



**MACQUARIE**  
University  
SYDNEY • AUSTRALIA

# **World-leading research**

# **World-changing impact**

Professor Peter Nelson

Pro Vice-Chancellor (Research Performance and Innovation)



# Macquarie at a glance

## Facts and Figures

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### Our University

- 1964 Founded
- 126ha Freehold park-like land
- 120 Firms in Business Park

### Financials

- \$1 billion Annual budget
- \$2.5 billion Assets
- AA2 Credit rating

### Staff (full-time equivalence)

- 1380 Academic staff
- 1432 Professional staff
- 2812 Total

### Student Enrolments

- 28,721 Domestic
- 10,032 International
- 38,753 Total

### Student Attendance Type

- 26,453 Full-time
- 12,300 Part-time
- 38,753 Total

### Degrees Awarded

- 5880 Undergraduate
- 3969 Postgraduate
- 9849 Total (150,000 alumni)

# Academic structures

Faculties and Graduate School of Management

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Medicine & Health Sciences

Professor Patrick McNeil

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Science & Engineering

Professor Barbara Messerle

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Human Sciences

Professor Simon Handley

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Arts

Professor Martina Möllering

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Business & Economics

Professor Mark Gabbott

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MGSM

Professor Alex Frino

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# Macquarie at a glance

## Research Profile

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**World-leading research**

**World-changing impact**



# Strategic research framework

The underlying architecture

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Research priorities

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Research themes

69

Research streams

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Key objectives

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Specific goals

58

Defined targets

122

Supporting strategies

# Strategic Research Framework

## Our four Key Objectives

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### Research Performance

Accelerate world-leading research performance

### Research Training

Prepare world-ready higher degree research HDR candidates

### Research Collaboration

Engage as a world-recognised research collaborator of choice

### Research Impact

Deliver research with world-changing impact

# Strategic Research Framework

Our five future-shaping Research Priorities

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## Healthy People

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Pioneering health, integrated healthcare and lifelong learning for wellness in our ageing world

## Resilient Societies

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Understanding cultures in our changing world and building ethical, just and inclusive communities

## Prosperous Economies

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Strengthening economic productivity to promote prosperity in our diverse world

## Secure Planet

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Sustaining our interdependent world and exploring our place in the universe

## Innovative Technologies

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Advancing our interconnected world with frontier technologies, systems, designs and creative practice

# Research Centres

Healthy People



## National

Australian Institute of Health Innovation

ARC Centre of Excellence in Cognition and its Disorders

ARC Science of Learning Research Centre

NHMRC Centre of Research Excellence in Mental Health and Substance Abuse

Hearing CRC

## University

Centre for Emotional Health

Centre for Language Sciences

Children and Families Research Centre

Macquarie University Special Education Centre



# Research Centres

Innovative Technologies



## National

ARC Centre of Excellence for Engineered Quantum Systems

ARC Centre of Excellence for Nanoscale BioPhotonics

ARC Training Centre for Molecular Technology in the Food Industry

ARC Centre of Excellence for Ultra-high Bandwidth Devices for Optical Systems

NCRIS AusBiotech

## University

Biomolecular Frontiers Research Centre

Centre of Australian Category Theory

Macquarie University BioFocus Research Centre

MQ Photonics Research Centre

Macquarie University Research Centre in Quantum Science and Technology

Macquarie University WiMed Research Centre

# Research Centres

Prosperous Economies

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University

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Macquarie University Centre for the Health Economy

Faculty

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Centre for Financial Risk

Centre for Workforce Futures

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International Governance and Performance Research Centre

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# Research Centres

Resilient Societies

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University

Ancient Cultures Research Centre

Macquarie University Research Centre for Agency, Values and Ethics

Faculty

Australian Centre for Ancient Numismatic Studies

Centre for Environmental Law

Centre for Media History

# Research Centres

Secure Planet



## National

ARC Centre of Excellence for Core to Crust Fluid Systems

National Centre for Climate Change Adaption Research Facility

## University

Biosecurity Futures Research Centre

Centre in Astronomy, Astrophysics & Astrophotonics

Climate Futures

Genes to Geoscience

Macquarie University Marine Research Centre

Macquarie University Planetary Research Centre

# Facilities

## Macquarie University Hospital

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- Macquarie University Hospital is Australia's first and only private not-for-profit teaching hospital on a university campus
- It combines the best available knowledge and expertise to ensure patients receive a comprehensive and integrated service, as well as the utmost compassion, support and care
- The hospital features the latest technology co-located next to the Faculty of Medicine and Health Sciences
- The hospital's two main research programs are neurosciences and a vascular program



# Facilities

## Australian Proteome Analysis Facility

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- Australian Proteome Analysis Facility (APAF), was the birthplace of the term proteomics in 1995 and was the world's first dedicated high throughput proteomics laboratory
- APAF uses cutting-edge infrastructure, technical excellence and scientific innovation to provide high quality outcomes with professional service
- APAF partners with other organisations to deliver collaborative research outcomes in fields such as
  - Proteomics technology evaluation, research and development
  - Human health research
  - Agricultural research
  - Food research and characterisation
  - Environmental sustainability



# Facilities

## Australian Hearing Hub

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- The Australian Hearing Hub is a unique, world-class facility purpose-designed to facilitate collaborative research into hearing and related speech and language disorders.
- It brings together the University's Language Sciences and Cognitive Sciences, clinical training teams and major not-for-profit organisations offering clinical and related social services for hearing disorders
- Co-located with Cochlear's Global Headquarters
- The Australian Hearing Hub enables ground breaking advances in mapping brain/hearing function, understanding auditory processing, assessing auditory system disorders, developing hearing aid and implant technologies and improving strategies for rehabilitation and learning to hear



# Research Activity

2014 At a glance

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MACQUARIE  
University

Weighted Publications	1,832
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HDR Completions	393
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External Research Income	\$57.9m
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