I am very pleased to present the 2017 Research Highlights Report for Bond University. The vibrant research culture at Bond continues to deliver quality outcomes.

Imagine. Innovate. Inspire. is not only the Research Week theme, but encapsulates the research focus at the University. Our postgraduate research students imagine the moment they have the answer to their thesis question. Our research teams innovate through their commitments to their work. Our results inspire us to continue our research to make the world a better place.

My sincere thanks to everyone in our research community, the researchers, staff, committee members, students, partners and collaborators.

VICE-CHANCELLOR'S RESEARCH AWARDS 2017

These awards celebrate the outstanding achievement of Bond’s researchers.

**Research Excellence**

Professor Tammy Hoffmann’s research is in the area of evidence-based practice, primarily about helping clinicians and patients to make evidence-informed health decisions. She has been awarded seven National Health and Medical Research Council (NHMRC) grants, authored 202 publications, and supervised eight Higher Degree by Research (HDR) and 25 honours students to completion.

**Research Supervision**

Professor Paul Glasziou’s key research interests include evidence-based medicine, non-drug treatments, and overdiagnosis. He currently supervises 11 PhD students. Over the period of Higher Degree by Research (HDR) supervision Professor Glasziou’s students develop a wide range of research skills and track record in publication, teaching, and other areas with an eye to their future career as an independent researcher.

**Early Career Research Excellence**

Associate Professor Rob Orr leads the Tactical Research Unit (TRU) at Bond University where he oversees and conducts various multinational research projects in tactical personnel (military, police and firefighter). Rob has published 55 research papers in peer-reviewed journals, two book chapters, four technical reports, presented 68 papers at national / international conferences, and is supervisor for nine postgraduate research students.
Grants

Reflecting our international institutional reputation and the regard held for our individual researchers, the research effort at Bond University continues to grow. Our staff participated in successful grant applications in excess of $12 million during 2017. Some highlights from the year include:

- Professor Paul Glasziou is part of a National Health and Medical Research Council (NHMRC) Partnership Centre for Health System Sustainability, led by Macquarie University. Total NHMRC funds awarded were $5,250,000 over five years. Bond will receive $729,527.
- Professor Paul Glasziou is also a member of the NHMRC Centre for Research Excellence in Digital Health, led by Macquarie University. Total NHMRC funds awarded were $2,498,649 over five years. Bond will receive $224,076.
- Professor Paul Glasziou is also part of an NHMRC Centre for Research Excellence – Australia & New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network, led by Monash University. Total NHMRC funds awarded were $2,497,653.50 over five years.
- Professor Tammy Hoffman is part of an NHMRC Project Grant, ‘Physical activity coaching for adults with physical disabilities: a pragmatic randomised controlled trial’, lead by the University of Sydney. Total funds awarded were $1,371,184.
- Associate Professor Rob Orr, head of our Tactical Research Unit, has been contracted by the Department of Veterans’ Affairs (DVA) to lead the research project ‘Measuring Occupational Exposures to Osteoarthritis in the Lower Limb in ADF Job Categories’, from October 2017 to May 2019. Associate Professor Orr will be working in collaboration with Prof Rod Pope, Charles Sturt University and Bond Adjunct.
- Professor Chris Del Mar was awarded funding by the NHMRC for the Cochrane Acute Respiratory Infections Group in the amount of $368,086.23 over three years.
- Associate Professor Bruce Vanstone received funding of $50,197 from the Department of Industry, Innovation and Science and Rapid Media Pty Ltd under the Innovation Connections program for the project ‘Consumer attribution modelling platform for non-digital media channels.’ A Bond PhD student, Mark Johnman is placed with the business Rapid Media Pty Ltd under a Researcher Placement.
- Dr James Birt is part of an Advance Queensland Ignite Ideas Fund grant, awarded to TCB Innovations Pty Ltd, valued at $100,000 to conduct the ‘Smart First Aid - Leading the World in 1st Aid Innovation’ project.

Cutmore Bequest

The Clem Jones Research Centre for Regenerative Medicine received a multi-million dollar bequest from Cora Grace Cutmore. The funds will be directed to research into the development of stem cell therapies, including those to treat age-related macular degeneration.

Professor Helen O’Neill, one of Australia’s leading immunology and stem cell experts, and newly-appointed Cutmore Distinguished Professor of Stem Cell Research at Bond University, said Cora’s bequest was highly significant and very much appreciated.

In recent years Professor O’Neill and her team of researchers in Bond University’s Clem Jones Research Centre for Regenerative Medicine have made a number of medical breakthroughs in the journey to restoring sight to patients with acute macular degeneration.
IMPACT

Research Training Impact

With postgraduate degrees offered in over 60 discipline areas, multidisciplinary supervision, and a focus on support and training, the Higher Degree by Research (HDR) cohort at Bond University continues to thrive.

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<tr>
<th>HDR students enrolled (FTE)</th>
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<tbody>
<tr>
<td>Bond Business School</td>
<td>25</td>
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<tr>
<td>Faculty of Law</td>
<td>26</td>
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<tr>
<td>Faculty of Society &amp; Design</td>
<td>66</td>
</tr>
<tr>
<td>Faculty of Health Sciences &amp; Medicine</td>
<td>71</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>188</strong></td>
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<table>
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<tr>
<th>HDR student completions</th>
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</tr>
<tr>
<td>Faculty of Society &amp; Design</td>
<td>13</td>
</tr>
<tr>
<td>Faculty of Health Sciences &amp; Medicine</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
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RESEARCH CAPACITY BUILDING

Principal Supervisors Accreditation Program (PSAP)

The Principal Supervisor Accreditation Program (PSAP) was developed as a new pathway to Higher Degree by Research (HDR) supervision capacity and was implemented as a research capacity-building initiative at Bond University in 2017. The focus of PSAP is promoting best practice and creating a culture of thoughtful, active discussion around supervision. PSAP participants attend workshops with both internal and external presenters and work individually with a senior mentor to write a reflective portfolio, create a research supervision tool to share and give a presentation to colleagues.

PSAP@Bond 2017 had 13 participants successfully complete the program and qualify as principal supervisors (eight from the Faculty of Health Sciences & Medicine; two from the Faculty of Society & Design; two from the Faculty of Law, and one from Core Curriculum).

Researcher Development and Mentoring Scheme

The Researcher Development and Mentoring Scheme at Bond University was launched in 2017 to provide every academic with the opportunity to reach their potential in a culture of research, learning and teaching excellence.

Mentoring@Bond empowers an academic to reach their potential through a supportive relationship network that focuses collegiality on personal, professional and career development. Mentoring is a process whereby a more experienced academic (the mentor) offers guidance and advice to a less experienced academic (the mentee) to assist them to reach their career aspirations. The mentor encourages the mentee to identify their goals and aspirations, then empowers the mentee to pursue and achieve them.

Coaching

Coaching @ Bond unlocks the potential of academics to maximize their performance by facilitating personal learning and development through skillful questioning, challenge and feedback. From 2018, Bond University offers researcher coaching workshops. These collaborative workshops challenge academics to explore and develop their own capabilities through learning in action. The format of the coaching workshop is structured exploration with a facilitator to increase self-awareness of choices and actions.
FACULTY RESEARCH CENTRES

Centre for Actuarial and Financial Big Data Analytics

The Centre aims to raise the profile of Bond University in the Big Data Analytics research space. This will help establish meaningful engagement with organisations, both government and private, which are expected to lead to funding opportunities and joint research collaborations.

Members of the Centre have specific big data analytics interests in finance, machine learning, risk management and climate change, amongst others. They have a genuine desire to collaborate and contribute their complimentary skills on a range of innovative big data projects.

Centre for Autism Spectrum Disorder

The Centre for Autism Spectrum Disorder (CASD) exists as a result of great demand for evidence-based and specialised treatment programs in the Gold Coast autism community. CASD is a multidisciplinary research and education facility dedicated to assisting people on the autism spectrum as well as their families, caregivers, educators and other professionals involved in their support.

Centre for Comparative Construction Research

Centre for Comparative Construction Research (CCCR) currently occupies a niche position by specialising in research on performance and productivity issues of the global construction industry, and other matters relating to comparative construction, such as:

- Project management effectiveness
- Building quality
- Building refurbishment and retrofit
- Bidding theory
- Green building design
- Environmental impact
- Infrastructure procurement and finance

Centre for Urology Research

The mission of the Centre for Urology Research (CUR) is to enhance our knowledge of the lower urinary tract with the aim of developing new treatments or enhancing current treatments of the following conditions:

- Benign prostatic hyperplasia
- Prostate and bladder cancer
- Overactive bladder
- Stress incontinence
- Erectile dysfunction
- Interstitial cystitis

Clem Jones Research Centre for Regenerative Medicine

The Clem Jones Research Centre for Regenerative Medicine was established to investigate the therapeutic use of stem cells in tissue repair and disease. An important goal of the Centre is to combine research excellence in stem cell science with clinical translation and to enhance, induce or transplant stem cells for patient benefit.

The Centre supports studies in the broader field of regenerative medicine and stem cell biology, combining stem cell science, biomaterials, tissue engineering, tissue regeneration, intelligent drug delivery and advanced surgery.

Current research projects include stem cell therapy for age-related macular degeneration, regeneration of spleen from stem cells and enhancing hematopoiesis during ageing and disease.

Interdisciplinary Centre for the Artificial Mind

The Interdisciplinary Centre for the Artificial Mind (iCAM) is an international Research Centre undertaking innovative research on the mind’s development over a lifespan, in interaction with artificial environments. iCAM is dedicated to making the following over-arching contributions:

- to guide new investigation into human-artificial environment interaction,
- to analyse the development of mind within artificial environments,
- to provide preventive solutions for human health disorders, and explore treatments of neurological diseases.
Centre for Research in Evidence-Based Practice

The Bond University Centre for Research in Evidence-Based Practice (CREBP) was established to support research into Evidence-Based Practice initially based on the NHMRC Australia Fellowship grant awarded to Professor Paul Glasziou. As a leader in Evidence-Based Medicine, Professor Glasziou’s work is to improve health care by developing better communication between clinicians and researchers, and a clearer understanding of the causes of, and solutions to, gaps between research evidence and its application in practice.

The key areas of focus are to better understand the gaps between research evidence and its application in practice, including areas such as the applicability of treatments to individuals, the effectiveness of diagnostic and disease monitoring processes, and the cognitive processes underpinning clinicians’ decisions about diagnosis and treatment.

Centre for Professional Legal Education

The Centre for Professional Legal Education is a community of legal educators, researchers, practitioners and administrators who collaborate in defining, understanding, engaging in and promoting best practice in the teaching of law, with a particular emphasis upon professional legal education, and in developing and delivering professional legal training programs of the highest quality.

RESEARCH WEEK 2017

Imagine. Innovate. Inspire.

This was the theme for the sixth annual Research Week at Bond University. Research Week is an opportunity for attendees to learn more about research at Bond University. The week-long event, held in October, represented a collaborative, community outreach effort for the University.

In 2017 there were 17 events across the week, attended by over 1,800 people.

Key events held during the week include:

• Dr Sven Brodmerkel and ABC RN hosted an evening presentation on Artificial Intelligence in the creative industries.
• Professor Peter Reaburn profiled our sports and exercise research in two panel events. Associate Professor Lotti Tajouri presented anti-doping technologies.
• Professor Liz Isenring, Tibor Paller and Cherie Hugo ran a cooking demonstration about cost efficient food presentation in aged care, at The Kitchens in Robina Town Centre.
• The Bond Business School and Business Links hosted a Big Data evening which included presentations from Professor Steve Stern and Dr Mike O’Neill.
• The Bond University Women’s Network breakfast, attended by 150 people, showcased three of our women researchers who discussed their research journey.
• The Centre for Professional Legal Education hosted a day symposium to discuss ‘Law without Lawyers?’
• The Vice-Chancellor hosted the annual Research Week Gala Dinner, where the three Vice-Chancellor Research Awards were announced.
• The inaugural Medical Program Research Conference was attended by 600 medical students, staff and clinicians.