Central Commencement Program
For New Higher Degree Research Candidates
Semester 1, 2018
Acknowledgement of Country
HDR@MQ: An Introduction

Professor Nick Mansfield, Dean HDR
What is HDR?

• Highest Standard Academic Qualification
• High Level Academic Research
• Major component of world research
Goal: Doctorate

- “Graduates at this level will have systematic and critical understanding of a complex field of learning and specialised research skills for the advancement of learning and/or for professional practice.”

- Australian Qualifications Framework
Goal: Research Masters

“Graduates at this level will have specialised knowledge and skills for research and/or professional practice and/or further learning.”

- Australian Qualifications Framework
HDR Administration

- DVC (Research): Prof Sakkie Pretorius
- Dean HDR: Prof Nick Mansfield
- Director, HDRO: Dr Ren Yi
- Associate Deans
HDR Key Committees

- Academic Senate
- RRTC (Research and Research Training Committee)
- TESC (Thesis Examination Sub-Committee)
- HDR Management Committee
- Ethics Committees
Dean HDR Roles

- HDR Quality
- MRes and HDR curriculum
- Work with HDRO on Admissions and Scholarships
- HDR Examination
- HDR Support and Development
- HDR Student Feedback
- Contribute to Policy and Development
- Australian Council of Graduate Research
1. Supervision: A/P Bill Ashraf and A/P Merilyn Childs
2. HDR Learning Skills: Dr Juliet Lum (Head), Dr Demelza Marlin/Dr Florence Chiew (Social Science), Dr Michelle Jamieson/Dr Emilie Auton (Humanities), Dr Adele Ferguson (Science)
3. HDR Professional Skills (Sally Purcell)
4. HDR Mentors (Kim Tan)
Supervision

- Principal Supervisor
- Associate Supervisor
- Adjunct Supervisor
- (Industry End-User Supervisor
- HDR Cultural Advisor
- HDR Advisor)

- HDR Supervision Policy and Procedure

- Becoming an autonomous researcher
You and the University

• Supervision
• Intellectual Climate
• Support Services
• Challenges

• The Importance of What You Do!
Understanding the Research Environment and Higher Degree Research Journey

Central Commencement Program, February 2018

Dr Louise Wedlock
Deputy Director HDR Governance and Operations
Higher Degree Research Office
A few facts about us:

- multi-billion dollar investment in facilities and infrastructure, including the most high-tech university library in Australia.
- Australia's first and only private, not-for-profit hospital on a university campus.
- A campus in one of the largest business and technology precincts in the southern hemisphere, creating a hub of innovation and excellence.
- A 126-hectare park-like campus protected by our award-winning sustainability practices.
- Awarded five stars in the prestigious QS Stars rating system for high performance in areas such as teaching, research, graduate employability and facilities.

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<tr>
<th>Degrees awarded</th>
<th>Student enrolments</th>
<th>Staff</th>
<th>Alumni</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate Total - 5118</td>
<td>Full-time students - 27,795</td>
<td>Academic staff - 1525</td>
<td>Total - 164,000</td>
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<tr>
<td>Postgraduate Total - 4,163</td>
<td>Part-time students - 12,414</td>
<td>Professional staff - 1674</td>
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<td>Total - 9,281</td>
<td>Domestic students - 31,568</td>
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<td>International students - 8,641</td>
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<td>Total students - 40,209</td>
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MQ INTERNATIONAL COLLABORATIONS 2007- 2016
Clarivate Analytics Report 2017 (Web of Sciences)

7,280 Web of Science Documents
20.6% of Documents in Top 10%

1.89 Category Normalised Citation Impact
178 Highly Cited Documents (top 1%)
Macquarie’s structures

- Faculty of Science and Engineering
- Faculty of Arts
- Faculty of Human Sciences
- Faculty of Business and Economics
- Faculty of Medicine & Health Sciences
- Macquarie Graduate School of Management
Research Priorities

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

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

Prosperous Economies
Strengthening economic productivity to promote prosperity in our diverse world

Secure Planet
Sustaining our interdependent world and exploring our place in the universe

Innovative Technologies
Advancing our interconnected world with frontier technologies, systems, designs and creative practice
# Macquarie’s Strategic Context

**AN ACCELERATING AND IMPACTFUL PERFORMANCE IN DISCOVERY**

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<tr>
<td>• Top-performing staff: Increase the number and proportion of research-productive staff</td>
<td>• Attracting quality candidates: Attract high-potential higher degree research candidates</td>
<td>• Strategic engagement: Pursue local, national and international partnerships to complement and enhance areas of current and emerging research strength</td>
<td>• Discovery for innovation: Strengthen basic research capability to drive discovery and underpin innovation</td>
</tr>
<tr>
<td>• World-leading research concentrations: Build on disciplinary areas of current and emerging research strength and enhance cross disciplinary capability</td>
<td>• Inspirational supervision: Provide outstanding supervisory expertise and mentoring</td>
<td>• Deep and authentic collaborations: Build mutually beneficial, long-term engagement with institutional, national and international colleagues</td>
<td>• Cross-disciplinary inquiry: Optimise the opportunities for inquiry across disciplines and structures</td>
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<tr>
<td>• Growing research investment: Accelerate growth of external research income to facilitate world-leading research</td>
<td>• Transformative research environment: Embed higher degree research candidates in areas of current and emerging strength</td>
<td>• Synergistic end user partnerships: Pursue shared goals with end users to maximise delivery of solutions and return on investment</td>
<td>• Diversity of impact: Foster an environment that facilitates and values diverse forms of knowledge creation, application, and creative practice to benefit society</td>
</tr>
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<td>• Pervasive best practice: Continuously improve policies, processes and systems that support the pursuit of excellence and integrity in research and scholarship</td>
<td>• Real-world engagement: Provide opportunities for career enhancing exposure to industry and the community</td>
<td>• Streamlined support: Practice efficient and effective facilitation of research collaborations</td>
<td>• Challenge-focused research: Conduct research that addresses national and global challenges and delivers significant benefits</td>
</tr>
<tr>
<td>• Leading-edge infrastructure: Secure world-leading research infrastructure, facilities and equipment</td>
<td>• Global champions: Provide internationally-aligned degrees with global relevance</td>
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</table>
Mr Simon Klein Cotutelle
PhD Candidate in Biology
Under the supervision of
Dr Andrew Barron
Cotutelle scholarship holder.
University Scholarships @ MQ

MQ invests around AUD$35 mil. per year in scholarship funding, enabling over 200 new HDR and MRES enrolments per year.

- International Macquarie University Research Excellence Scholarships (MQ/IMQRTP & MQ/IMQRES)
- Cotutelle IMQRES scholarships with research partner universities
- Faculty top-up Scholarships, e.g. grants for travel & research related expenses
National Structure of Research Integrity Management in Australia

**National Responsibility**
1. 2007 Australian Code for Responsible Conduct of Research (2007 Code)
2. Australian Research Integrity Committee

**Institutional Responsibility**
1. The Macquarie University Code for the Responsible Conduct of Research
2. Institutional Policy on Research Misconduct

**Researcher Responsibility**
1. HDR students Induction/Orientation program
2. Workshops on Research Integrity
Sakkie Pretorius

Professor
Deputy Vice- Chancellor, Research, Deputy Vice-Chancellor (Research) - Office

Phone  
+61 2 9850 8645

E-mail  
sakkie.pretorius@mq.edu.au

Profile

Professor Sakkie Pretorius is internationally recognised as a pioneer in molecular microbiology, biotechnology and translating research outcomes into innovative industry applications. He joined Macquarie University in 2013 and in 2014 his passion for academic excellence and research drove the creation of the University’s strategic research framework, World-leading research World-changing impact. The framework will shape Macquarie’s research priorities over the next decade and build upon the Our University: A Framing of Futures project.

Originally from South Africa, Professor Pretorius studied agriculture at the University of the Free State from 1977 until 1986, when he was awarded a PhD for his work on physical, genetic and biochemical characteristics of yeast. He was appointed Professor of Microbiology at Stellenbosch University in 1993, where he later became the founding director of South Africa’s Institute for Wine Biotechnology.

By identifying some of the unique characteristics of South Africa’s wine production...
Positive-feedback, ratiometric biosensor expression improves high-throughput metabolite-producer screening efficiency in yeast


Solving yeast jigsaw puzzles over a glass of wine: Synthetic genome engineering pioneers new possibilities for wine yeast research

Pretorius, I. S. 1 Nov 2017 In : EMBO Reports. 18, 11, p. 1875-1884 10 p.
Candidature Support

MQ aims to provide you with a research culture, climate and community that supports your research journey. But - it also includes your own engagement with other HDR students, staff and the wider MQ community.

Faculty HDR contacts (Managers):
• Faculty of Business & Economics – Lin Bai
• Faculty of Human Sciences - Robyn Bishop
• Faculty of Arts - Maryanne Hozijan
• Faculty of Science – Jane Yang
• Faculty of Medicine and Health – Tania Kinane / Viviana Bong
• MGSM - Kerry Daniel
MQ Cotutelle and Joint PhD programs
## Background, context and key foundations

### INTERNATIONAL RESEARCH TRAINING PARTNERSHIPS - BASELINE (2016)

<table>
<thead>
<tr>
<th><strong>300+</strong></th>
<th><strong>110</strong></th>
<th><strong>30+</strong></th>
<th><strong>164</strong></th>
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<tbody>
<tr>
<td>Cotutelle and joint PhD candidates*</td>
<td>Cotutelle and joint PhD collaborating partners*</td>
<td>Countries involved in cotutelle and joint PhD arrangements*</td>
<td>Cotutelle candidate completions*</td>
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<table>
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<tr>
<th><strong>75</strong></th>
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<td>Priority partners in 21 countries (and 68 preferred partners)</td>
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<tr>
<td>Regional partnership tiers – strategic, developing and emerging</td>
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<tr>
<th><strong>25</strong></th>
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<tr>
<td>Disciplines involved in current programs</td>
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<table>
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<tr>
<th><strong>41</strong></th>
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<tbody>
<tr>
<td>Universities with Academic Senate approval for joint PhDs</td>
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<table>
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<tr>
<th><strong>112</strong></th>
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<tbody>
<tr>
<td>Current cotutelle and joint PhD candidate enrolments</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th><strong>69</strong></th>
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<tr>
<td>Percent of current candidates with European universities</td>
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<th><strong>20</strong></th>
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<tr>
<td>Percent of current candidates with Chinese universities</td>
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<th><strong>10</strong></th>
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<tr>
<td>MRes exchange partners established (a path to cotutelle/joint PhD)</td>
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<tr>
<td>Strategic tri-lateral partnership: MQ-FU-HAM</td>
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<tbody>
<tr>
<td>Australian university participating in IDEALAB joint PhD</td>
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<th><strong>15</strong></th>
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<tr>
<td>Joint funding agreements with key international funding agencies</td>
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<th><strong>35</strong></th>
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<tbody>
<tr>
<td>IDEALAB PhD candidates (including 30 current enrolments)</td>
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</tbody>
</table>

* Since 1999
International research training partnerships

Key foundation

- 300+ candidates from 110+ universities in 30+ countries*
- 130 current or recent joint PhD candidates
- 68 per cent of current candidates with European universities
- 37 per cent of current candidates with Chinese universities
- 75 partners in current joint PhDs and partnerships
- 3 strategic tri-lateral partnerships with EU, US and Asia
- 15 partner universities participating in JCU/JMU joint PhD
- 15 joint funding agreements with major international funding agencies
- 35 research PhD candidates (including 30 current enrolment)
The key priorities

Quality HDR Programs & Experiences
Develop, maintain and partner with leading international research training programs to ensure outstanding experiences.

Quality HDR Candidates
Attract, develop and retain international HDR candidates of the highest quality.

Quality Funding Sources
Expand the quality and number of funding sources to support international research training.

Quality Institutional Partners
Develop, secure and maintain international research training partnerships with world-leading research institutions.

HDRO World-Leading Research; World-Changing Impact
Key roles

AND FUNCTIONAL RESPONSIBILITIES

Higher Degree Research Office

- Executive Director, Research Training and International Research Training Partnerships
- International Research Training Partnerships
- HDR Management and Co-ordination
- HDR Operations
- MRes Operations
- Office Management and Support
- Projects
- Governance and Management
- Scholarship
- Examinations
- Progression
- Completion

Office of the Dean, Higher Degree Research

- Dean, Higher Degree Research
- HDR Supervision Enhancement
- HDR Learning Skills
- HDR Professional Skills
- HDR Mentors

Faculties

- Associate Deans, HDR
- HDR Managers
- MRes Directors

HDRO
## Cotutelle & Joint PhD

<table>
<thead>
<tr>
<th>Cotutelle</th>
<th>Joint PhD</th>
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<tbody>
<tr>
<td>Joint enrolment at MQ and an overseas university</td>
<td>Joint enrolment at MQ and an overseas university</td>
</tr>
<tr>
<td>Priority institutional partners – but open to all universities subject to approval</td>
<td>Institutional partners require Academic Senate Approval</td>
</tr>
<tr>
<td>Institutional memorandum of understanding (MOU) not compulsory</td>
<td>Institutional MOU/agreement required</td>
</tr>
<tr>
<td>Separate progress assessments</td>
<td>One university is designated as the lead</td>
</tr>
<tr>
<td>Single thesis submitted to both universities</td>
<td>Single thesis submitted to the lead university</td>
</tr>
<tr>
<td>Separate Examination</td>
<td>Joint examination</td>
</tr>
<tr>
<td>Two testamurs</td>
<td>One joint testamur</td>
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<tr>
<td>Two graduation ceremonies</td>
<td>One graduation ceremony</td>
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</table>
**Why do we do it?**
Establishing deep and continuing relationships

<table>
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<tr>
<th>Institutions</th>
<th>Candidate</th>
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<tr>
<td>Deepens and strengthens research collaborations and networks at an institutional level</td>
<td>Exposure to different academic environments through joint enrolment and supervision</td>
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<tr>
<td>Fosters a higher level of cooperation between researchers in their respective fields through co-supervision</td>
<td>Training experiences and access to the latest research equipment and technologies at two institutions</td>
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<tr>
<td>Provides access to new funding schemes as well as new international enrolments</td>
<td>International networking opportunities that will expand future employment opportunities through exposure to new academic institutions and new industries</td>
</tr>
<tr>
<td>Provides an opportunity to increase joint publications, citation rate and rankings</td>
<td>Access to new funding schemes</td>
</tr>
<tr>
<td>Make the institution more attractive to potential candidates</td>
<td>Experience a new culture and environment and develop soft skills</td>
</tr>
</tbody>
</table>
Historical Distribution by Faculties

- Faculty of Arts: 49%
- Faculty of Business & Economics: 23%
- Faculty of Human Sciences: 18%
- Faculty of Medicine and Health Sciences: 7%
- Faculty of Science and Engineering: 2%
- Macquarie Graduate School of Management: 1%

Legend:
- Faculty of Arts
- Faculty of Business & Economics
- Faculty of Human Sciences
- Faculty of Medicine and Health Sciences
- Faculty of Science and Engineering
- Macquarie Graduate School of Management
Current Distribution by Faculties

- Faculty of Arts: 37.16%
- Faculty of Business & Economics: 10.81%
- Faculty of Human Sciences: 6.08%
- Faculty of Medicine and Health Sciences: 25.00%
- Faculty of Science and Engineering: 17.57%
- Macquarie Graduate School of Management: 3.38%
International Doctorate for Experimental Approaches to Language and Brain

Group photo taken at the Roveto winter school (2015 Feb)

The Erasmus Mundus PhD Program International Doctorate for Experimental Approaches to Language And Brain offers an outstanding interdisciplinary, laboratory-based 3-year doctoral training to its candidates to study structure, processing and foundations of human language, integrating interdisciplinary approaches.
Consortium

The consortium consists of 5 EU-partner universities. 4 in the EU (Universities of Potsdam, DE; Groningen, NL; Trento, IT; Newcastle, GB) and one non-EU university (Macquarie, AU). The full partners have been selected on the basis of their quality and long-standing previous record of cooperation. In addition to this core consortium, there are 16 associated partners from the public and private sector with various expertise; they include:

- six non-EU universities: Hong Kong, HK; Beijing Normal, CN; Lomonosov Moscow State, RU; Université de Genève, CH; National University of Singapore, SG; and the National Research University Higher School of Economics, RU; and the Free University of Brussels;
- four members from the private sector: two with a focus on R&D (Advanced Neuro Technology (ANT) and Entwicklungsgruppe Klinische Neuropsychologie EKN), who are potential co-supervisors; and two publishers who are involved in training (Springer publishers and Psychology Press), and
- seven members of the health sector associated to the consortium who belong to the health sector and provide internships, including a rehabilitation center in Moscow, the largest centre for language impaired people in the world.

By including non-university associated members in monitoring and supporting the program, the employability of IDEALAB professionals in health rehabilitation services will be strengthened as an added value to their excellent preparation for employment in academia and specialized research labs.

### CONSORTIUM OVERVIEW

<table>
<thead>
<tr>
<th>FULL EUROPEAN PARTNERS</th>
<th>FULL NON-EUROPEAN PARTNERS</th>
<th>ASSOCIATED MEMBERS UNIVERSITY</th>
<th>ASSOCIATED MEMBERS INDUSTRY</th>
<th>EUROPEAN HEALTH</th>
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<tbody>
<tr>
<td>University of Potsdam (co-ordinator) (DE)</td>
<td>University of Groningen (NL)</td>
<td>University of Newcastle (GB)</td>
<td>University of Trento Rovereto (IT)</td>
<td>Beijing Normal University (BJU)</td>
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<td>Macquarie University, Sydney (AU)</td>
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<td>Lomonosov Moscow State University (MSU)</td>
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<td>Higher School of Economics (HSE)</td>
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<td>Hong Kong University (HKU)</td>
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<td>Free University of Brussels (VUB)</td>
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<td>Université de Genève (CH)</td>
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<td>National University of Singapore (SG)</td>
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<td>ZIAPP Berlin/Potsdam</td>
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<td>Springer Publishers (NL)</td>
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<td>Psychology Press, Aarhus, Denmark (UK)</td>
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<td>North of Tyne collaboration, Newcastle, UK</td>
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<td>Department of Psychology, University of Sonnenmarchhaus, Germany</td>
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<td>Centre for Mind, Brain, Education, University of ZIAPP Berlin/Potsdam</td>
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MQ-FU-HAM TRILATERAL STRATEGIC PARTNERSHIP

The German Academic Exchange Service (DAAD) with the support and funding from the German Federal Ministry for Education and Research (BMBF) has in 2012 launched the “Strategic Partnerships and Thematic Networks” program, which encourages more intensive partnerships at the university level, in contrast to a department-level managed partnership.

"By concentrating on top-level strategic partnerships, the programme aims to improve the overall quality of research and instruction. Furthermore, it hopes to create new synergies by coordinating the activities of the participating instructors more closely. Not only will this foster more knowledgesharing between the partners, but – thanks to its cross-disciplinary approach – also strengthen interdisciplinary at the university.\" - DAAD

The trilateral partnership with Macquarie University in Sydney and Fudan University in Shanghai represents an example of successful strategic networking.

CONTACT - UNIVERSITÄT HAMBURG
Antje Katzschnier
Project Coordinator - Dept. of International Affairs
Tel: +49 40 42838-8747
Email: antje.katzschner@uni-hamburg.de

CONTACT - MACQUARIE UNIVERSITY
Follow the leader
COTUTELLE AND JOINT PHD

Spread your wings internationally and gain a research experience like no other. Macquarie’s global perspective is at the heart of everything we do. Deep continuing relationships with international research universities through joint research candidate supervision is a priority.

Macquarie is proud to have high-quality research training partnerships with universities in Asia, the United Kingdom, Europe, the United States and South America. We have hosted more than 350 cotutelle and joint PhD candidates from more than 160 universities across 30-plus countries.

JOINTLY SUPERVISED PhD PROGRAMS
Macquarie participates in two modes of international co-enrollment – cotutelles and joint degrees – with universities whose research activity strongly aligns with ours. Under both joint supervision models, you are enrolled at two universities with a principal supervisor at each. You will spend around 50 percent of your candidate at each university.

mq.edu.au/cotutelle-and-joint-phd

INTERNATIONAL FUNDING OPPORTUNITIES
Macquarie’s global perspective – extended through partnership and collaboration – has created funding opportunities with some of the world’s leading funding bodies, including:
- CSC: China Scholarship Council
- CONACYT: National Commission for Scientific and Technological Research, Chile
- CONACYT: National Council of Science and Technology, Mexico
- DAAD: German Academic Exchange Service
- European Commission: Erasmus+ Programme
- BOLASHAK: JIC Center for International Programs, Kazakhstan
- IHEC: Higher Education Commission, Pakistan
- VIEK: Vietnam International Education Development
- ANID: National Agency for Research and Innovation, Uruguay
mq.edu.au/externally-funded-scholarships

IRTP’ framework: Objectives, goals and key targets

QUALITY PROGRAMS AND EXPERIENCES
Develop, maintain and partner with leading international research training programs to ensure outstanding experiences.

QUALITY CANDIDATES
Attract, develop and retain international HDR candidates of the highest quality.

QUALITY FUNDING SOURCES
Expand the quality and

QUALITY INSTITUTIONAL PARTNERS
Develop, secure and maintain

World-leading research
World-changing impact

"My research comprises the generation of early continental crust and the affiliated oceanic plate tectonics. A great portion of the early earth’s crust is built up by so-called TTGs (tonalite-trondhjemite-granodiorite) suites. Their formation process is assumed to reflect the main tectonic mechanisms of the early earth, and are at the center of a long-standing debate.

Until now, most research has focused on finding the source rock material, which is then experimentally melted in the laboratory under various temperatures and pressure conditions to determine the conditions to make TTGs. In my PhD, I will investigate the TTG suite itself with equilibrium melting experiments to constrain their formation depth and mutual relationships, respectively in their joint evolution. The results will be set into perspective by integration in geodynamic models."

Alexander Welthüser
JOINT FIRST TREATMENT PhD CANDIDATE IN A PARTNERSHIP BETWEEN MACQUARIE UNIVERSITY; GEORGE AUGUST UNIVERSITY, GÖTTINGEN, GERMANY; AND RENMIN UNIVERSITY, CHINA
INTERNATIONAL MACQUARIE UNIVERSITY RESEARCH EXCELLENCE SCHOLARSHIP RECIPIENT
GERMANY
EVA ELIZABETH

was admitted to the degree of

DOCTOR OF PHILOSOPHY

on the twenty-fourth day of May 2014

This degree was jointly awarded with Université Paris-Sud XI
in France under a mutual PhD Agreement

[Signature]
Vice-Chancellor

[Signature]
Registrar

Example of Cotutelle Testamur
By authority of the Governing Bodies of Macquarie University and the University of Edinburgh,

JANE CITIZEN

was admitted to the degree of

DOCTOR OF PHILOSOPHY

on the sixteenth day of January 2015

This degree was awarded under a Joint PhD agreement between Macquarie University and the University of Edinburgh.

Vice Chancellor

Registrar

Example of Joint PhD Testamur
Example of EU Joint PhD Testamur
Thank You

https://www.mq.edu.au/research/phd-and-research-degrees
Reflections on the PhD Voyage

Phillipa Bellemore
phillipa.bellemore@hdr.mq.edu.au
PhD Candidate, Sociology Department
March 2018
A voyage

- Three year journey
- A solo pilgrimage?

Year 1: Cruise and prepare. Publication or monograph? Ethics Review literature Reference system

Year 2: Sailing along

Year 3: Hard trek and Completion. Time speeds up. Intense writing
It doesn’t have to be a solo trek
You are not alone

- Accept stuff goes wrong in a 3 year period
- Supervisors
- Establish links in other unis
- Campus Wellbeing
- Your peers
- HDR and library training, writing bootcamp
- Writing groups
- Helpful blogs: Thesis Whisperer, patter, DoctoralWriting SIG
Challenges

Anxiety
Perfectionism
“Imposter” syndrome
Writers block
Ethics and fieldwork
Academic writing
Coping with life events: good and bad
Highlights

• NewMac committee and chairing sessions
• Peer writing assistant
• PGRF trip
• Presentation at conferences and seminars
• Teaching and lectures
• Entering new worlds
• Years researching and becoming expert in an area
  I am passionate about
• Ask for what you need: supervision, help, support, leave
• It’s not a Nobel prize…do your best
• Take regular breaks, exercise and rest time
• Attend to admin, watch budgets, return library books
• Remember your partner, family and friends…you are not in jail
• Cultivate compassion for yourself and others
• Write every day
Reflect about how you would like to look back on your PhD
MORNING TEA
Research Training Resources

Dr Juliet Lum
Head, HDR Learning Skills
What are HDR Learning Skills?

- Writing a doctoral thesis
- Presenting to academic and other audiences
- Publishing in academic journals

Research Literacy
Research Writing Courses

• discipline-flavoured:
  Science, Social Science, Humanities

• 6-8 week courses (2 hour class / week)

• many writing tasks

• feedback on writing
Research Writing Groups

- discipline-specific
- 4-6 participants/group
- individualised feedback
- training in peer review
Research Writing support
Stand-alone events

Lectures and workshops on research writing & publishing

Writing Retreats
Oral presentation training

Oral Presentation workshops

Conference Presentation courses (6 weeks)

3 Minute Thesis training

Mock presentation sessions
# Academic Literacy Online resources

## 1. Uni basics: Get ready to learn
- Academic culture
- Communicating with lecturers and tutors
- Lectures, tutes, labs & flipped classrooms
- Managing your time
- Working in groups
- Workshop slides S2 2017

## 2. Key skills: Read, think, argue & write
- Active listening
- Taking notes
- Thinking critically
- Reading and writing
- Paraphrasing
- What is research?
- Preparing for LAW

## 3. Steps in the assignment process
- The assignment process
- Analysing your assignment task
- Researching for your assignment
- Planning
- Writing drafts
- Referencing your sources
- Editing and proofreading
- Literacy and numeracy test (teacher education students)

## 4. Assignments & exams
- Essay
- Summary
- Report
- Case study and case analysis
- Critical review
- Annotated bibliography
- Literature review
- Example assignments
- Oral presentation
- Preparing for exams

## 5. English language resources
- Quiz: Find the English grammar errors
- Quiz: Academic writing conventions
- Common grammar mistakes
- Strategies to improve your English Grammar
- Vocabulary in academic writing
- Word order
- Spoken vs written English
- Recommended grammar resources

[students.mq.edu.au/support/study/skills-development](students.mq.edu.au/support/study/skills-development)
Academic Literacy Online resources

To self-enrol, go to:
Research methods and skills

• **Research methods training**: faculty/department based

• **Finding & managing literature**: library training courses and online resources

• **Statistical Consulting Service**: Wednesday mornings, Room 609, 12 Wally’s Walk. Contact A/Prof Peter Petocz

• **Research tools training**: (eg NVivo, SPSS, EndNote, Thesis formatting) Online guides, some FTF courses organised centrally
Other recommended resources

Elsevier Publishing Campus’ College of Skills Training:  
Online lectures and interactive courses on every aspect of research publication

Purdue Online Writing Lab (OWL): https://owl.english.purdue.edu/
Accessible advice and online activities to improve your academic writing

Vitae’s Doing Research resources: https://www.vitae.ac.uk/doing-research
Advice for researchers, starting from new PhD candidates, on conducting research and planning beyond

Epigeum Research Master Skills Course
ilearn unit with modules on research methods, writing & publishing, research integrity, research careers and more
Email hdrlearningskills@mq.edu.au for access
Asked to teach?

Tutoring Induction Program (TIP), including:
• New to teaching: The first tutorial
• Managing the university classroom
• Teaching in iLearn for tutors
and lots more!

Blended (face-to-face and online) delivery

Workshops are free for MQ staff!

For more details on the Tutoring Induction Program,
Contact your Faculty Learning & Teaching team

Arts: artslandt@mq.edu.au
FoHS: fohs.lds@mq.edu.au
FBE: fbelt@mq.edu.au

FSE: fohs.lds@mq.edu.au
FMHS: fmhs.ldt@mq.edu.au
Preparing to teach

MACQUARIE University

WORK TEACH RESEARCH SUPPORT ON CAMPUS

LEARNING AND TEACHING STRATEGIC FRAMEWORK
Connected experiences
Connected curriculum
Connected people
Implementation
Governance

STUDENT ENGAGEMENT AND COLLABORATION
Orientation and commencement
Curriculum
Higher degree research
Employability
Student support
Technology and spaces
Alumni

TEACHING AT MACQUARIE
Macquarie curriculum
PACE
Pathway and partnerships
Recognition of prior learning
Teaching roles
Unit convenors

Tutors and lecturers
Professional workshops and events

staff.mq.edu.au
HDR Learning Skills online

HDR Learning Skills ilearn unit
- seminar recordings & slides
- announcements about new workshops

HDR Workshops webpage
Listing and registration for all courses
First come first served!

HDR Learning Skills website
General info and links ...
Macquarie's commitment to Research Training has led to the creation of a range of resources which aim to augment the PhD and Masters of Research programs. This is to assist candidates to expand their knowledge and skills to build upon research experience and develop professional, interpersonal, and employability skills to broaden their career opportunities.
# 2018 HDR Workshops and Courses

The University offers a suite of HDR (Higher Degree Research) support and development programs for research candidates. The three program areas within HDR Support and Development are: HDR Learning Skills, HDR Professional Skills and HDR Mentors.

In addition to the workshops listed below, HDR Candidates can also access online resources and information via the iLearn sites for HDR Learning Skills, and HDR Professional Skills, as well as following the HDR Mentors Facebook page. Other self-paced resources are listed on our Online Resources webpage.

HDR Support and Development face-to-face events for 2017 are listed below. Please note that workshop details are subject to change, and participant numbers are strictly limited so registration is essential. If you register for a HDR Support and Development workshop or event and discover that you are unable to attend, please let us know via the relevant email i.e. hdrlearningskills@mq.edu.au, hdrprofessionalskills@mq.edu.au or hdrmentors@mq.edu.au so that other HDR candidates, on the waiting list, may take your place.

Filter Year by Category: Learning Skills, Professional Skills, HDR Mentors, Library, Others

## March

<table>
<thead>
<tr>
<th>Category</th>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS</td>
<td>05/03/2018</td>
<td>Preparing CVs/resumes and job applications</td>
<td>02:00 PM - 04:00 PM</td>
<td>TBA</td>
</tr>
<tr>
<td>LS</td>
<td>12/03/2018</td>
<td>SPSS Introductory Course</td>
<td>09:30 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>LS</td>
<td>12/03/2018 - 23/04/2018</td>
<td>Science Research Writing Basics Course</td>
<td>10:00 AM - 12:00 PM</td>
<td>75 Tatavera Rd Room 602</td>
</tr>
<tr>
<td>LB</td>
<td>13/03/2018</td>
<td>EndNote Basic for PC</td>
<td>02:30 PM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>LB</td>
<td>14/03/2018</td>
<td>Mendeley: Introductory course</td>
<td>02:00 PM - 04:00 PM</td>
<td>Library Training Room M4.03</td>
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<tr>
<td>LB</td>
<td>15/03/2018</td>
<td>EndNote Basic for PC</td>
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<tr>
<td>LS</td>
<td>19/03/2018</td>
<td>NVivo for PC - Level One</td>
<td>09:30 AM - 04:00 PM</td>
<td></td>
</tr>
</tbody>
</table>

hdrworkshops.mq.edu.au
HDR Learning Skills ilearn unit

To self-enrol, go to: ilearn.mq.edu.au/course/view.php?id=12702
Your HDR Learning Advisors

**Social Science:**  Dr Demelza Marlin
demelza.marlin@mq.edu.au
Room 217, 29 Wally’s Walk (X5B)

**Science:**    Dr Adèle Thomas
adele.thomas@mq.edu.au
Ground Floor, 12 Wally's Walk (E7A)

**Humanities:**  Dr Emilie Auton
emilie.auton@mq.edu.au
[location TBA]
HDR Writing Efficacy survey

Measuring changes in HDRs’ writing confidence throughout candidature

Conducted by Dr Adèle Thomas
adele.thomas@mq.edu.au

Please submit your survey in the box at the EXIT

Or complete online https://goo.gl/yjeLGi
Questions or Suggestions?

please email HDRLearningSkills@mq.edu.au
HDR Professional Skills Program

Sally Purcell
HDR Professional Skills Program

• Audit & expand upon professional skills
• Develop career development planning skills
• Understand employer needs
• Enhance career opportunities
• Build connections
• Translate skills for employers
Questions to consider … seriously

• What are your reasons for doing a PhD?
• How will your PhD help you achieve your goals?
• What else do you need to do to achieve your goals?
Your career, your responsibility

• Start thinking about life post PhD now
• Build your networks
• Understand your values
• Grow your technical, interpersonal & transferable skills
• Get involved, contribute & start early
HDR Workshops & Zoom sessions Career Development Planning, Job applications & Interviews, Wellbeing - Resilience & Motivation, Communication, Events Management, Research Partnerships, Grant applications, Social Media – LinkedIn, Twitter Networking

HDR Professional Skills iLearn

HDR Professional Skills website
Tailored individual career consultations – C7A (MUSE building)

- Open Mon – Fri (year round)
- Support in developing skills in Job search, Application & Resume, Career planning
- Mock interviews and online resume/application review service

Jobs on and off campus

- Register for CareerHub: https://www.careerhub.mq.edu.au

Connecting with employers (register via CareerHub)

- Employer presentations (year round)
- Careers Fair (Sem 1 & 2)
Thank you
What can your library do for you?

MACQUARIE UNIVERSITY LIBRARY SERVICES
FOR HIGHER DEGREE RESEARCH STUDENTS
LIBRARY SERVICES FOR HDR STUDENTS

About the Library
Research Consultations
Borrowing & Study Spaces
Getting Material from other Libraries
Organising your Research
Getting your Thesis Online
Training and Help
Library

MultiSearch

Search MultiSearch...

/ Books, Articles & more

MyLibrary  Journals A-Z  Google Scholar @MQ

Advanced Search

Opening hours

Levels 1 & 2

Monday - Friday  Saturday - Sunday

8am - 10pm  10am - 6pm

Levels 3, 4 & 5

Monday - Friday  Saturday - Sunday

8am - 10pm  10am - 6pm

18 February 2018
Library services delivered differently. In the App Store & Google Play. Search libMQ https://t.co/VmqX76CFDA

10 February 2018
RT @MQSciEng: Did you know this Sunday #February11 is @WomenScienceDay ? @EnvScMQ’s @ShariGallo spoke to @ABCCentralCoast about the day thi
Individual Consultations

YOUR RESEARCH LIBRARIAN CAN PROVIDE:

- An introduction to relevant information resources.
- Strategies for effective database searching.
- Advice on setting up and managing search alerts.
- Help locating high impact journals.

Find *your* Research Librarian on the Library website.
Your Research Librarians

Research and Clinical Librarians support Academics, ECRs, Professional Staff, HDR, MRes, Postgraduate and Honours students.

Contact your Research or Clinical Librarian for [learning, teaching and research support](#)

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**Find your Research Librarian**

<table>
<thead>
<tr>
<th>Faculty of Arts</th>
<th>+</th>
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<tbody>
<tr>
<td>Faculty of Business &amp; Economics</td>
<td>+</td>
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<tr>
<td>Faculty of Human Sciences</td>
<td>+</td>
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<tr>
<td>Faculty of Medicine &amp; Health Sciences</td>
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<tr>
<td>Faculty of Science and Engineering</td>
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<tr>
<td>MGSM</td>
<td>+</td>
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<tr>
<td>Offices and Units</td>
<td>+</td>
</tr>
<tr>
<td>Find your Research Librarian by Name</td>
<td>+</td>
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</tbody>
</table>
Research Identity:

What is ORCID?
• ORCID (Open Researcher Contributor ID) is a unique researcher identifier
• ORCID acts like a DOI, but rather than identifying a digital object, it provides a lifelong digital name
• ORCID is fully owned and controlled by the researcher
• Having an ORCID makes the collection of metrics data for easier for grant applications
• ORCID is an optional field in the ERA 2018 Data Submission

ORCID & Pure
• Macquarie University’s research management system, Pure, links directly to ORCID
• Researchers can create and link to their ORCID via Pure
• Once linked, Pure will automatically export your research outputs directly to your ORCID record

ORCID & Databases
• You can link your ORCID with both Scopus and Web of Science

Want to Know More? Please see your Research Librarian or [http://libguides.mq.edu.au/tracking-your-research](http://libguides.mq.edu.au/tracking-your-research)
BORROW AN UNLIMITED NUMBER OF BOOKS FOR 16 WEEKS
(PLUS 4 RENEWALS)

AUTOMATED RETRIEVAL COLLECTION REQUESTS
VIA MULTISEARCH

ONLINE ACCESS TO BORROWING DETAILS VIA MULTISEARCH
INCLUDING HOLDS AND RENEWALS
Higher Degree Researchers Study Space (Level 5)

- Swipe card access.
- Over 150 seats.
- Desktop power for laptops.
- Apply online for access.
- Free daily lockers.
- Vending machine.
- Macquarie wireless network access.
Interlibrary Loans

If we don’t have it, you can request it...

Borrow from other libraries.

E-documents delivered to your desktop.

Or, suggest a new purchase.
Managing your Research

Bibographic Referencing Software

How to use this guide

Most bibilographic management software allows you to:

- Create bibilographic records for your citations, either by manual entry or electronically, mainly from databases and library catalogues.
- Manage this data by allowing the addition of personal notes, attachments and sorting of records.
- Link to word processing documents to insert in-text or footnote citations and construct bibliographies.
- Access a range of citation styles.
- Access a range of format types (book, journal article, book chapter).

Macquarie University has a licence for two bibilographic management software packages:

- EndNote
- Mendeley

This guide provides information about these applications and other free software that has similar functionality.

Look at the information given for each of the software products and particularly note any information under Issues and Technical information that may pertain to your situation. Check information under the software description and then look at the support guides for specific products before deciding on the software you wish to use.

Citation styles

The Referencing guide provides examples of different citaiton styles.
HDR Workshops

2018 HDR Workshops and Courses

The University offers a suite of HDR (Higher Degree Research) support and development programs for research candidates. The three program areas within HDR Support and Development are: HDR Learning Skills, HDR Professional Skills and HDR Mentors.

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http://hdrworkshops.mq.edu.au/
Research Output Management and Support

- ResearchOnline Macquarie University's open access digital collection
- Digital Thesis Program: submission guidelines and form
- Research Identifiers: ORCID, Scopus ID, ResearcherID, Google Scholar profiles
- Government Reporting including HERDC and ERA
- Open Access at Macquarie a guide
- Research data management assistance with data description and DOI generation
- Copyright and IP advice contact information and introductory guide
- Copyright for research
Need Help?

Workshops are available to help you with:
- Using Research Databases
- Organising your research (EndNote)

Individual Consultations with your Research Librarian

Online:
- EndNote and Mendeley tutorials and guides
- Subject and Research Guides
Physical Opening Hours
SESSION 1 – CHECK LIBRARY WEBSITE

Current Hours:

Opening hours
Levels 1 & 2

Monday - Friday | Saturday - Sunday
8am - 10pm | 10am - 6pm

Levels 3, 4 & 5

Monday - Friday | Saturday - Sunday
8am - 10pm | 10am - 6pm
See you at the Library
The Campus Wellbeing and Support Service is a comprehensive service offered by Macquarie University to support and care for students. Our service is confidential, no information is shared to anyone without your consent. Our services can be accessed by MQ students for free.
Respectful Relationships
ENSURE PERSONAL SAFETY

Macquarie University has a lower than average crime rate. If you are victim of a crime report it.

Macquarie University has many places for support

OFFICE: DVC-S&R | DEPARTMENT: Campus Wellbeing & Support Services
Thank you

Campus Wellbeing and Support Services
Level 2, Lincoln Building, C8A
16 Wally’s Walk
phone: 9850 7497
email: campuswellbeing@mq.edu.au
HDR Mentors

Mo Haque & Adam Johnston, HDR Mentors

Creating a stronger HDR community
HDR Mentors

Purpose & Aim

- Increase formation of research community, reduce sense of isolation, increase intellectual climate
- Improve peer level support, foster a scholarly community between MRes and PhD students
- Improve BPhil/MRes student experience, promote feeling of belongingness
- Create networking opportunity between MRes, PhD students and faculty staff members

To create a peer to peer platform to support and enhance the research quality, capability and experience of the research students
Diversity of HDR Mentors

WHO ARE WE?
- PhD & MRes
- Domestic & International

WHERE ARE WE?
- 5 Faculties & MGSM
- 15 Departments

OUR BACKGROUND
- 10 Nations
- 16 Languages

INDUSTRY EXPERIENCE
- 12 Industry sectors
Dimensions of HDR Mentors

- Building research network
- Linking Alumni and Industries
- Peer-to-peer support
- Skills development
- Tackling current issues: PhD employability
- Developing social integrity
HDR Mentors

Are you looking for a HDR Mentor?
Please email us hdrmentors@mq.edu.au
Peer-to-peer mentoring panel sessions

**Why?**
Feelings of isolation & frustration are far too common – we can learn with & from each other

**Who?**
A panel of peers from across MQ

**What?**
A safe & supportive environment for you to ask burning questions

**When?**
Keep an eye on your inbox & our website…
Communicate your Research With Confidence

- Instant feedback from experts and peers
- Showcase your research to a wider community
- Conference talk preparation
- Friendly environment
Submit your thesis with Confidence!

This is a peer-to-peer sharing forum designed to address all of the challenges centred on HDR thesis preparation and submission
Writing skills development program

Peer Writing Assistance (PWA)
- Based on the principle of collaborative learning
- Launches in April 2018 → sign up via HDR Workshops
  (https://hdrworkshops.mq.edu.au)
Networking development session – HDR Café

A space for HDR Candidates to network and share their research highs and lows
Cultural exchange program – Pot Luck Dinner

Sharing and celebrating our differences and similarities

"Lovely opportunity to network with fellow HDR students. It was an evening that allowed me to forget HDR pressures and meet like-minded people from diverse disciplines and cultures. Very well organised"
HDR Mentors website

About HDR Mentor

Aim of HDR Mentors:
To create a sustainable peer to peer platform to support and enhance the research quality, capability and experience of the HDR students.

Objectives of HDR Mentors:
- Peer to peer support: deliver peer to peer support by facilitating the flow of information to meet the administrative, academic and social support to HDR students. This is conducted through the development of peer support relationships.
Keep an eye out for...

HDR Welcome Lunch

hdrmentors@mq.edu.au
Faculty HDR Representatives

**Arts**
Associate Dean, HDR  
Dr Noah Basil  
Faculty HDR Manager  
Maryanne Hozijan

**Business & Economics**
Associate Dean, HDR  
Prof Lorne Cummings  
Faculty HDR Manager  
Lin Bai

**Human Sciences**
Associate Dean, HDR  
A/Prof Jennifer Cornish  
Faculty HDR Manager  
Robyn Bishop

**Medicine & Health Sciences**
Associate Dean, HDR  
Prof. Mark Connor  
Student Services Manager  
Tania Kinane

**Science & Engineering**
Associate Dean, HDR  
A/Prof Tracy Rushmer  
Faculty HDR Manager  
Jane Yang

**MGSM**
Director, HDR  
Dr Vito Mollica  
Research Office Executive  
Kerry Daniel
University Support for HDR Students

Professor Nick Mansfield
Uni support for HDR Students

**Infrastructure support**
Faculty operating funds (academic technical & administrative staff, general facilities) via the Faculty Funding Model (FFM)
Major and minor capital works and major equipment and facilities are funded through specific University allocations
General infrastructure (Library, IT, animal facilities, mechanical & electrical workshops, student support services etc) are supported through University Office budgets
HDR Support and Development

**Project support**
Faculty support through the HDR component of the FFM
Funding via Postgraduate Research Fund (PGRF - Research Grants)
External funding support

**Life support**
Research Training Program (Australian Government)
Macquarie University Research Training Program Scholarships
Sponsored scholarships
Postgraduate Research Fund

Competitive Grants Scheme
- Requires written (typed) application

One Grant tenable during HDR candidature (before thesis submitted)
- Up to $5,000 per candidate

The Primary Goal:
- To enhance HDR student experience and add value to (improve the Quality of) HDR thesis. Note PGRF funding is NOT to be used for funding the CORE expenses of the project
- Alignment with MQ Strategic Research Framework

Skill Development:
- Exposure to competitive research grant process (with the supervisor’s guidance)
- Experience in the preparation and justification of budgets
- Exposure to peer-review
University Support for Student Inventors

WHAT YOU NEED TO KNOW ABOUT INTELLECTUAL PROPERTY (IP)

Gorjana Mitic, PhD: Commercialisation and Innovation Manager (Life Sciences)
Commercialisation
THE CONCEPT OF INNOVATION

Turning ideas
Into Products (reality)
That people want and/or need
And are willing to pay for
Intellectual Property
WHAT IS IT AND WHY DOES IT MATTER?

• **Intellectual Property (IP)** is “Product of Thought, Creativity and Intellectual Effort” (inventions, designs, software, know-how) that can be protected by law

• The holder of this legal entitlement (the owner) has exclusive rights in relation to the subject matter of the IP

• IP rights are available to protect your knowledge, and the products of your knowledge, from unauthorised use by others

• These exclusive rights may be potentially commercially valuable and therefore:

  ➢ Can generate research income

  ➢ Provide the most efficient mechanism to transfer research results to our stakeholders and the community

  ➢ Enhance impact of publications

  ➢ Can be great for your career
Why is the University interested in IP?

• Under the *National Principles of Intellectual Property Management for Publicly Funded Research* the University is legally required to exploit the results of publicly funded research for the benefit of Australia.

• The approach facilitates benefits for the inventors, the institution and the Australian and international community.

• An individual’s experience in IP protection and commercialisation adds significantly to employability in many fields.
What is Intellectual Property?

Formally registered:
- Patents
- Registered Designs
- Registered Trade Marks
- Plant Breeders Rights

Not registered:
- Copyright
- Confidential Information & Know How
- Trade Secrets
WHAT IS IT AND WHY DOES IT MATTER?

What can be patented?

“To be issued, the invention described just has to be novel, non-obvious, and useful.”

USPTO

An invention can be a small component or an improvement of a known thing...

A synergy of known things...

A new use...

Software if new in function

Business methods

Hierarchy (golden egg) of patents are compositions, pre-cursors, platforms.

e.g. a formulation that could be a brick, a tile, a wall etc.

or a mandatory component

You are experts - you very well could think what you are doing is obvious; maybe not
Examples of IP that is not formally registered?
(protected by copyright)

- Music scores
- Know-how
- Artistic works
  - inc. artwork, designs, logos
- Business methods
- Manuals
- Software code
- Names – domain names, business names...
Is it all about the IP?

Questions we ask:

Is there a need for this OR would this benefit the community if this was developed?

If so – should this be protected?

How can we get this made/developed etc.

Who should we partner with?
Often a combination of IP is commercialised together in a bundle...
Students – own their IP (unless assigned)

HDR Students – the University asserts ownership

Staff – the University asserts ownership

• We pay!

• IP Policy;
  (split 50:50)
Report your ideas

HOW TO LET US KNOW OF

INNOVATION DISCLOSURE FORM

1. TITLE OF INNOVATION:

2. RESEARCHERS: List of team members:

3. INNOVATION:

   Break out of the innovation:

   (Please write the details)

4. FUNDING

   Was the research that led to the innovation sponsored wholly or in part by any public or private funding?

   Yes - Please provide details

   No

5. DOES IT WORK?

   WHAT DOES IT NEED TO RECOMMEND?

   What is needed to validate the innovation now? i.e. to demonstrate that it is functional, patentable, etc.

   (Please provide details)

6. ORGANISATIONS/COLLABORATORS

   Were you or any other team members paid or employed by any organisation other than

   Macquarie University when the innovation was conceived?

   Yes - Please provide details

   No

7. THIRD PARTY AGREEMENTS

   Was the innovation conceived and/or developed and/or reduced to practice, in whole or in

   part, as a direct result of:

   - by using a third party agreement or third party funding?

   Yes - Please provide details

   No

8. FUNDING

   Was the research that led to the innovation sponsored wholly or in part by any public or

   private funding?

   Yes - Please provide details

   No

Submitted to the Office of Commercialisation by: (name)

Phone number (mobile/landline): (number)

Date: (date)

Version 001, 17 August 2015
• Contact the Office of Commercialisation and Innovation

• Complete an Innovation Disclosure form

• Meeting

• If under licence or option we confer with the licensee or option holder

• IP Commercialisation Advisory Committee
Yes, one needs to publish.

Patenting options/strategies are limited and sometimes opportunities are completely diminished if there is a prior disclosure...

You can do both – patent and publish
Talk to us

Commercialisation folk are a service providers for you

We can move fast, if we know
We can help in many ways

• IP Development Fund
• Inventor “Business Development” Grant
• Research and industry networks/contacts

Contact the Office of Commercialisation and Innovation for more information.
Got an invention or a question?

Contact the Office of Commercialisation and Innovation:

**Gorjana Mitic** 9850 4542
gorjana.mitic@mq.edu.au

**Anna Grocholsky** 9850 4599
anna.grocholsky@mq.edu.au

**Bel COPPOCK** 9850 4598
belinda.coppock@mq.edu.au

Got an invention? You have our attention.
What is “thesis by publication”?

A thesis by publication may include relevant papers, including conference presentations, which have been published, accepted, submitted or prepared for publication for which at least half of the research has been undertaken during enrolment.

Thesis by publication may be a better fit with disciplines where a research question is answered by work in discrete stages or involves a sequence of related components (e.g., a series of laboratory experiments or production of creative works).
What is “thesis by publication”? 

Although it is not necessary to reformat published works in a thesis, it is not enough simply to bind these publications together. The candidate needs to include a critical introduction to the work, sections that link the papers together, and a concluding section that synthesises the material as a whole. Above all, candidates must consider the coherence of the thesis as a whole, and the way in which each paper contributes to the overall thesis.
Each discipline will have a different number of publications that are acceptable as the substantive foundation for a thesis by publication. As a general rule a candidate will need to have enough papers to support the important findings from the research, presented in a logical and coherent way. Most theses by publication have between 2 and 8 papers in combinations of sole and co-authored papers. These papers will normally form thesis chapters and the chronological publication order may be quite different from the way they are sequenced in the thesis.

As each research project is different, take advice from your supervisory panel, and establish authorship protocols ideally at the beginning of the research and writing process. Do read the University Authorship protocol:

These papers may be single author or co-authored. The candidate must specify his/her specific contribution. The contribution of others to the preparation of the thesis or to individual parts of the thesis should be specified in the thesis Acknowledgments and/or in relevant footnotes/endnotes. Where a paper has multiple authors, the candidate would usually be the principal author and evidence of this should appear in the appropriate manner for the discipline. Examiners can then assess if the quality and extent of the candidate’s contribution warrant the award of the degree based on the standard criteria.
Thesis by publication is not obligatory so why consider it?

1. Constructive feedback on your work by specialists outside the supervisory panel can be used to improve the manuscripts included in the thesis. You are engaging with a broader community of experts. However remember journal reviewers are chosen for different expertise than are thesis examiners.

2. As a time management strategy so you can avoid doing all the writing in the last six months. Preparing your thesis and preparing papers can overlap as a task.
Thesis by publication is not obligatory so why consider it?

3. It gives experience in writing for publication, dealing with editors, writing rejoinders and pitching articles at the right audience. These are transferable skills.
4. You begin to establish yourself as an authority in the area.
5. Published/accepted papers are good for your CV while you are a candidate and when you graduate.
6. The process of publishing is time consuming. After the PhD is finished there may be obstacles to publishing. Preparing manuscripts in your candidature likely increases the chance the work will get published and might be part of your long term publication plan.
What are the disadvantages?

1. Falling into the trap of thinking that because the work is published it is meets the requirements for PhD.

2. You may have to manage co-authors.

3. The “ouch” factor: reviewers can be harsh, you might need to harden up: desk rejection [where the Editor does not send it to reviewers] or unfair harsh reviewers are possibilities. “Accept as is” is very rare.
Most scientists regarded the new streamlined peer-review process as “quite an improvement.”

https://www.cartoonstock.com/cartoonview.asp?catref=nki0211
Tips if considering thesis by publication

Work with your supervisory panel to target the right journal
Is it a good fit for *this* work:

1. Is it a reputable journal that requires peer review? Be warned of predatory publishers/spam invites for journals and conferences.
2. Check aims, scope, editorial board and recent content to check its the right audience.
3. Does it have a realistic impact factor and rejection rate: submit to a journal where it will go to reviewers for constructive feedback and not get a desk rejection.
4. Consider the style of the journal: word limit, referencing style, layout, are there page charges, is it open access

Don’t publish rubbish: examiners make a judgement about the quality of the work against the criteria for a PhD
What is Research Integrity?

Research integrity can be defined as the **trustworthiness** of research due to the **soundness of its methods** and the **honesty and accuracy** of its presentation

- Draft Singapore Statement 2010

“A set of **principles and professional responsibilities** that are fundamental to the integrity of research wherever it is undertaken.”
Research Integrity
CRITICAL TO ACADEMIC FREEDOM

Academic freedom is the foundation of the University.
It is the right to put forward a position and have that position openly debated.
The principles of Academic Freedom only hold if researchers act with integrity.
Research Integrity Matters

- Reliability of research (public perception)
- Health and safety
- Funding
- Criminal investigation
- The reputation of the Institution
- Reliability of degrees
Responsible Conduct and Ethics

Responsible Conduct of Research:
- Principles and practices of good research
- Applies to all research

Research Ethics:
- Standards for research with humans, animals and GMO's
Responsible Research Conduct

The Australian Code, 2007

- Endorsed by NHMRC, ARC, Universities Australia
- Describes best practice in research for researchers and host institutions
- Compliance is a requisite for NHMRC & ARC funds

The Macquarie Code, 2014

- Applies to all researchers
- Outlines ethical research behaviour in key areas
- Principles of good practice
The Responsible Conduct of Research

THE MACQUARIE CODE
When developing, undertaking and reporting research;

- Researchers must conduct themselves ethically, with integrity and professionalism
- Follow all policies, regulations and laws including Animal Ethics, Human Ethics, Biosafety
- Respect the environment, animals and research participants
- Acknowledge the responsibilities we have when working with groups of Aboriginal and Torres Strait Islander People
Principles and Practices
The Macquarie Code

1. MANAGEMENT OF DATA & MATERIALS
2. PUBLICATION, DISSEMINATION & AUTHORSHIP
3. PEER REVIEW
4. COLLABORATIVE RESEARCH
5. CONFLICTS OF INTEREST
6. MANAGING & SUPERVISING RESEARCH TRAINEES
Conversations with supervisors and our expectations of you

- Ensure you read and are familiar with the *Macquarie Code*
- Discuss data management and be meticulous with your records
- Talk about authorship, participate in planning authorship and keep records of discussions
- Make sure you understand plagiarism or undertake further training if unsure
- Ask for training in peer review
- Discuss any conflicts of interest and how to manage them
- Meet regularly with your supervisor & seek other help to manage pressures
- If things aren’t going well raise it with a mentor or supervisor
Suspected breaches or misconduct

Breach of the Code – Failure to comply with the Macquarie Code or policy

Research misconduct involves the following –

• an alleged Breach of the Code
• intent & deliberation, recklessness or gross and persistent negligence
• serious consequences

Examples of research misconduct:

• fabrication, falsification, plagiarism or deception
• failure to declare or manage a conflict of interest
• failure to follow research proposals as approved by a research ethics committee
• wilful concealment or facilitation of research misconduct

Reports to the Director, Research Ethics and Integrity research.integrity@mq.edu.au
• Associate Deans of Higher Degree Research, and Research

• RIAs are able to provide advice on good research practice

• RIAs also provide advice about reporting breaches

• If researchers have concerns they are encouraged to:
  ➢ Talk to any RIA, not just in your faculty
  ➢ Talk in hypotheticals
  ➢ Get help and advice in preparing a complaint
Where to get information


MQ Research Integrity Office: [http://mq.edu.au/research-integrity](http://mq.edu.au/research-integrity)

Online resources...

- Epigeum Research Integrity Course on iLearn
- The Lab - [http://ori.hhs.gov/thelab](http://ori.hhs.gov/thelab)
- The Research Clinic - [http://ori.hhs.gov/TheResearchClinic](http://ori.hhs.gov/TheResearchClinic)
Research Ethics

APPLYING FOR ETHICAL APPROVAL AT MACQUARIE
The core of ethical research

Ethical and responsible research (and use of research data) has, at its core, a judicious balancing of benefits against any risks/potential harms.

*This means...*

Advancement of knowledge
Attainment of potentially significant social and individual benefits

*must be balanced against*

Protection of vulnerable parties
### Research ethics oversight

<table>
<thead>
<tr>
<th>Research type</th>
<th>National requirements</th>
<th>Macquarie Committee</th>
<th>Forms, guidelines, information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human</td>
<td>National Statement on Ethical Conduct in Human Research (2015)</td>
<td>• Human Research Ethics Committees (HRECs)</td>
<td>10 meetings/year (central HRECs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Faculty Subcommittees</td>
<td>Ongoing review (faculties)</td>
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<td></td>
<td></td>
<td></td>
<td>See website</td>
</tr>
<tr>
<td>Animal</td>
<td>Australian for the care and use of animals for scientific purposes (2013)</td>
<td>• MQ Animal Ethics Committee</td>
<td>10 meetings/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>See website</td>
</tr>
</tbody>
</table>

**Requirement in order to submit thesis and publications**

Human research ethics
Responsibilities to human research participants

• Approval must be obtained from an HREC for all research involving and observing humans, their samples and their data.

Applications are reviewed against the Four Principles:
• Research Merit and Integrity
  Justifiable and appropriate
• Justice
  Fair recruitment and access to benefits
• Beneficence
  Benefit must justify risks
• Respect for Human Beings
  Respect human value and autonomy

All work with animals must be approved by the Animal Ethics Committee

**Key principles of working with animals:**

**The 3 ‘R’s**

- **Replacement**
  Methods that avoid or replace the use of animals

- **Reduction**
  Methods that minimise the number of animals used

- **Refinement**
  Methods that minimise the pain, suffering, distress or lasting harm

Your Responsibilities

- Follow the standards
- Get training
- Talk regularly with your supervisor
- Ask if your project needs approval
- Seek advice if you think there is something wrong
- Report breaches
**Application process**

**Prepare**
- Download the [Ethics form](#).
- Work with your supervisor to prepare the application prior to the [ethics deadline](#).

**Submit**
- PDF & email to: [ethics.secretariat@mq.edu.au](mailto:ethics.secretariat@mq.edu.au)
- Include all associated documents such as [PICFs](#) (include version dates on all documents).

**Review**
- Applications are risk-assessed.
- Reviewed by either an HREC or Faculty Sub-Committee.

**Revise**
- The Committee may ask for revisions to be made before the application can be approved.

**Approve**
- When all concerns are addressed you will receive an approval letter from the Committee.

**Research**
- Get on and do your research.
- Report any Adverse Events.

**Amend**
- You can request [amendments](#) to approved protocols.
- Submit using an Amendment Request Form.

**Report**
- Complete your progress and final reports as required.
The take-home message

- Be aware of relevant regulation/legislation

- But don’t think of responsible/ethical research as just about regulatory/legal compliance

- Instead, habituate yourself to engaging in continuous reflection on the values implicit in academic research:
  
  - Does your research project & practice reinforce or undermine these values?
  
  - Does your conduct reflect ethical engagement with colleagues, co-researchers, supervisors, assessors/reviewers, fellow postgraduates, research participants, animal subjects, etc.?

  - If you have a bad feeling or feel uneasy about something, talk to someone.
HUMAN RESEARCH ETHICS

• Ethics.Secretariat@mq.edu.au

ANIMAL RESEARCH ETHICS

• Animal.Ethics@mq.edu.au
Thank you

Good luck with your research!
THE ROAD TO COMPLETION
The HDR Thesis Examination Process

Professor Nick Mansfield
Dean, HDR
The HDR Thesis Examination Process

- MQ thesis examination requires 3 examiners for PhD and 2 for MPhil
- Examination is by written report
- All examiners are external to the University
- 3 months before your scheduled submission date HDRO contacts your Principal Supervisor requesting nomination of examiners
- Supervisors must consult with you in formulating the list of prospective examiners
- It is the University (through TESC/RRTC) which makes the appointment of the examiners, and if there are perceived conflicts of interest the University may seek further nominations from your supervisors (and you)

- HDR Thesis Preparation, Submission & Examination - Policy & Procedure, from Policy Central
Nomination Of Examiner

To learn more about the process of Nomination Of Examiner, please find below the steps.

We suggest the following:

1. **Step 1**
   You are asked to provide the names of at least 5 prospective examiners for a PhD and at least 4 for a Masters. A thesis abstract must also be included with the form.

2. **Step 2**
   You are asked to supply information about examiners. These include evidence of their suitability for examining the thesis, record of previous HDR examination experience, and a list of publications. This information is used to make sure the examiners you propose conform to the Macquarie University Thesis Examination Policy. This policy is to be found at University's Policy Central Website.

3. **Step 3**
   Before submitting the form, you MUST make sure you have supplied enough information for a complete evaluation to be made of the examiner's suitability. If insufficient evidence is provided, the form will be returned to you. If you supply a web link, please make sure the link is live and it contains all the required information relevant to the criteria.

OneID

The OneID is required and cannot be empty.

Password

The password is required and cannot be empty.

Please use Google Chrome for submission. We are aware of submitting issues when using internet explorer.

Log In
PhD Examination report

REPORT OF EXAMINATION:  Please tick appropriate boxes.

In my judgement this thesis:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Marginal</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>makes a distinct contribution to knowledge in the area with which it deals;</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(b)</td>
<td>affords evidence of originality shown either by the discovery of new facts or by the exercise of independent critical power;</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(c)</td>
<td>is satisfactory as regards its literary presentation;</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(d)</td>
<td>contains a substantial amount of material suitable for publication</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(e) (i)</td>
<td>Would you consider this thesis to be in the top 10% of doctoral level research in the field?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>(e) (ii)</td>
<td>Would you consider this thesis to be in the top 5% of doctoral level research in the field?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>(f)</td>
<td>How many research theses have you examined?</td>
<td>☐</td>
<td></td>
</tr>
</tbody>
</table>

OFFICE | FACULTY | DEPARTMENT
I recommend: (Please tick ONE only)

☐ AWARD: That the thesis meets all required standards in terms of the nature and quality of work undertaken, and the degree can be awarded without any further work by the candidate, other than the correction of typographical errors and small lapses of expression and presentation in the final copy.

☐ AWARD (AFTER CORRECTIONS): That the thesis meets all required standards in terms of the nature and quality of work undertaken, and the degree can be awarded without further examination once the candidate has made a number of corrections and clarifications in the thesis, as specified in my report. The corrections are to be done to the satisfaction of the university’s Higher Degree Research Committee, and would be normally completed within a period of one to two months.

☐ REVISION and RE-EXAMINATION: That the thesis does not yet meet all required standards for the award of the degree and the candidate should complete a further period of research and writing. Normally under this category a candidate would re-enrol for a period of up to one-year fulltime (or equivalent). The thesis will then be submitted for re-examination.

☐ I am prepared to re-examine this thesis ☐ I am NOT prepared to re-examine this thesis

☐ NOT AWARD: That the thesis does not meet the required standards for the award of the degree, and does not warrant a further period of research and writing.

REQUEST FOR CONFIDENTIALITY:

I do NOT wish my name to remain on Part II of the report referred to the candidate ☐
The HDR Thesis Examination Process

The Macquarie HDR process after thesis submission

- Examiners’ reports are received within 2 months of submission (examiners may recommend award, award with corrections, revise and resubmit, not award)
- Principal supervisor is invited to respond to examiners’ reports and make a recommendation, endorsed by Faculty Associate Dean HDR
- Examiners reports and faculty recommendations are considered by TESC, which forwards a recommendation to RRTC
- RRTC advice and examiners’ reports go to candidate and principal supervisor to guide any further work required
- For corrections up to 2 months is allowed
- In cases where it is determined that the thesis falls within the top 5% of PhD theses in the field (based on examiners recommendations) a Vice- Chancellors Commendation is awarded
Please complete the CCP FEEDBACK SURVEY before leaving.