

Consolidated	Note	Construction in progress \$'000	Land \$'000	Buildings \$'000	Plant and equipment ¹ improvements \$'000	Leasehold improvements \$'000	Library General \$'000	Library Special \$'000	Works of Art \$'000	Infrastructure \$'000	Total \$'000
At 1 January 2018											
- Cost		70,419	-	-	232,227	2,825	12,072	-	-	-	317,543
- Valuation		-	766,250	1,213,765	-	-	-	6,711	27,938	100,106	2,114,770
Accumulated depreciation		-	-	(3,229)	(143,537)	(2,083)	(6,224)	-	-	(651)	(155,724)
Net book amount		70,419	766,250	1,210,536	88,690	742	5,848	6,711	27,938	99,455	2,276,589
Year ended 31 December 2018											
Opening net book amount		70,419	766,250	1,210,536	88,690	742	5,848	6,711	27,938	99,455	2,276,589
Additions		110,297	-	-	16,180	16,544	857	-	2,880	5,938	152,696
Recognised in other comprehensive income											
- Revaluation surplus on ongoing property, plant and equipment		-	78,495	3,511	-	-	-	-	-	(10,599)	71,407
Assets classified as held for sale and other disposals		-	-	-	(187)	-	-	-	-	-	(187)
Recognised in the Income Statement - Depreciation charge	10	-	-	(30,757)	(21,514)	(648)	(1,747)	-	-	(5,360)	(60,026)
Transfers		(61,296)	-	47,919	9,970	-	-	-	-	-	(3,407)
Closing net book amount		119,420	844,745	1,231,209	93,139	16,638	4,958	6,711	30,818	89,434	2,437,072
At 31 December 2018											
- Cost		119,420	-	-	248,803	19,369	12,929	-	-	-	400,521
- Valuation		-	844,745	1,234,195	-	-	-	6,711	30,818	89,788	2,206,257
Accumulated depreciation		-	-	(2,986)	(155,664)	(2,731)	(7,971)	-	-	(354)	(169,706)
Net book amount		119,420	844,745	1,231,209	93,139	16,638	4,958	6,711	30,818	89,434	2,437,072

19 Property, plant and equipment (continued)

Consolidated	Note	Construction in progress \$'000	Land \$'000	Buildings \$'000	Plant and equipment ¹ improvements \$'000	Leasehold improvements \$'000	Library General \$'000	Library Special \$'000	Works of Art \$'000	Infrastructure \$'000	Total \$'000
At 1 January 2019											
Opening net book amount		119,420	844,745	1,231,209	93,139	16,638	4,958	6,711	30,818	89,434	2,437,072
Effect of adoption of new standard AASB 16		-	-	-	(267)	-	-	-	-	-	(267)
Restated Opening net book amount		119,420	844,745	1,231,209	92,872	16,638	4,958	6,711	30,818	89,434	2,436,805
Additions		209,596	-	-	12,385	801	556	-	3,872	5	227,215
Recognised in Other Comprehensive Income											
- Revaluation surplus on property, plant and equipment		-	34,630	38,384	-	-	-	45	2,699	1,397	77,155
Disposals		-	-	-	(309)	-	-	-	-	-	(309)
Recognised in the Income Statement - Depreciation charge	10	-	-	(34,313)	(22,778)	(3,270)	(1,734)	-	-	(4,784)	(66,879)
Transfer between asset classes		(72,573)	-	50,682	5,011	9,829	-	-	-	7,036	(15)
Closing net book amount		256,443	879,375	1,285,962	87,181	23,998	3,780	6,756	37,389	93,088	2,673,972
At 31 December 2019											
- Cost		256,443	-	-	261,293	29,849	13,485	-	-	-	561,070
- Valuation		-	879,375	1,291,868	-	-	-	6,756	37,389	93,850	2,309,238
Accumulated depreciation		-	-	(5,906)	(174,112)	(5,851)	(9,705)	-	-	(762)	(196,336)
Net book amount		256,443	879,375	1,285,962	87,181	23,998	3,780	6,756	37,389	93,088	2,673,972

¹ Plant and equipment include motor vehicles.

19 Property, plant and equipment (continued)**(a) Capital commitments**

Capital expenditure contracted for various building capital projects at the reporting date but not recognised as liabilities as at 31 December 2019 are as follows:

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Within one year	265,121	136,720	264,465	136,720
Total capital commitments	265,121	136,720	264,465	136,720

Accounting Policy

Capital commitments are shown undiscounted, and inclusive of GST liability.

Property, plant and equipment policies (PPE)*(i) Definition*

Property, plant and equipment are tangible items that:

- are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- are expected to be used during more than one period.

(ii) Recognition

An item of property, plant and equipment can be recognised as an asset if:

- it is probably that future economic benefits associated with the item will flow to the entity, and;
- The cost of the item can be measured reliably.

An item of property, plant and equipment that qualifies for recognition as an asset is initially measured at cost, which includes both the purchase price (net of discounts and rebates) and costs directly attributable to bringing the asset to the location and condition necessary for it to operate (including incremental employee costs, site preparation, delivery, installation, assembly costs and professional fees).

Where an asset is acquired or gifted at no or nominal cost, the cost is its fair value as at the date of acquisition.

(iii) Capitalisation thresholds and collective asset

Acquisitions and additions of non-current assets are capitalised if the value is more than \$5,000.

Where individual items are less than this amount, but the purchase total is collectively greater than the capitalisation limit, the collective total may be capitalised.

(iv) Subsequent costs, replacement of parts and repairs and maintenance

Subsequent costs, including replacement of parts, are recognised as an asset only if they meet the recognition criteria above. The carrying value of those parts that are replaced are derecognized in accordance with derecognition criteria below.

All other repairs and maintenance are charged to the Income Statement during the financial period in which they are incurred.

19 Property, plant and equipment (continued)**Property, plant and equipment policies (PPE) (continued)***(v) Derecognition*

The carrying amount of a capital asset shall be derecognised:

- On disposal, or;
- When no future economic benefits are expected from its use.

The gain or loss on derecognition is the difference between the net proceeds (if any) and the carrying amount of the item at the date of disposal. The gain or loss is recognised in the Income Statement.

(vi) Subsequent re-measurements by asset class

All PPE asset classes are measured at fair value, using the methodologies described in the Note 33 Fair Value Measurement, except for the following classes, which are measured at depreciated historic cost: Plant and Equipment; Leasehold Improvements; Library General, and Construction in Progress. There are no material differences between the fair value and the carrying value of these assets.

(vii) Fair value revaluation adjustments

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the carrying amount is adjusted to the revalued amount of the asset.

Increases in the carrying amounts arising on revaluation of property, plant and equipment are recognised in Other Comprehensive Income and accumulated in equity under the heading of Asset Revaluation Reserve.

Decreases that reverse previous increases of the same asset class are recognised in Other Comprehensive Income, to the extent of the remaining reserve attributable to the asset class. All other decreases are charged to the Income Statement.

(viii) Depreciation

Property, plant and equipment are depreciated only when they are completed and ready for use. Depreciation is calculated on a straight-line basis, net of an asset's residual value, over its expected useful life. Standard applicable rates by asset type are:

Asset	2019 and 2018
Construction in progress	N/A
Land	N/A
Buildings	10 - 60 years
Plant and equipment	3 - 10 years
Leasehold improvements	Term of lease
Library Collections: General	5 years
Library Collections: Special	N/A
Works of Art	N/A
Infrastructure	10 - 60 years

(ix) Asset residual values and useful lives

Asset residual values and useful lives are reviewed annually, and adjusted if appropriate, incorporating external valuers information where relevant. The carrying amount of an asset held at depreciated historic cost is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

(x) Purpose of property ownership

All property held by the University is held for strategic purposes. In accordance with AASB 140 Investment Properties (para Aus 9.1), buildings are therefore accounted for under AASB 116 rather than AASB 140.

20 Right-of-use assets and liabilities**Right-of-use assets**

	Note	Parent			Consolidated		
		Buildings \$'000	Plant and Equipment \$'000	Total \$'000	Buildings \$'000	Plant and Equipment \$'000	Total \$'000
Year ended 31 December 2019							
Opening net book amount		-	-	-	-	-	
Restated as at 1 January 2019		40,790	3,180	43,970	42,537	3,447	45,984
Additions		1,829	-	1,829	1,829	-	1,829
Amortisation charge	10	(6,853)	(1,089)	(7,942)	(7,321)	(1,250)	(8,571)
Closing net book amount		35,766	2,091	37,857	37,045	2,197	39,242
At 31 December 2019							
- Cost		42,619	3,180	45,799	44,366	3,447	47,813
- Accumulated amortisation and impairment		(6,853)	(1,089)	(7,942)	(7,321)	(1,250)	(8,571)
Net book amount		35,766	2,091	37,857	37,045	2,197	39,242

Lease liabilities as lessee

	Parent		Consolidated	
	2019 \$'000	2019 \$'000	2019 \$'000	2019 \$'000
Lease liabilities -Current	8,448	9,022	8,448	9,022
Lease liabilities - Non Current	30,742	31,583	30,742	31,583
At 31 December 2019	39,190	40,605	39,190	40,605

The Group has leases for buildings and equipment and these are recorded in accordance with AASB 16 Leases.

Buildings

The Group has entered into property leases with third party organisations. The lease periods range 3 to 12 years. These leases are subject to market rent review and rental increases as per the terms of the contracts. Other variable considerations such as outgoings are expensed in the Income Statement in the period in which they relate to. The lease term is determined at inception based on management's best estimate on the likelihood of exercising the options.

Plant and Equipment

The Group has leases for IT equipment and other equipment. The lease periods for equipment range 4-5 years. The leases are not subject to rental increases per the contracts nor do they have variable considerations.

Accounting Policy*(i) Definition of a Lease*

A contract is a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration.

a) The lessee has the right to obtain substantially all of the economic benefits from the use of the asset throughout the

20 Right-of-use assets and liabilities (continued)**Right-of-use assets (continued)**

period of use.

b) The customer has the right to direct the use of the asset throughout the period of use.

The contract does not contain a lease if the supplier has the substantive right to substitute the asset throughout the period of use.

A right of use asset is an asset that represents a lessee's right to use an underlying asset for the lease term.

The Group has elected not to recognise right-of-use assets and lease liabilities

a) where the leases term is 12 months or less, or

b) where the value of the leased asset as new is assessed as being low value. The Group has applied a threshold of \$50k.

The Group recognises right-of-use assets for leases that have significantly below-market terms and conditions principally to enable the entity to further its objective (concessionary leases) at cost.

(ii) Recognition

In contracts where the Group is a lessee, a right of use asset and lease liability is recognised at the commencement date of the lease.

(iii) Measurement

A lease liability is initially measured at the present value of unpaid lease payments at the commencement date of the lease. To calculate the present value, the unpaid lease payments are discounted using the interest rate implicit in the lease if the rate is readily determinable. If the interest rate implicit in the lease cannot be readily determined, the incremental borrowing rate at the commencement date of the lease is used.

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

A right-of-use asset is initially measured at cost comprising the initial measurement of the lease liability adjusted for any lease payments made before the commencement date less lease incentives received, plus other direct costs required by the lease.

(iv) Subsequent remeasurement

After commencement date, the lease liability is reduced to reflect the lease payments made and increased to reflect the interest on the lease liability.

The lease liability is remeasured to reflect any lease reassessments or lease modifications. Lease reassessments can include when there are changes in future lease payments arising from a change in an index or rate or change in lease term. Lease modifications can include a change in the scope of the lease. The lease liability is remeasured by discounting the revised lease payments.

Right-of-use assets are measured at cost less accumulated amortisation and adjusted for any remeasurements of the lease liability.

21 Intangible Assets

	Parent				Consolidated					
	Construction in progress	Patents	IT software	Digital library collection	Total	Construction in progress	Patents	IT software	Digital library collection	Total
Note	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
At 1 January 2018										
- Cost	-	2,123	26,470	50,279	78,872	-	2,123	30,981	50,279	83,383
- Accumulated amortisation and impairment	-	(203)	(11,590)	(29,077)	(40,870)	-	(203)	(15,365)	(29,077)	(44,645)
Net book amount	-	1,920	14,880	21,202	38,002	-	1,920	15,616	21,202	38,738
Year ended 31 December 2018										
Opening net book amount	-	1,920	14,880	21,202	38,002	-	1,920	15,616	21,202	38,738
Additions	18,502	318	-	7,714	26,534	18,502	318	-	7,714	26,534
Amortisation charge	-	(31)	(4,700)	(3,451)	(8,182)	-	(31)	(5,098)	(3,451)	(8,580)
Transfers between asset classes/reclassification from Note 19	634	-	2,773	-	3,407	634	-	2,773	-	3,407
Closing net book amount	19,136	2,207	12,953	25,465	59,761	19,136	2,207	13,291	25,465	60,099
At 31 December 2018										
- Cost	19,136	2,441	29,243	57,993	108,813	19,136	2,441	30,634	57,993	110,204
- Accumulated amortisation and impairment	-	(234)	(16,290)	(32,528)	(49,052)	-	(234)	(17,343)	(32,528)	(50,105)
Net book amount	19,136	2,207	12,953	25,465	59,761	19,136	2,207	13,291	25,465	60,099
Year ended 31 December 2019										
Opening net book amount	19,136	2,207	12,953	25,465	59,761	19,136	2,207	13,291	25,465	60,099
Additions	22,415	527	386	8,702	32,030	22,415	527	80	8,702	31,724
Amortisation charge	-	(31)	(6,520)	(4,316)	(10,867)	-	(31)	(6,532)	(4,316)	(10,879)
Transfer between asset classes	(28,900)	-	28,900	-	-	(28,900)	-	28,900	-	-
Closing net book amount	12,651	2,703	35,719	29,851	80,924	12,651	2,703	35,739	29,851	80,944
At 31 December 2019										
- Cost	12,651	2,967	58,529	66,695	140,842	12,651	2,967	59,613	66,695	141,926
- Accumulated amortisation and impairment	-	(264)	(22,810)	(36,844)	(59,918)	-	(264)	(23,874)	(36,844)	(60,982)
Net book amount	12,651	2,703	35,719	29,851	80,924	12,651	2,703	35,739	29,851	80,944

21 Intangible Assets (continued)

Accounting Policy

(i) Patents

Patents are recorded at cost and amortised over their useful life.

(ii) IT software

IT software which is purchased or developed is recorded at historical cost and amortised over its useful life.

(iii) Digital library collections

Digital library collections are capitalised when the license includes perpetual access rights to the information purchased. Such assets are recorded at historical cost and amortised over their useful life.

(iv) Amortisation

Amortisation is calculated on a straight line basis over the assets' estimated useful lives, which are reviewed regularly. Standard applicable rates by asset type are:

Asset	2019 and 2018
Patents	20 years
IT software	3-10 years
Digital library collections	10 years

(v) Impairment

Intangible assets are reviewed for impairment wherever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount, being the higher of the asset's fair value less costs of disposal, and its value in use.

22 Trade and other payables

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current					
Related parties		-	-	1,289	818
Third parties		44,747	43,290	27,595	29,796
Accrued expenses		56,000	56,876	48,606	48,536
OS-HELP Liability to Australian Government	35(g)	147	145	147	145
Total current trade and other payables		100,894	100,311	77,637	79,295
Total trade and other payables		100,894	100,311	77,637	79,295

Accounting Policy

Trade accounts payable are recognised when the University becomes obliged to make future payments as a result of purchases or other obligations. These liabilities are measured at original cost, which is not materially different to amortised cost due to the short-term nature of liabilities. The amounts are unsecured and are usually paid within 30 days of recognition.

Total trade and other payables include \$2.8m (2018: \$3.6m) denominated in currencies other than Australian dollars.

23 Borrowings

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current					
Unsecured University-issued bonds	23(c)	249,828	-	249,828	-
Unsecured controlled entity loans	23(a)	-	-	13,950	24,050
Unsecured bank loans (student accommodation)	23(b)	543	1,584	543	1,584
Secured finance lease liabilities		-	145	-	-
Total current borrowings		250,371	1,729	264,321	25,634
Non-current					
Unsecured University-issued bonds	23(c)	495,708	497,309	495,708	497,309
Unsecured bank loans (student accommodation)	23(b)	-	535	-	535
Secured finance lease liabilities		-	100	-	-
Total non-current borrowings		495,708	497,944	495,708	497,844
Total borrowings		746,079	499,673	760,029	523,478

Accounting Policy

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in the Income Statement over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities, which are not an incremental cost relating to the actual draw-down of the facility, are recognised as prepayments and amortised on a straight-line basis over the term of the facility.

Borrowings are removed from the Statement of Financial Position when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in other income or other expenses.

Borrowings are classified as current liabilities unless the University has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period and does not expect to settle the liability for at least 12 months after the end of the reporting period.

(a) Controlled Entities loans

Several Controlled Entities with surplus cash balances have entered into an unsecured loan agreement with the University. The University pays interest on loan tranches to the lending controlled entity, at a rate reflecting the University's return on investments.

(b) Bank loans for student accommodation

In 2000 the University entered into a 20 year commercial bank loan to fund the construction of student accommodation. The loan is unsecured and is denominated in AUD. The balance of the loan outstanding as at 31 December 2019 is \$543k which is all current and to be repaid in 2020. (2018:\$2.1m which comprises current \$1.6m and non-current \$0.5m).

23 Borrowings (continued)**(c) University-issued bonds**

The fair value of the issued bonds was \$799.9m (2018: \$530.5mil). Refer to Note 33(c) for details of fair value measurement.

Bonds payable	Face value \$000s	Fixed coupon rate	Term	Issue date
Tranche1	250,000	6.75%	10 years	Sept 2010
Tranche2	200,000	3.5%	10 years	Sept 2018
Tranche3	50,000	4.5%	25 years	Sept 2018
Tranche4	160,000	2.25%	10.5 years	Nov 2019
Tranche5	90,000	3.10%	25 years	Nov 2019

(d) Financial arrangements

The University had unrestricted access to bank loan facilities totalling \$500m at the reporting date, none of which were drawn (2018: \$500m available, nil drawn).

There was no formal overdraft facility in place as at 31 December 2019. There were unused credit card facilities totalling \$2.8m (2018: \$4.8m) at the year end.

(e) Reconciliation of liabilities arising from financing activities

	Consolidated				Parent			
	2018 \$'000	Cashflow \$'000	Other \$'000	2019 \$'000	2018 \$'000	Cashflow \$'000	Other \$'000	2019 \$'000
Secured finance lease liabilities	245	(245)	-	-	-	-	-	-
Bank Loans (student accommodation)	2,119	(1,576)	-	543	2,119	(1,576)	-	543
University-issued bonds	497,309	247,926	301	745,536	497,309	247,926	301	745,536
Controlled Entities Loans	-	-	-	-	24,050	(1,100)	(9,000)	13,950
Lease Liabilities-as a lessee	-	(8,525)	49,130	40,605	-	(7,885)	47,075	39,190
Total liabilities from financing activities	499,673	237,580	49,431	786,684	523,478	237,365	38,376	799,219

24 Provisions

	Note	Consolidated		Parent	
		2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current provisions expected to be settled wholly within 12 months					
Employee benefits					
Annual leave		41,047	37,612	34,010	31,562
Long service leave		14,609	13,808	14,055	13,475
Other employee related costs		5,002	1,487	4,964	937
Deferred benefits for superannuation	34(f)	33,521	32,730	33,521	32,730
Employment on-cost provision		592	529	592	529
Subtotal		94,771	86,166	87,142	79,233
Current provisions expected to be settled wholly after more than 12 months					
Employee benefits					
Annual leave		4,788	4,583	4,788	4,583
Long service leave		28,776	26,291	28,317	25,819
Subtotal		33,564	30,874	33,105	30,402
Total current provisions		128,335	117,040	120,247	109,635
Non-current provisions					
Employee benefits					
Long service leave		17,355	16,310	14,520	13,504
Deferred benefits for superannuation	34(f)	510,937	488,195	510,937	488,195
Employment on-cost provision		8,976	8,581	8,976	8,581
Make Good		3,996	3,195	3,996	3,195
Total non-current provisions		541,264	516,281	538,429	513,475
Total provisions		669,599	633,321	658,676	623,110

Refer to note 34(f) for ageing of net liability and reimbursement rights relating to Deferred Benefits for Superannuation.

Accounting Policy**Employee benefits***(i) Short-term obligations*

Liabilities for short-term employee benefits including wages and salaries are measured at the amount expected to be paid when the liability is settled. If it is expected that these liabilities will be settled wholly within twelve months of the reporting period, they are recognised in the Trade and Other Payables Note 22.

(ii) Long-term obligations

The liabilities for long-term benefits such as annual leave and long service leave are recognised in current provisions for employee benefits if:

- it is expected to be settled wholly within twelve months of the reporting period and;
- there is no unconditional right to defer settlement of the liability for at least twelve months after the reporting date. Such liabilities are recognised as non-current if either of the above criteria do not apply.

Long term liabilities are measured at the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely

24 Provisions (continued)

Employee benefits (continued)

as possible, the estimated future cash outflows.

The long service leave liability has been recognised according to an actuarial assessment performed in accordance with AASB 119 Employee Benefits.

(iii) Post-employment benefits - please refer to Note 34

Other provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the date of Statement of Financial Position. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as a finance cost.

(i) Termination benefits - included in Note 24 Other employee related costs

Termination benefits are payable when employment is terminated before the normal retirement date, or when an employee accepts an offer of benefits in exchange for the termination of employment. The Group recognises termination benefits either when it can no longer withdraw the offer of those benefits or when it has recognised costs for restructuring within the scope of AASB 137 that involves the payment of termination benefits. Benefits not expected to be settled wholly before 12 months after the end of the reporting period are discounted to present value.

25 Other liabilities

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Current				
Lease liability - lessor	-	319	-	319
Lease liability - lessee	-	436	-	436
Unearned Revenue Student Fees	54,195	55,576	54,195	55,576
Unearned Revenue Other	9,188	6,771	4,508	4,483
Australian government unspent financial assistance	8,107	4,661	8,107	4,661
Total current other liabilities	71,490	67,763	66,810	65,475
Non-current				
Lease liability - lessee	-	11,039	-	11,039
Lease liability - lessor	-	27	-	27
Advances other	149	-	-	-
Total non-current other liabilities	149	11,066	-	11,066
Total other liabilities	71,639	78,829	66,810	76,541

As part of the adoption of AASB 16 *Leases*, the Group derecognised lease liabilities-lessee, disclosed above, refer to Note1(f) for further details.

Unearned Revenue Student Fees relates to student fees and Government teaching grant revenue recognised under AASB 15 where the courses are yet to be delivered.

Unearned Revenue Other relates to grant and other revenue recognised under AASB 15 where the performance obligations have not or have only partially been satisfied as at the end of the reporting period.

Refer to note 2- 7 for the accounting policies on revenue and income.

Refer to note 20 for accounting policies on lease liabilities where the Group is a lessee.

Accounting Policy

Where the Group is a lessor and the lease contract contains lease incentives such as rent free periods or up-front cash payments, the Group will recognise lease liabilities to recognise the timing mismatch between lease income and rental receipts. These liabilities are reduced over the life of the lease term to the Income Statement.

26 Key Management Personnel Disclosures**(a) Names of responsible persons and executive officers**

The following persons were responsible persons and executive officers of Macquarie University during the financial year. All members of the University Council were appointed or elected under the provisions of the Macquarie University Act 1989. Council members include University employees who may be ex-officio members or elected staff members.

(i) Executive officers

Professor Stephen Brammer
 Ms Saveria Dimasi (until October 2019)
 Professor S Bruce Dowton
 Ms Nicole Gower
 Professor Simon Handley
 Professor Kevin Jameson
 Professor Patrick McNeil
 Professor Barbara Messerle (until September 2019)
 Professor Bernard Mans (from September 2019)
 Professor Martina Mollering
 Mr Robin Payne
 Professor Sakkie Pretorius
 Professor David Wilkinson

(ii) University Council Members

The Hon Michael Egan AO – Chancellor (until October 2019)
 Dr Martin Parkinson AC PSM - Chancellor (appointed October 2019)
 Professor S Bruce Dowton – Vice-Chancellor and President
 Ms Louise Mason - Deputy Chancellor
 Professor Mariella Herberstein – Chair of Academic Senate
 Mr Michael Book (from November 2019)
 Dr Wylie Bradford
 Mr Chum Darvall
 Professor Catherine Dean
 Dr Evianne Grosvenor (from 1 January 2019)
 The Hon Patricia Forsythe (until February 2019)
 Mr Alexander Hablutzel (from June 2019)
 Ms Deborah Hadwen
 Ms Jingmin Qian
 Ms Cissy Shen (until May 2019)
 Mr John Wigglesworth
 Mr Frank Zipfinger

26 Key Management Personnel Disclosures (continued)**(b) Remuneration of Council Members and Executives**

No Council member has received any remuneration in his/her capacity as a Council member.

	Parent	
	2019	2018
Remuneration of executive officers		
\$10,000 to \$19,999	-	1
\$300,000 to \$309,999	1	-
\$360,000 to \$369,999	-	2
\$380,000 to \$389,999	1	2
\$390,000 to \$399,999	-	2
\$410,000 to \$419,999	1	-
\$420,000 to \$429,999	1	-
\$430,000 to \$439,999	3	-
\$440,000 to \$449,999	-	1
\$490,000 to \$499,999	-	1
\$510,000 to \$519,999	-	1
\$520,000 to \$520,999	-	1
\$530,000 to \$539,999	1	-
\$540,000 to \$549,999	1	-
\$550,000 to \$559,999	1	-
\$570,000 to \$579,999	1	-
\$630,000 to \$639,999	1	-
\$1,010,000 to \$1,019,999	-	1
\$1,080,000 to \$1,089,999	1	-
	13	12

The University has performed a review of transactions with entities in which the Council members of the University and members of the University Executive have declared their interest via the University Register of Interests. Management has determined that these transactions have occurred at arm's length and on terms and conditions no more favourable than those which it is expected the University would have adopted for a normal employee, customer or supplier relationship.

(c) Key management personnel compensation

	Parent	
	2019	2018
	\$'000	\$'000
Salaries	5,963	5,338
Superannuation payments	455	405
Termination benefits	322	-
Total key management personnel compensation	6,740	5,743

No short-term bonus payments were paid to key management personnel.

26 Key Management Personnel Disclosures (continued)**(d) Loans to key management personnel**

During 2013 a Loan Agreement was signed between Macquarie University and Professor S B Downton for acquiring a residence in Sydney. The loan has a facility limit of \$875,000, was drawn down in full in 2014 and remains fully drawn at the reporting date.

Interest of \$25k was payable for the year ended 31 December 2019 (2018: \$25k). No write downs or allowances for doubtful receivables have been recognised in relation to this loan in 2019 (2018: nil).

Pursuant to the Loan Agreement, the University uses this property for University functions, for a fee assessed at a fair value using comparable market rental for similar properties. The fee in 2019 was \$25k (2018: \$48k).

There are no other loans to key management personnel.

27 Related Parties**(a) Parent entity**

The ultimate parent entity within the Group is Macquarie University, an entity established under NSW state legislation.

(b) Controlled Entities

The consolidated financial statements incorporate the assets, liabilities and results of the following controlled entities in accordance with the accounting policy described in note 1(b):

Name of Entity	Principal place of business	Class of Shares	Equity Holding	
			2019	2018
			%	%
Access Macquarie Ltd	Australia	Limited by Guarantee	100	100
APAF Ltd	Australia	Limited by Guarantee	-	100
CMBF Ltd	Australia	Limited by Guarantee	-	100
COH Property Trust	Australia	Units	100	100
MGSM Limited	Australia	Limited by Guarantee	100	100
Macquarie University Clinical Associates Pty Ltd	Australia	Limited by Guarantee	100	100
Macquarie University Hong Kong Foundation Ltd	Hong Kong	Limited by Guarantee	100	100
MU Property Investment Company No. 3 Pty Ltd	Australia	Ordinary	100	100
Macquarie University Property Investment Company Pty Ltd	Australia	Ordinary	100	100
Macquarie University Property Investment Trust	Australia	Units	100	100
MQ Health Pty Ltd	Australia	Class B Funding	100	100
MUH Operations Pty Ltd	Australia	Ordinary	100	100
MUPH Clinic Pty Ltd	Australia	Ordinary	100	100
MUPH Hospital Pty Ltd	Australia	Ordinary	100	100
U@MQ Ltd	Australia	Limited by Guarantee	100	100

APAF Ltd and CMBF Ltd were deregistered under section 6aAA(4) Corporations Act 2001 on 6 November 2019.

27 Related Parties (continued)**(c) Transactions with related parties**

The following transactions occurred with related parties in 2019:

	Revenue \$'000	Expenses \$'000	Receivables/ Equity \$'000	Payables/ Loans \$'000
Access Macquarie Ltd	1,409	5,024	2,254	58
MGSM Ltd	9,058	787	-	2,662
MQ Health Pty Ltd	2,314	14,426	100,043	1,195
U@MQ Ltd	1,901	472	1,058	11,321
Macquarie University Hong Kong Foundation Ltd	2,067	-	-	-
CMBF Ltd	3,298	-	-	-
	20,047	20,709	103,355	15,236

The following material transactions occurred with related parties in 2018:

	Revenue \$'000	Expenses \$'000	Receivables/ Equity \$'000	Payables/ Loan \$'000
Access Macquarie Ltd	2,207	3,011	1,558	3,045
APAF Ltd	578	54	-	-
MGSM Ltd	31,284	777	21	12,201
MQ Health Pty Ltd	13,913	30,441	98,806	466
U@MQ Ltd	850	357	28	9,065
Macquarie University Clinical Associates Pty Ltd	2,594	6,928	2	91
	51,426	41,568	100,415	24,868

(d) Loans to related parties

	Note	2019 \$'000	2018 \$'000
Loan to MQ Health Pty Ltd			
Beginning of the year		-	69,297
Net loans advanced		-	4,000
Interest charged	5	-	2,203
Converted to Class B Funding Shares		-	(75,500)
End of Year		-	-

28 Remuneration of Auditors

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Audit and review of the Financial Statements				
Fees paid to Audit Office of NSW				
Audit fees for parent entity/ group entity	641	677	376	357
Audit fees for Restricted Funds	3	3	3	3
Total paid for audit and review	644	680	379	360
Other audit and assurance services				
Fees paid to Audit Office of NSW				
Audit of regulatory returns	15	14	15	14
Total paid for audit and assurance	15	14	15	14
Total remuneration for audit and assurance related services	659	694	394	374

29 Contingencies**(a) Bank Guarantees**

The University has a bank guarantee facility of \$28.7m (2018: \$28.7m) of which \$4.3m (2018: \$4.2m) was unused at the reporting date. The bank guarantees primarily relate to the provision of security for a workers' compensation insurance program.

(b) Contingent liabilities

At the reporting date, the University had a number of claims outstanding which it is currently evaluating. Management has assessed that none of these claims would result in material financial exposure for the University or require specific disclosure in the financial statements. The Group does not have any other contingent liabilities.

30 Events Occurring After the Reporting Date

As at the date of authorisation of the 2019 financial statements there is uncertainty surrounding the impact of the COVID-19 outbreak on the University's results for 2020. The University continues to monitor the situation and has implemented a range of measures to reduce the impact to students and support them through this difficult time.

No other event or transaction has occurred between the end of the financial year and the date of authorisation of this report of a material nature to significantly affect the financial position of the Group.

31 Reconciliation of operating result after income tax to net cash flows from operating activities

	Consolidated		Parent	
	2019 \$'000	2018 \$'000	2019 \$'000	2018 \$'000
Net result for the period	(8,954)	9,740	1,412	53,451
Depreciation and amortisation	86,329	68,606	85,339	67,406
Net (gain) / loss on sale of non-current assets	63	68	49	26
Fair value gains on other financial assets at fair value through profit or loss	(18,557)	(5,770)	(18,557)	(5,770)
Distribution from related parties	-	-	(12,298)	(30,867)
Capitalisation of borrowing costs	(4,241)	(930)	(4,241)	(930)
Non-cash bond expenses	301	-	301	-
Contribution to related parties	-	-	8,001	22,800
Other non cash income	(5,513)	(4,836)	(5,513)	(7,038)
Interest expense on lease liabilities	1,317	-	1,276	-
Change in operating assets and liabilities:				
(Increase) / decrease in trade debtors	(12,796)	(27,617)	(19,190)	(22,939)
(Increase) / decrease in inventories	(188)	19	(13)	2
AASB 15 opening adjustment	(12,702)	-	(6,968)	-
(Increase) / decrease in other non-financial assets	(5,049)	(1,945)	(5,709)	(3,129)
Increase / (decrease) in trade creditors	(8,468)	6,947	(10,709)	2,238
Increase / (decrease) in other operating liabilities	1,629	15,184	(912)	14,674
Increase / (decrease) in provision	37,140	22,476	36,428	22,227
Net cash provided by operating activities	50,311	81,942	48,696	112,151

32 Financial Risk Management**(a) Objectives and policies**

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Group.

The University has adopted an Investment & Treasury Risk Management Policy, approved by the Finance and Facilities Committee (a Committee of Council) that establishes a policy framework for the management of financial risk. The Finance and Facilities Committee reviews the University's financial risk and financial asset performance at each of its meetings.

32 Financial Risk Management (continued)**(b) Market risk***(i) Foreign exchange risk*

The Group is exposed to fluctuations in foreign currencies arising from the purchase of goods and services in currencies other than the Group's functional currency. The risk is not material due to the limited amount of trade and other payables denominated in non AUD currency at the reporting; refer to note 22.

(ii) Price risk

The University is exposed to equity securities price risk. This arises from investments held by the University and classified as designated at fair value through other comprehensive income. The risk is not likely to be material to the Group, given the limited holdings in these assets.

(iii) Cash flow and fair value interest rate risk

Although the University carries debt, the majority of debt is at a fixed rate of interest. Refer to note 23 for details. Interest rate risk relates to investments. All other financial assets and liabilities are non-interest bearing.

(iv) Summarised sensitivity analysis

Sensitivity analysis was produced by altering the relevant balance for +/-10% change in the foreign exchange and other price risk, and +/-1% in the interest rate risk identified. The results of this analysis and the risk assessment noted in the paragraph above, did not give rise to any material changes in the balances affected by the risks identified for the consolidated or parent entity.

(c) Credit risk

The maximum exposure to credit risk to recognised financial assets at the reporting date, is the carrying amount, net of any provisions for impairment of these assets, as disclosed in the Statement of Financial Position and notes to the financial statements. The University has no credit risk for derivative financial instruments. Financing facilities are disclosed in note 23.

The carrying amount of financial assets (as contained in the table in sub note 32(d) below) represents the Group's maximum exposure to credit risk.

(d) Liquidity risk

The University manages liquidity risk by monitoring forecast cash flows and maintains sufficient cash to maintain short term flexibility and enable the University to meet financial commitments in a timely manner.

Consolidated**31 December 2019**

	Note	Less than 1 year	1 to 5 years	5+ years	Total
		2019 \$'000	2019 \$'000	2019 \$'000	2019 \$'000
Financial Liabilities:					
Trade and other payables	22	(99,696)	-	-	(99,696)
Bonds	23	(249,828)	-	(495,708)	(745,536)
Bank Borrowings	23	(543)	-	-	(543)
Lease liabilities as a lessee	20	(9,022)	(26,913)	(4,670)	(40,605)
Total Financial Liabilities		(359,089)	(26,913)	(500,378)	(886,380)
Financial Assets:					
Financial assets ¹		476,938	58,582	10,624	546,144
Total Financial Assets		476,938	58,582	10,624	546,144
Net Liquidity		117,849	31,669	(489,754)	(340,236)

#1 Financial Assets consists of cash and cash equivalents, term deposits, trade and finance receivables and third-party equity investments.

32 Financial Risk Management (continued)**(d) Liquidity risk (continued)**

31 December 2018

		Less than 1 year 2018	1 to 5 years 2018	5+ years 2018	Total 2018
	Note	\$'000	\$'000	\$'000	\$'000
Financial Liabilities:					
Trade and other payables	22	(100,311)	-	-	(100,311)
Bonds	23	-	(249,579)	(247,730)	(497,309)
Bank Borrowings	23	(1,584)	(535)	-	(2,119)
Lease liabilities		(145)	(100)	-	(245)
Total Financial Liabilities		(102,040)	(250,214)	(247,730)	(599,984)
Financial Assets:					
Financial Assets		427,267	46,675	18,202	492,144
Total Financial Assets		427,267	46,675	18,202	492,144
Net Liquidity		325,227	(203,539)	(229,528)	(107,840)

33 Fair Value Measurement**(a) Fair value measurements**

Due to the short-term nature of current receivables, current borrowings and current payables, their carrying value is assumed to approximate to fair value. The fair value of liabilities is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the University for similar financial instruments. The only balance where the carrying amount and aggregate fair values of financial liabilities differ at reporting date is borrowings, disclosed in Note 23 (c).

(b) Fair value hierarchy

Macquarie University categorises assets and liabilities measured at fair value into a hierarchy based on the level of inputs used in measurements.

	Description
Level 1	quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2	inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
Level 3	inputs for the asset or liability that are not based on observable market data (unobservable inputs)

(i) Recognised fair value measurements

Fair value measurements recognised in the Statement of Financial Position are categorised into the following levels at 31 December 2019.

33 Fair Value Measurement (continued)**(b) Fair value hierarchy (continued)****Fair value measurements at 31 December 2019**

		Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000
Consolidated and Parent					
Financial assets					
Third party equity investments held at fair value and revalued through the Income Statement	16	50,604	929	49,675	-
Investment in controlled entities at fair value	17	98,799	-	-	98,799
Total financial assets		149,403	929	49,675	98,799
Non-financial assets					
PPE:					
Land	19	879,375	-	879,375	-
Building	19	1,285,962	-	459,032	826,930
Infrastructure	19	93,088	-	-	93,088
Library Special Collections	19	6,756	-	-	6,756
Works of Art	19	37,389	-	-	37,389
Total non-financial assets		2,302,570	-	1,338,407	964,163

Fair value measurements at 31 December 2018

		Total \$'000	Level 1 \$'000	Level 2 \$'000	Level 3 \$'000
Consolidated and Parent					
Financial assets					
Third party equity investments held at fair value and revalued through the Income Statement	16	34,404	2,934	31,470	-
Total financial assets		34,404	2,934	31,470	-
Non-financial assets					
PPE:					
Land	19	844,745	-	844,745	-
Buildings	19	1,231,209	-	439,098	792,111
Infrastructure	19	89,434	-	-	89,434
Library Special Collections	19	6,711	-	-	6,711
Works of Art	19	30,818	-	-	30,818
Total non-financial assets		2,202,917	-	1,283,843	919,074

There were no transfers between levels 1, 2 or 3 for recurring fair value measurements during the year.

Macquarie University's policy is to recognise transfers into and transfers out of fair value hierarchy levels as at the end of the reporting period.

33 Fair Value Measurement (continued)**(c) Valuation techniques used to derive level 2 and level 3 fair values***(i) Borrowings*

The fair value of the bonds disclosed in Note 23(c) are based on observable price quotations at the reporting date (Level 1).

(ii) Assets or liabilities not traded in active markets

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2.

(iii) Property, Plant and Equipment

The fair value of property, plant and equipment is measured on an existing use basis, where there are no feasible alternative uses in the existing natural, legal, financial and sociopolitical environment. However, in the limited circumstances where there are feasible alternative uses, assets are valued at their highest and best use. Fair value of property, plant and equipment is determined based on the best available market evidence, including current market selling prices for the same or similar assets. Where there is no available market evidence, the asset's fair value is measured at its market buying price, the best indicator of which is depreciated replacement cost.

- Off-campus buildings and tenanted on-campus buildings are assessed annually by an independent expert valuer. Observable market transactions or market information is used when available (Sales Comparison Approach and Income Capitalisation Approach). These assets are located in established and relatively liquid markets and are classified as Level 2.

- On-campus non-tenanted buildings and infrastructure are assessed annually by an independent expert valuer. Additionally, revaluation adjustments may be made during the year if there are significant changes in either expected use or duration of use for assets in these classes. As market information is not observable, other valuation techniques (including discounted replacement value) are used that maximise the use of relevant observable inputs (including utilising State Government approved Campus Concept Plans) and minimise the use of unobservable inputs. These assets are classified as Level 3.

(iv) Library Special Collections

The Library Special Collection is revalued every three years by an independent expert valuer. The collections are classified as Level 3 due to the limited number of external observable inputs.

(v) Works of Art

Works of Art are revalued every three years by an independent external valuer, on the basis of market value for existing use. The collection is classified as Level 3 due to the limited number of external observable inputs.

(vi) Land

Land is assessed annually by an independent expert valuer. Significant inputs include existing zoning rights, specific planned uses for each precinct of Campus Land (as described in the government approved Concept Plan), specific floor space maximums for several precincts, and market sale evidence. Discounts have been applied to reflect restricted use and the large land parcel size. Land is classified as Level 2.

(vii) Equity investment in controlled entities (MQ Health Pty Ltd)

Equity investments in controlled entities are fair valued every year using a five year discounted cashflow model which includes a terminal value. A discount rate is selected based on the weighted average cost of capital of comparable organisations within the Australian private healthcare sector.

(d) Fair value measurements using significant unobservable inputs (level 3)*(i) Valuation inputs and relationships to fair value*

Buildings represent the majority of the assets classified within level 3. Remaining Useful Life is the largest unobservable input for this asset class. An increase/decrease in the term of useful life by +/- 5% would increase/decrease fair value by \$41.3m.

34 Retirement benefit obligations

All University employees, including casuals, receive superannuation benefits equal to or exceeding the government Superannuation Guarantee Levy.

(a) Employee Benefits - Unfunded Defined Benefit Superannuation Liabilities*Accounting Policy*

The University contributes to three closed state pension schemes within the State Authorities Superannuation Trustee Corporation, namely the State Authorities Superannuation Scheme (SASS), the State Superannuation Scheme (SSS) and the State Authorities Non-contributory Superannuation Scheme (SANCS), which are subject to reimbursement arrangements under the Higher Education Support Act 2003 in the proportion of 78:22 from the Commonwealth and the State Governments respectively. Cash contributions to these three schemes in 2019 and 2018, as well as reimbursements received from the Commonwealth and State Governments, are detailed in note 35(h) and are shown in the Statement of Cash Flows.

These schemes are defined benefit schemes, providing defined lump sum benefits based on years of service and final average salary.

A liability in respect of these plans is recognised in note 24, and is measured as the present value of the defined benefit obligation at the reporting date less the fair value of the superannuation fund's assets at that date and any unrecognised past service cost. The present value of the defined benefit obligation is based on expected future payments which arise from membership of the fund to the reporting date, calculated annually by independent actuaries using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Remeasurement gains and losses and past service costs are not recognised in the Income Statement or Statement of Comprehensive Income, due to the government reimbursement arrangements noted above. Instead, a debtor is shown in note 14, to the same value of the liability in note 24, reflecting the funds owing from the Federal and State Governments to cover the unfunded element of the three schemes.

(b) Fund specific disclosure*State Authorities Superannuation Trustee Corporation*

The Pooled Funds hold in trust the investments of the State Authorities Superannuation Scheme (SASS), State Authorities Non-contributory Superannuation Scheme (SANCS) and State Superannuation Scheme (SSS) which are now closed NSW public sector superannuation defined benefit schemes.

The University does not expect to make contributions to any Pooled Fund Schemes in 2019 (2018: Nil) aside from normal payments made under the Superannuation Guarantee Levy for those employees who are members of these funds, and minor payments for recently retired pensioners with a pensionable salary at exit that is higher than the expected notional salary as calculated by the scheme administrators.

The weighted average duration of the defined benefit obligation is 10.1 years (2018:10.6 years).

Professorial Superannuation Fund

The Professorial Superannuation Fund (PSF) is closed to new members and provides a combination of an accumulation benefit and a defined benefit. The University expects to make \$0.3m in contributions in 2020 (2019: \$0.3m) to the Professorial Superannuation Scheme.

Pooled Funds - maturity analysis

The expected maturity analysis of undiscounted benefit payments is as follows:

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
	\$'000	\$'000	\$'000	\$'000	\$'000
Defined benefit obligations - 31 December 2019	33,521	32,483	91,662	426,556	584,222
Defined benefit obligations - 31 December 2018	32,730	32,134	92,206	448,354	605,424

34 Retirement benefit obligations (continued)**(b) Fund specific disclosure (continued)****Professorial Superannuation Fund - maturity analysis**

The expected maturity analysis of undiscounted benefit payments is as follows:

	Less than	Between 1	Between 2	Over 5	Total
	1 year	and 2 years	and 5 years	years	
	\$'000	\$'000	\$'000	\$'000	\$'000
Defined benefit obligations - 31 December 2019	1,261	1,204	3,251	7,384	13,100
Defined benefit obligations - 31 December 2018	1,407	1,333	3,545	7,348	13,633

(c) Categories of plan assets**Pooled Funds - key assumptions**

The analysis of the plan assets at the end of the reporting period is as follows:

	2019 (%)		2018 (%)	
	Active Market	No Active Market	Active Market	No Active Market
Cash and Cash Equivalents	4.0	5.0	4.0	6.0
Equity instruments	45.0	6.0	38.0	7.0
Debt instruments	-	8.0	-	9.0
Property	2.0	7.0	2.0	7.0
Other	-	23.0	1.0	26.0
Total	51.0	49.0	45.0	55.0

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	2019	2018
	%	%
Discount rate	1.37	2.3
Expected return on plan assets	7.4	7.4
Expected rates of salary increase	3.2	2.7-3.2
Expected rates of CPI increase	1.75-2.5	2.0-2.5

Professorial Superannuation Fund - key assumptions

The analysis of the plan assets at the end of the reporting period is as follows:

	2019 (%)		2018 (%)	
	Active Market	No Active Market	Active Market	No Active Market
Cash and Cash Equivalents	19.8	-	18.9	-
Equity instruments	49.6	-	50.9	-
Debt instruments	-	16.3	-	11.1
Other	-	14.3	-	19.1
Total	69.4	30.6	69.8	30.2

34 Retirement benefit obligations (continued)**(c) Categories of plan assets (continued)**

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	2019	2018
	%	%
Discount rate	1.2%	2.2%
Expected rates of salary increase	2.0	2.0
Pension growth rate	3.0%	3.0%

(d) Actuarial assumptions and sensitivity

The sensitivity of the Pooled Funds defined benefit obligation to change in the significant assumptions is:

	Change in assumption	Impact on defined obligation	
		Increase in assumption	Decrease in assumption
Discount rate	1%	Decrease by 9.76%	Increase by 11.64%
Rate of CPI increase	0.5%	Increase by 5.7%	Decrease by 5.3%
Rate of salary increase	0.5%	Increase by 0.12%	Decrease by 0.12%
Rate of pensioner mortality	0.5%	Increase by 1.06%	Decrease by 1.14%

The sensitivity of the Professorial Superannuation Fund defined benefit obligation to change in the significant assumptions is:

	Change in assumption	Impact on defined obligation	
		Increase in assumption	Decrease in assumption
Discount rate	0.5%	Decrease by 4%	Increase by 4.2%
Salary/ pension growth rate	0.5%	Increase by 4.2%	Decrease by 4%

The above sensitivity analyses are based on a change in an assumption while holding all the other assumptions constant. In practice this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method has been applied as when calculating the defined benefit liability recognised in the Statement of Financial Position.

The methods and types of assumptions used in the preparation of the sensitivity analysis did not change compared to the prior period.

34 Retirement benefit obligations (continued)

(e) Statement of financial position amounts

	\$'000	\$'000	\$'000	\$'000	\$'000
Note	SASS	SANCS	SSS	PSF	Total
Net liability reconciliation - 2019					
Defined benefit obligation	32,376	4,771	555,882	13,100	606,129
Fair value of plan assets	(14,535)	(608)	(36,020)	(10,508)	(61,671)
Net liability	17,841	4,163	519,862	2,592	544,458
Reimbursement rights - 2019					
Opening value of reimbursement right	16,041	4,791	496,660	-	517,492
Expected return on reimbursement rights	(1,299)	-	246	-	(1,053)
Remeasurements	3,099	(628)	22,956	-	25,427
Closing value of reimbursement right	17,841	4,163	519,862	-	541,866
Present value obligations - 2019					
Opening defined benefit obligation	35,090	5,176	530,272	13,633	584,171
Current service cost	471	153	-	245	869
Interest expense	755	108	12,154	276	13,293
	36,316	5,437	542,426	14,154	598,333
Remeasurements					
Actuarial losses/(gains) arising from changes in demographic assumptions	837	184	43,671	864	45,556
Actuarial losses arising from changes in financial assumptions	1,428	(175)	(3,557)	(353)	(2,657)
Experience losses/(gains)	-	-	-	-	-
	2,265	9	40,114	511	42,899
Contributions					
Plan participants	356	-	68	-	424
	356	-	68	-	424
Payments from plan					
Benefits (paid)	(6,505)	(697)	(25,822)	(1,321)	(34,345)
Taxes, premiums and expenses (paid)	(56)	22	(904)	(244)	(1,182)
	(6,561)	(675)	(26,726)	(1,565)	(35,527)
Closing defined benefit obligation	32,376	4,771	555,882	13,100	606,129

34 Retirement benefit obligations (continued)

(e) Statement of financial position amounts (continued)

	\$'000	\$'000	\$'000	\$'000	\$'000
Note	SASS	SANCS	SSS	PSF	Total
Present value of plan assets - 2019					
Opening fair value of plan assets	19,049	385	33,612	10,200	63,246
Interest income	380	7	913	210	1,510
	19,429	392	34,525	10,410	64,756
Remeasurements					
Actual gains/(losses) on plan assets, excluding amounts included in net interest expense	1,299	-	(246)	1,373	2,426
	1,299	-	(246)	1,373	2,426
Contributions					
Employers	11	891	28,399	290	29,591
Plan participants	356	-	68	-	424
	367	891	28,467	290	30,015
Payments from plan					
Benefits (paid)	(6,504)	(697)	(25,822)	(1,321)	(34,344)
Taxes, premiums and expenses (paid)	(56)	22	(904)	(244)	(1,182)
	(6,560)	(675)	(26,726)	(1,565)	(35,526)
Closing fair value of plan assets	14,535	608	36,020	10,508	61,671
Net liability reconciliation - 2018					
Defined benefit obligation	35,090	5,176	530,272	13,633	584,171
Fair value of plan assets	(19,049)	(385)	(33,612)	(10,200)	(63,246)
Net liability	16,041	4,791	496,660	3,433	520,925
Opening value of reimbursement right	14,560	5,576	489,590	-	509,726
Expected return on reimbursement rights	206	(3)	248	-	451
Remeasurements	1,275	(782)	6,822	-	7,315
Closing value of reimbursement right	16,041	4,791	496,660	-	517,492

34 Retirement benefit obligations (continued)**(e) Statement of financial position amounts (continued)**

	Note	\$'000 SASS	\$'000 SANCS	\$'000 SSS	\$'000 PSF	\$'000 Total
Present value obligations - 2018						
Opening defined benefit obligation		36,727	5,547	523,263	14,049	579,586
Current service cost		595	168	46	228	1,037
Interest expense		910	132	13,464	375	14,881
		<u>38,232</u>	<u>5,847</u>	<u>536,773</u>	<u>14,652</u>	<u>595,504</u>
Remeasurements						
Actuarial losses/(gains) arising from changes in demographic assumptions		(471)	(87)	2,468	-	1,910
Actuarial losses arising from changes in financial assumptions		332	71	16,658	268	17,329
Experience losses		433	221	1,016	248	1,918
		<u>294</u>	<u>205</u>	<u>20,142</u>	<u>516</u>	<u>21,157</u>
Contributions						
Plan participants		393	-	104	-	497
		<u>393</u>	<u>-</u>	<u>104</u>	<u>-</u>	<u>497</u>
Payments from plan						
Benefits (paid)		(4,681)	(794)	(25,575)	(1,307)	(32,357)
Taxes, premiums and expenses (paid)/received		852	(82)	(1,172)	(228)	(630)
		<u>(3,829)</u>	<u>(876)</u>	<u>(26,747)</u>	<u>(1,535)</u>	<u>(32,987)</u>
Closing defined benefit obligation		<u>35,090</u>	<u>5,176</u>	<u>530,272</u>	<u>13,633</u>	<u>584,171</u>
Present value of plan assets - 2018						
Opening fair value of plan assets		22,167	(29)	33,673	11,917	67,728
Interest income		524	1	834	279	1,638
		<u>22,691</u>	<u>(28)</u>	<u>34,507</u>	<u>12,196</u>	<u>69,366</u>
Remeasurements						
Actual gains/(losses) on plan assets, excluding amounts included in net interest expense		(206)	4	(248)	(461)	(911)
		<u>(206)</u>	<u>4</u>	<u>(248)</u>	<u>(461)</u>	<u>(911)</u>
Contributions						
Employers		-	1,285	25,996	-	27,281
Plan participants		393	-	104	-	497
		<u>393</u>	<u>1,285</u>	<u>26,100</u>	<u>-</u>	<u>27,778</u>
Payments from plan						
Benefits (paid)		(4,681)	(794)	(25,575)	(1,307)	(32,357)
Taxes, premiums and expenses (paid)/received		852	(82)	(1,172)	(228)	(630)
		<u>(3,829)</u>	<u>(876)</u>	<u>(26,747)</u>	<u>(1,535)</u>	<u>(32,987)</u>
Closing fair value of plan assets		<u>19,049</u>	<u>385</u>	<u>33,612</u>	<u>10,200</u>	<u>63,246</u>

34 Retirement benefit obligations (continued)**(f) Ageing of net liability and reimbursement rights**

	Note	\$'000 SASS	\$'000 SANCS	\$'000 SSS	\$'000 PSF	\$'000 Total
Net liability 2019						
Current	24	5,927	777	26,817	-	33,521
Non-current	24	11,914	3,386	493,045	2,592	510,937
Total net liability		<u>17,841</u>	<u>4,163</u>	<u>519,862</u>	<u>2,592</u>	<u>544,458</u>
Reimbursement rights 2019						
Current	14	5,927	777	26,817	-	33,521
Non-current	14	11,914	3,386	493,045	-	508,345
Total reimbursement rights		<u>17,841</u>	<u>4,163</u>	<u>519,862</u>	<u>-</u>	<u>541,866</u>
Note						
Net liability 2018						
Current	24	5,506	776	26,448	-	32,730
Non-current	24	10,535	4,015	470,212	3,433	488,195
Total net liability		<u>16,041</u>	<u>4,791</u>	<u>496,660</u>	<u>3,433</u>	<u>520,925</u>
Reimbursement rights 2018						
Current	14	5,506	776	26,448	-	32,730
Non-current	14	10,535	4,015	470,212	-	484,762
Total reimbursement rights		<u>16,041</u>	<u>4,791</u>	<u>496,660</u>	<u>-</u>	<u>517,492</u>

(g) Amounts recognised in Other Comprehensive Income

	\$'000	\$'000
	PSF	PSF
	2019	2018
Remeasurements		
Actuarial losses arising from changes in financial assumptions	(864)	(268)
Actuarial losses arising from experience adjustments	353	(248)
Actual return on plan assets less interest income	1,373	(461)
Total remeasurements in Other Comprehensive Income	<u>862</u>	<u>(977)</u>

(h) UniSuperAccounting Policy

The University also contributes to UniSuper Defined Benefit Plan ("UniSuper") (formerly Superannuation Scheme for Australian Universities) (SSAU) for academic staff appointed since 1 March 1988 and all other staff from 1 July 1991. The UniSuper is a post employment defined contribution plan into which the University pays fixed contributions.

The UniSuper Defined Benefit Division (DBD) is a defined benefit plan under Superannuation Law but, as a result of Clause 34 of the UniSuper Trust Deed, a defined contribution plan under Accounting Standard AASB 119. UniSuper is not considered to be controlled by the University and therefore the excess/shortfall of assets over accrued benefits has not been included in the University's accounts.

35 Acquittal of Australian Government Financial Assistance

(a) Education - CGS and other Education grants

	Commonwealth Grants Scheme#1		Indigenous Student Success Program#2		Access and Participation Fund		Disability Performance Funding#3		Promotion of Excellence in Learning and Teaching		Total
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	
Parent Entity (University) Only	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Financial assistance received in CASH during the reporting period (total cash received from Australian Government for the program)	176,572	175,682	1,363	1,426	2,835	2,712	630	491	(63)	(10)	181,337
Net accrual adjustments	1,023	59	(25)	-	-	-	-	-	-	-	998
Revenue for the period	177,595	175,741	1,339	1,426	2,835	2,712	630	491	(63)	(10)	182,336
Surplus from the previous year	-	-	14	-	-	34	-	-	29	76	43
Total revenue including accrued revenue	177,595	175,741	1,353	1,426	2,835	2,746	630	491	(34)	66	182,379
Less expenses including accrued expenses	(177,595)	(175,741)	(1,353)	(1,412)	(2,835)	(2,746)	(630)	(491)	34	(37)	(182,427)
Surplus for the reporting period	-	-	-	14	-	-	-	-	-	29	-

#1 Includes the basic CGS grant amount, CGS – Enabling Loading, Allocated Places, Non Designated Courses and CGS - Special Advances from Future Years.

#2 Indigenous Student Success Program has replaced the Indigenous Commonwealth Scholarships Program and the Indigenous Support Program as of 1 January 2017.

#3 Disability Performance Funding includes Additional Support for Students with Disabilities and Australian Disability Clearing house on Education & Training.

35 Acquittal of Australian Government Financial Assistance (continued)

(b) Higher education loan programmes (excl OS-HELP)

	HECS-HELP (Australian Government payments only)		FEE-HELP		SA-HELP		Total
	2019	2018	2019	2018	2019	2018	
Parent Entity (University) Only	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Cash Payable/(Receivable) at the beginning of the year	2,766	1,643	182	(99)	-	-	1,544
Financial assistance received in cash during the reporting period	166,567	161,113	36,712	35,577	2,359	2,165	198,855
Cash available for the period	169,333	162,756	36,894	35,478	2,359	2,165	200,399
Revenue earned	(167,630)	(159,990)	(35,724)	(35,296)	(2,355)	(2,165)	(197,451)
Net Adjustments	2,222	-	155	-	-	-	2,377
Cash Payable/(Receivable) at the end of the year	3,925	2,766	1,325	182	4	-	2,948

35 Acquittal of Australian Government Financial Assistance (continued)**(c) Department of Education and Training Research****Parent Entity (University) Only**

Financial assistance received in CASH during the reporting period (total cash received from the Australian Government for the program)

Net accrual adjustments

Revenue for the period

Surplus/(deficit) from the previous year

Total revenue including accrued revenue

Less expenses including accrued expenses

Surplus for reporting period

Note	Research Training Program		Research Support Program		Total
	2019	2018	2019	2018	
	\$'000	\$'000	\$'000	\$'000	\$'000
	28,464	27,889	15,795	16,026	44,259
2	28,464	27,889	15,795	16,026	44,259
	-	3,369	-	-	3,369
	28,464	31,258	15,795	16,026	44,259
	(28,464)	(31,258)	(15,795)	(16,026)	(44,259)
	-	-	-	-	-

(d) Total Higher Education Provider Research Training Program expenditure

Research Training Program Fees offsets

Research Training Program Stipends

Research Training Program Allowances

Total for all types of support

Total domestic students	Total domestic students	Total overseas students	Total overseas students
2019	2018	2019	2018
\$'000	\$'000	\$'000	\$'000
18,418	16,629	825	3,016
6,189	10,435	1,379	78
1,011	1,068	642	32
25,618	28,011	2,846	3,126

35 Acquittal of Australian Government Financial Assistance (continued)**(e) Other Capital Funding****Parent Entity (University) Only**

Financial assistance received in CASH during the reporting period (total cash received from Australian Government for the program)

Net accrual adjustments

Revenue for the period

Surplus/(deficit) from the previous year

Total revenue including accrued revenue

Less expenses including accrued expenses

Surplus/(deficit) for the reporting period

Note	Linkage Infrastructure, Equipment and Facilities grant		Total
	2019	2018	
	\$'000	\$'000	\$'000
	500	645	500
2	(40)	-	(40)
	460	645	460
	188	35	188
	648	680	648
	(92)	(492)	(92)
	556	188	556

(f) Australian Research Council Grants**Parent Entity (University) Only**

Financial assistance received in CASH during the reporting period (total cash received from the Australian Government for the program)

Net accrual adjustments

Revenue for the period

Surplus/(deficit) from the previous year

Total revenue including accrued revenue

Less expenses including accrued expenses

Surplus/(deficit) for reporting period

Note	Discovery		Linkages		Networks and Centres		Total
	2019	2018	2019	2018	2019	2018	
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
	16,233	14,522	2,471	2,120	-	-	18,704
	(647)	284	(392)	8	-	-	(1,040)
2	15,586	14,806	2,079	2,128	-	-	17,664
	11,524	11,412	2,981	3,149	-	3,681	14,505
	27,110	26,218	5,060	5,277	-	3,681	32,170
	(15,573)	(14,694)	(1,791)	(2,296)	-	(3,681)	(17,364)
	11,537	11,524	3,269	2,981	-	-	14,806

35 Acquitment of Australian Government Financial Assistance (continued)**(g) OS-HELP**

	2019	2018
Note	\$'000	\$'000
Parent Entity (University) Only		
Cash received during the reporting period	3,660	3,496
Cash spent during the reporting period	<u>(3,658)</u>	<u>(3,383)</u>
Net cash received	2	113
Cash surplus from the previous period	145	32
Cash surplus for the reporting period	<u>147</u>	<u>145</u>

(h) Higher Education Superannuation Program (HESP)

	2019	2018
Note	\$'000	\$'000
Cash received from Commonwealth government during the reporting period	22,102	20,472
Cash received from State government during the reporting period	6,234	5,774
Cash available	<u>28,336</u>	<u>26,246</u>
Cash surplus / (deficit) from the previous period	-	-
Cash available for current period	28,336	26,246
Contributions to specified defined benefit funds	<u>(28,336)</u>	<u>(26,246)</u>
Cash surplus/(deficit) for this period	<u>-</u>	<u>-</u>

35 Acquitment of Australian Government Financial Assistance (continued)**(i) Student Services and Amenities Fee**

	2019	2018
Note	\$'000	\$'000
Parent Entity (University) Only		
Unspent revenue from previous period	-	-
SA-HELP revenue earned	2,355	2,165
Student services and Amenities Fees from students	5,372	4,123
Total revenue expendable in period	<u>7,727</u>	<u>6,288</u>
Student services expenses during period	<u>(7,727)</u>	<u>(6,288)</u>
Unspent student services revenue	<u>-</u>	<u>-</u>



INDEPENDENT AUDITOR'S REPORT

Macquarie University

To Members of the New South Wales Parliament

Opinion

I have audited the accompanying financial statements of Macquarie University (the University), which comprise the Income statement and Statement of comprehensive income for the year ended 31 December 2019, the Statement of financial position as at 31 December 2019, the Statement of changes in equity and the Statement of cash flows for the year then ended, notes comprising a Summary of significant accounting policies and other explanatory information of the University and the consolidated entity. The consolidated entity comprises the University and the entities it controlled at the year's end or from time to time during the financial year.

In my opinion, the financial statements:

- give a true and fair view of the financial position of the University and the consolidated entity, as at 31 December 2019, and of their financial performance and cash flows for the year then ended in accordance with Australian Accounting Standards
- are in accordance with section 41B of the *Public Finance and Audit Act 1983* (PF&A Act) and the Public Finance and Audit Regulation 2015
- comply with the 'Financial Statement Guidelines for Australian Higher Education Providers for the 2019 Reporting Period' (the Guidelines), issued by the Australian Government Department of Education, pursuant to the *Higher Education Support Act 2003* and the *Australian Research Council Act 2001*.

My opinion should be read in conjunction with the rest of this report.

Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements of my report.

I am independent of the University in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants (including Independence Standards)' (APES 110).

I have fulfilled my other ethical responsibilities in accordance with APES 110.

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of public sector agencies
- precluding the Auditor-General from providing non-audit services.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Other Information

The University's annual report for the year ended 31 December 2019, includes other information in addition to the financial statements and my Independent Auditor's Report thereon. The Council of the University is responsible for the other information. At the date of this Independent Auditor's Report, the other information I have received comprise the Statement by Appointed Officers and the annual report.

My opinion on the financial statements does not cover the other information. Accordingly, I do not express any form of assurance conclusion on the other information.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude there is a material misstatement of the other information, I must report that fact.

I have nothing to report in this regard.

University Council's Responsibilities for the Financial Statements

The Council is responsible for the preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards, the PF&A Act and the Guidelines, and for such internal control as the Council determines is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Council is responsible for assessing the University's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance, but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: http://www.auasb.gov.au/auditors_responsibilities/ar3.pdf. The description forms part of my auditor's report.

My opinion does *not* provide assurance:

- that the University carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.



Margaret Crawford
Auditor-General for NSW

6 April 2020
SYDNEY

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CONTACT US

Location: Balaclava Road, North Ryde Sydney Australia
Postal address: Macquarie University NSW 2109 Australia
Business hours: Monday – Friday, 9am – 5pm

T: +61 (2) 9850 7111
F: +61 (2) 9850 7433
mq.edu.au

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SDG icons are embedded throughout this report to highlight projects, research, and stories that align with the UN's SDG targets.



MACQUARIE
University
SYDNEY · AUSTRALIA

Macquarie University
New South Wales 2109
T: +61 (2) 9850 7111

mq.edu.au

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