Central Commencement Program
For New Higher Degree Research Candidates
Semester 1, 2017
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 (ACGR/DDOGS)
HDR Support and Development

1. Supervision: A/Professor Merilyn Childs
2. HDR Learning Skills: Dr Florence Chiew (Head), Dr Demelza Marlin (Social Science), Dr Michelle Jamieson (Humanities), Dr Adele Ferguson (Science) Dr Jennifer Rowland (Medicine)
3. HDR Professional Skills (Sally Purcell)
4. HDR Mentors (Kim Tan)
Supervision

- Principal Supervisor
- Associate Supervisor
- Adjunct Supervisor

- 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 The Master of Research Candidate Journey

Central Commencement Program, February 2017

Dr Louise Wedlock
Deputy Director, Higher Degree Research Office
At a glance

90 per cent of our graduates under the age of 25 are employed in their first full-time job within six months of completing their study.

$1 billion invested in infrastructure and facilities in recent years.

85 per cent of our research is rated at world standard or higher by the Australian government.

Among top 100 universities in the world for graduate recruitment.

50 countries and over 150 partner universities for exchange.

8,200 students in PACE (Professional and Community Engagement) since its inception.

Over 38,000 students.

23 researchers ranked in the top one per cent in the world.

150,000 alumni in more than 140 countries.

20 companies on campus providing access to job opportunities.

10,000 degrees awarded annually.

15 kilometres from the Sydney CBD.
A 10-year Strategic Research Framework

- Research Priorities: 5
- Research Themes: 14
- Research Streams: 69
Future-shaping 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
Four Key Objectives

**Key objective 1:**
Accelerate World-Leading Research Performance

**Key objective 2:**
Prepare world-ready higher degree research candidates

**Key objective 3:**
Engage as a world-recognised research collaborator of choice

**Key objective 4:**
Deliver research with world-changing impact
Ms Ina Geedicke
Joint PhD Candidate with
University of Hamburg
Under the supervision of
Professor Michelle Leishman
Research Training @ MQ

Our HDR Candidates develop the skills and competencies to succeed in the dynamic and changing world of work.

HDR Candidates statistics (2017, approx.)

- 2,000 Higher Degree Research Candidates
- 500-600 Master of Research Candidates
- 30-40% International Candidates
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 (MQRTP & IMQRTP)
• Cotutelle IMQRTP 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
Principles on international research collaboration

Macquarie University Code for the Responsible Conduct of Research
• [http://www.mq.edu.au/policy/category.html#research](http://www.mq.edu.au/policy/category.html#research)

Singapore Statement on research integrity (2010)

OECD principles (2009)
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
Cotutelle & Joint PhD
A program delivering Key Research Objectives
# Background, context and key foundations

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotutelle and joint PhD candidates*</td>
<td>290</td>
<td></td>
</tr>
<tr>
<td>Cotutelle and joint PhD collaborating partners*</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Countries involved in cotutelle and joint PhD arrangements*</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Cotutelle candidate completions*</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>Priority partners in 21 countries (and 68 preferred partners)</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Regional partnership tiers – strategic, developing and emerging</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Disciplines involved in current programs</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Universities with Academic Senate approval for joint PhDs</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Current cotutelle and joint PhD candidate enrolments</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>Percent of current candidates with European universities</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Percent of current candidates with Chinese universities</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>MRes exchange partners established (a path to cotutelle/joint PhD)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Strategic tri-lateral partnership: MQ-FU-HAM</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Australian university participating in IDEALAB joint PhD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Joint funding agreements with key international funding agencies</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>IDEALAB PhD candidates (including 30 current enrolments)</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

* Since 1999
International research training partnerships

277 CANDIDATES AT 110 UNIVERSITIES IN 30 COUNTRIES*
# Cotutelle & Joint PhD

<table>
<thead>
<tr>
<th>Cotutelle</th>
<th>Joint PhD</th>
</tr>
</thead>
<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>
</tr>
<tr>
<td>Two graduation ceremonies</td>
<td>One graduation ceremony</td>
</tr>
</tbody>
</table>
Cotutelle & Joint PhD
FACT & FIGURES

Arts
52 students (21.93%)

Science & Engineering
103 students (43.86%)

Business & Economics
20 students (8.77%)

Medicine & Health
5 students (1.75%)

Human Sciences
54 students (23.68%)
### Why do we do it?

Establishing deep and continuing relationships

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Candidate</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<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>
</tr>
<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>

**Institutions**

- Deepens and strengthens research collaborations and networks at an institutional level
- Fosters a higher level of cooperation between researchers in their respective fields through co-supervision
- Provides access to new funding schemes as well as new international enrolments
- Provides an opportunity to increase joint publications, citation rate and rankings
- Make the institution more attractive to potential candidates

**Candidate**

- Exposure to different academic environments through joint enrolment and supervision
- Training experiences and access to the latest research equipment and technologies at two institutions
- International networking opportunities that will expand future employment opportunities through exposure to new academic institutions and new industries
- Access to new funding schemes
- Experience a new culture and environment and develop soft skills
International Doctorate for Experimental Approaches to Language and Brain

Group photo taken at the Rovereto 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.
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.
Example of Cotutelle Testamur
Example of Joint PhD Testamur
MACQUARIE UNIVERSITY
SYDNEY, AUSTRALIA

The degree was awarded under a joint PhD agreement for the Einstein Maeda International Doctors in Experimental Approaches to Language and Texts (EDLALTA) project, with signatories from the following institutions: University of Pavia (IT), Università di Torino (IT), Università di Roma Tor Vergata (IT), Erasmus Mundus, and Macquarie University (AUS).

JOHN SMITH
was admitted as a candidate for the degree of

DOCTOR OF PHILOSOPHY

on the thirteenth day of September 2015

Chancellor
Registrar

Example of EU Joint PhD Testamur
Considering a Cotutelle or Joint PhD?

Scholarship: Tuition Fee Offset for up to 3 years
- Stipend while at MQ
- Return airfare to partner institution

Contact: Joanna McCarthy at HDR Cotutelle hdrcotutelle@mq.edu.au
Thank You

Current students: https://students.mq.edu.au/study/my-research-program

Future students: www.mq.edu.au/research/phd-and-research-degrees
MRes and HDR candidates
The university’s heroes… Well not just yet!

Fabiola Barba Ponce
PhD Candidate Organisational Psychology

20 February 2016
MRes and HDR candidates are like super heroes...
Some are born... some are made
Some heroes doubt... some don’t.
As diverse as universe...

...as unique as finger prints
AW HELL NO.
Super powers for the battle
Villain:
Distant sense of achievement (many years to get there!!)

Super power:
Volunteer using my extra talents and mentoring
Villain: Situational depression

Super power: HDRO staff, psychologist and meditation
Villain:
Too much with myself and my research only, but really... TOO MUCH!!

Super power:
workshops, shut up and write and community events
To infinity and beyond...
Mission: MQ Future ready
Secret code: TACO Tuesday

Take action
Ask for help
Comfort zone to CERO
Organise and join social gatherings
  • HDR mentors, student groups, own Facebook groups and MQ initiatives
May the force be with you
Fabiola Barba Ponce
PhD candidate Organisational Psychology

@fabybarbaponce

Fabiola Barba Ponce

Fabiola.barba-ponce@hdr.mq.edu.au
MORNING TEA
Research Training Resources

Dr Florence Chiew
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

Professional Development

- Building a well-rounded career
- Developing Higher Ed teaching skills
- Acquiring transferrable skills (e.g., effective work habits, strong interpersonal and leadership skills)
Research Writing Courses

• faculty-specific: Science, Social Science, Humanities

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

• a range of activities focused on strengthening research skills, and critical thinking and writing

• peer feedback on writing
Research Writing Groups

- May be discipline specific or interdisciplinary
- 4-6 participants/group
- Individualised feedback
- Training in peer review (i.e. effective ways to give and receive critical feedback)
Other relevant events

Workshops and seminars on publishing, grant writing, working with your supervisors, managing critical feedback, etc.

2-3 day HDR writing retreats

A peer writing assistance program with the HDR mentors (work in progress)
Oral presentation training

Oral Presentation workshops and courses

3 Minute Thesis training

Mock presentation sessions
# Academic Literacy Online resources

![STUDYWISE](http://www.students.mq.edu.au/support/learning_skills/studywise)

## Starting at uni
- Getting off to a good start
- University 'culture'
- Academic study
- Lectures and tutorials
- Learning online
- Communicating with lecturers and tutors
- Working in groups

## Skills and strategies for success
- Thinking critically
- Taking notes
- Reading and writing
- How do I manage my time?
- What is research?
- Doing research
- Quantitative and Qualitative Research
- Preparing for exams
- Preparing for LAW

## Writing your assignment
- The assignment process
- The assignment task
- Reading for your assignment
- Strategies for good writing
- Writing drafts
- Referencing your sources
- Editing and proofreading

## Types of assignment
- Essay
- Professional and technical report
- Research report
- Case study
- Critical review
- Annotated bibliography
- Literature review
- Example assignments

## English language resources
- Academic Language Quiz
- Common grammar mistakes
- Strategies to improve your English Grammar
- Vocabulary in academic writing
- Word order
- Spoken vs written English

[http://www.students.mq.edu.au/support/learning_skills/studywise](http://www.students.mq.edu.au/support/learning_skills/studywise)
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**: Mondays 11am-2pm E4A 529. Contact A/Prof Peter Petocz
- **Research tools training**: NVivo, SPSS, EndNote, Mendeley, Thesis formatting
Other recommended resources

Online lectures and interactive courses on every aspect of research publication

Purdue Online Writing Lab (OWL): [https://owl.english.purdue.edu/](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](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](mailto:hdrlearningskills@mq.edu.au) for access
Tutoring Induction Program (TIP), including:

- New to teaching: The first tutorial
- Managing the university classroom
- Teaching in iLearn for tutors
  and lots more!
- **FTF or online delivery**

Contact your Faculty’s **Associate Dean, Learning and Teaching**:

Arts: peter.keegan@mq.edu.au  
FoHS: mitch.parsell@mq.edu.au  
FBE: leigh.wood@mq.edu.au  
FSE: james.downes@mq.edu.au  
FMHS: catherine.dean@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 ...
HDR Learning Skills website:
www.hdr.mq.edu.au/information_for/current_candidates/hdr_support
## 2017 HDR Workshops and Courses

The University offers a suite of HDR support and development programs for research candidates and supervisors. These cover the areas of Supervision Enhancement, Learning Skills, Professional Skills, and Mentorship.

Research candidates have access to face-to-face workshops (listed below) and online resources, including the HDR Learning Skills Learn unit, which houses materials and recordings of face-to-face HDR workshops. Members of the HDR Learning Skills Learn unit also receive advanced notification when new courses are available for registration. 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.

### February

<table>
<thead>
<tr>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/02/2017</td>
<td>Key Thinkers: Key Concepts Interdisciplinary Panel</td>
<td>10:00 AM - 12:00 PM</td>
<td>Senate Room CBA 310</td>
</tr>
<tr>
<td>08/02/2017</td>
<td>Building your Budget</td>
<td>13:30 PM - 02:00 PM</td>
<td>Senate Room CBA 310</td>
</tr>
<tr>
<td>14/02/2017</td>
<td>Project Grant Writing Workshop</td>
<td>01:00 PM - 03:00 PM</td>
<td>WSB 325</td>
</tr>
<tr>
<td>15/02/2017</td>
<td>Strategic Statement</td>
<td>12:30 PM - 02:00 PM</td>
<td>Senate Room CBA 310</td>
</tr>
<tr>
<td>24/02/2017</td>
<td>Thesis Formatting Workshop (for PC)</td>
<td>09:30 AM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
</tbody>
</table>

### March

<table>
<thead>
<tr>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/03/2017</td>
<td>EndNote Basic for PC</td>
<td>02:00 PM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>02/03/2017 - 09/04/2017</td>
<td>Writing for Social Scientists</td>
<td>10:00 AM - 12:00 PM</td>
<td>CSA202</td>
</tr>
<tr>
<td>02/03/2017</td>
<td>Mendeley: Introductory course</td>
<td>02:00 PM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>13/03/2017</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>15/03/2017</td>
<td>Nvivo v11 Full-day workshop (for PC)</td>
<td>09:15 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>15/03/2017 - 19/04/2017</td>
<td>Humanities Research Writing Basics</td>
<td>10:00 AM - 12:00 PM</td>
<td>EA 323</td>
</tr>
<tr>
<td>21/03/2017</td>
<td>SPSS Intermediate course</td>
<td>09:30 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>31/03/2017</td>
<td>Thesis Formatting Workshop (for PC)</td>
<td>09:30 AM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
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### April

<table>
<thead>
<tr>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
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</thead>
<tbody>
<tr>
<td>05/04/2017</td>
<td>EndNote Basic for PC</td>
<td>10:00 AM - 12:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>06/04/2017</td>
<td>EndNote Basic for Mac</td>
<td>10:00 AM - 12:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>07/04/2017</td>
<td>Mendeley: Introductory course</td>
<td>10:00 AM - 12:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>10/04/2017</td>
<td>Survey Design using Qualtrics</td>
<td>10:00 AM - 01:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>12/04/2017</td>
<td>Nvivo v11 Full-day workshop (for Mac)</td>
<td>09:15 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>28/04/2017</td>
<td>Thesis Formatting Workshop (for Mac)</td>
<td>09:30 AM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
</tbody>
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**HDR Workshops & Courses webpage:**
https://hdrworkshops.mq.edu.au/
To self-enrol, go to: http://ilearn.mq.edu.au/course/view.php?id=12702
Your HDR Learning Advisors

Science: Dr Adele Thomas
adele.thomas@mq.edu.au

Social Science: Dr Demelza Marlin
demelza.marlin@mq.edu.au

Medicine: Dr Jennifer Rowland
jen.rowland@mq.edu.au

Humanities: Dr Michelle Jamieson
michelle.jamieson@mq.edu.au
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/yjeLGj
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?
• When do you need to start?
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
Workshops include … Career Development Planning, Job applications & Interviews, Wellbeing - Resilience & Motivation, Communication, Events Management, Research Partnerships, Grant applications, Social Media – LinkedIn, Twitter

Events … networking with employers

iLearn online options … in development

Website
Career and Employment Service … available to you

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)

Career and Employment Service
C7A Muse building Ph: 9850 7372

Email: careers@mq.edu.au
Careers website - www.careers.mq.edu.au
www.facebook.com/macquarieuniversitycareerservice
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
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.
Research Librarians consult with academic staff and postgraduate students about library services and information resources to support research, teaching and learning.

**What can your Research Librarian do for you?**

We can:

- work with you to support your teaching and research activities
- advise you on the best sources of information for your research
- provide information skills training to find and manage information for research
- meet with you to discuss your research needs

**Find your Research Librarian**

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

Borrowing

BORROW AN UNLIMITED NUMBER OF BOOKS FOR 16 WEEKS (PLUS 5 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)

Apply online for access.

- Swipe card access.
- Over 150 seats.
- Desktop power for laptops.
- 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

Bibliographic Referencing Software

Citations

A citation provides information needed to locate a book, journal article or other resource. These are usually listed in a bibliography, index or database.

**Book:** Generally a book citation would include author, title, place of publication, publisher and date of publication.

**Journal article:** Generally, a journal article citation will include author, title of the article, date of publication.

How to use this guide

Most bibliographic management software allows you to:

- Create bibliographic 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 bibliographic management software packages:

Citation styles

The Referencing guide provides examples of different citation styles.

Ask a Librarian

Need HELP with your assignment or research?

Contact us

Call us on 1800 300 753
# 2017 HDR Workshops and Courses

The University offers a suite of HDR support and development programs for research candidates and supervisors. These cover the areas of Supervision Enhancement, Learning Skills, Professional Skills and Mentorship.

Research candidates have access to face-to-face workshops (listed below) and online resources, including the HDR Learning Skills Learn unit, which houses materials and recordings of face-to-face HDR workshops. Members of the HDR Learning Skills Learn unit also receive advanced notification when new courses are available for registration. 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.

## February

<table>
<thead>
<tr>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>24/02/2017</td>
<td>Thesis Formatting Workshop (for PC)</td>
<td>09:30 AM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
</tbody>
</table>

## March

<table>
<thead>
<tr>
<th>Date</th>
<th>Workshop</th>
<th>Time</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/03/2017</td>
<td>EndNote Basic for PC</td>
<td>02:00 PM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>02/03/2017 - 06/04/2017</td>
<td>Writing for Social Scientists</td>
<td>10:00 AM - 12:00 PM</td>
<td>C5a222</td>
</tr>
<tr>
<td>02/03/2017</td>
<td>Mendeley: Introductory course</td>
<td>02:00 PM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>13/03/2017</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>15/03/2017</td>
<td>NVivo v11 full-day workshop (for PC)</td>
<td>09:15 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>15/03/2017 - 19/04/2017</td>
<td>Humanities Research Writing Basics</td>
<td>10:00 AM - 12:00 PM</td>
<td>E4A 323</td>
</tr>
<tr>
<td>21/03/2017</td>
<td>SPSS Intermediate course</td>
<td>09:30 AM - 04:30 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
<tr>
<td>31/03/2017</td>
<td>Thesis Formatting Workshop (for PC)</td>
<td>09:30 AM - 04:00 PM</td>
<td>Library Training Room M4.02 (Level 4)</td>
</tr>
</tbody>
</table>

[http://hdrworkshops.mq.edu.au/](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
Getting Your Thesis Online

Macquarie University ResearchOnline

Trove for other examples
Need Help?

**Tours:** Monday 20th – Friday 24th March
Monday to Friday @ 1:15pm

**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:

**Levels 1 & 2**

<table>
<thead>
<tr>
<th>Monday - Friday</th>
<th>Saturday - Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8am - 8pm</td>
<td>10am - 6pm</td>
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</tbody>
</table>

**Levels 3, 4 & 5**

<table>
<thead>
<tr>
<th>Monday - Friday</th>
<th>Saturday - Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>8am - 11pm</td>
<td>10am - 6pm</td>
</tr>
</tbody>
</table>
See you at the Library
Campus Wellbeing and Support Services

2017
The Campus Wellbeing and Support Service is a comprehensive service offered by Macquarie University to support and care for students.

Our services can be accessed by MQ students and are 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

We care about your wellbeing and safety.

If you need help at anytime
call 1800 CARE MQ (1800 2273 67)
This is a free call from landline anywhere in Australia.
Standard call rates apply from mobile phones
In an emergency call 000 (ambulance, fire or police).

Other useful contact numbers.

<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifeline</td>
<td>13 11 14</td>
</tr>
<tr>
<td>Domestic &amp; Family Violence</td>
<td>1800 737 732</td>
</tr>
<tr>
<td>NSW Rape Crisis Centre</td>
<td>1800 424 017</td>
</tr>
<tr>
<td>Victim Support Line</td>
<td>1800 633 063</td>
</tr>
<tr>
<td>Poisons Information Line</td>
<td>13 11 26</td>
</tr>
<tr>
<td>Campus Wellbeing</td>
<td>9850 7497</td>
</tr>
<tr>
<td>Security</td>
<td>9850 7112</td>
</tr>
</tbody>
</table>
In the case of an emergency on Campus

Call Campus Emergency - 02 9850 9999

http://www.mq.edu.au/about/campus-services-and-facilities/security

Security Control Centre is opposite the Library, Building C3C.
24 hours per day, 7 days a week.
Responds to any type of emergency.

Emergency help points - automatically connect you with Campus Security

Walking escorts - 9850 7112 to arrange an escort
Online Programs for Students

University Wellbeing Course

... The University Wellbeing Course is designed to teach practical skills for managing symptoms of stress, anxiety, worry, low mood and depression.

Dr Blake Dear
Co-Director, eCentreClinic
Macquarie University, Australia

Prof Nick Titov
Co-Director, eCentreClinic
Macquarie University, Australia
Thank you

Campus Wellbeing and Support Services
Level 2, Lincoln Building, C8A
P: 9850 7497
Creating a new culture of scholarly community
Strategic Research Framework: 2015-2024

Key objective 1:
Accelerate World-Leading Research Performance

Key objective 2:
Prepare world-ready higher degree research candidates

Key objective 3:
Engage as a world-recognised research collaborator of choice

Key objective 4:
Deliver research with world-changing impact
Future-shaping 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

Research themes and streams:
- Arts and humanities
- Business, economics and management
- Human sciences
- Medicine and health sciences
- Science and engineering

Excellent research spanning fundamental to applied
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
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
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
HDR Mentors

What do we do?

**Academic and skills development support**
- Peer-to-peer mentoring panel session
- Research communication skills development
- Writing skills development
- One to one peer support

**Social and community support**
- Cultural exchange program
- Networking development program
- Outreach program
Are you looking for a HDR Mentor?

Please email us hdrmentors@mq.edu.au
“Thanks you very much for organising the Communicate your research event. I recognise that you went to a lot of effort and it was a well presented and thought out event.

It was my first time presenting and so great experience. I learnt a lot from watching others and your thoughtful comments and know I will do better in the future as a result.”
Networking Development Session

HDR Café: A space for the HDR Candidates to network and share their research highs and lows.

HDR Mentors Present:
HDR Café

A place created by HDR candidates for HDR candidates to network & share experiences.

Friday, 11 November
12-1pm, C5C 209
Peer Assisted Writing (PAW):
The peer Assisted Writing program is based on the principle of collaborative learning in which a more experienced student helps another student in managing various aspects of the research/academic process.
Social Pot Luck Diner: Sharing and celebrating our differences and similarities

"Great arrangements and atmosphere, 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"
Social and Community support

Out Reach Program: Bush care Regeneration Program

HDR Mentors are actively volunteering in the Bush care project in Lane cove National Park with the friends of lane cove team.
Inter-university collaboration

Inter-university participation: Inspire Conference 2016 at UTS

HDR Mentors assisted in supporting the Inspire Conference 2016
MQ Research Community Engagement

Participated in the MQ Minds Showcase Conference 2016
HDR Mentors Website

EVENTS AND PROJECTS
HDR Mentors social media
Facebook: hdmrmentors
Join the HDR Mentors Family!

C5C East, Room 312

Email: 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**
HDR Coordinators
*Mel Hubbard*
HDR Coordinators
*Steve Jacenyik*

**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*
LUNCH
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**
- Australian Postgraduate Awards, APAIs, International Postgraduate Research Scholarships
- Macquarie University Research Excellence 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
The University receives funding from the Australian Government for HDR students based on a research training performance model which includes HDR completions, and external research funding.

The Faculty does not receive any funding for HDR students beyond 3 years for PhD and 2 years for MPhil.

Both the University and you are making an extremely large investment in your HDR program and your future career.
University Support for Student Inventors

WHAT YOU NEED TO KNOW ABOUT INTELLECTUAL PROPERTY (IP)

Anna Grocholsky: Director, Commercialisation and Innovation

23 February 2017
Commercialisation
THE CONCEPT OF INNOVATION

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

• Intellectual Property (IP) is product of the (creative) mind 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.

• 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.
Intellectual Property

WHAT IS IT AND WHY DOES IT MATTER?

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 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
Artistic works
  inc. artwork, designs, logos
Manuals
Names – domain names, business names...

Know-how
Business methods
Software code
Is it all about the IP?

Questions I 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...
IP Policy

IP OWNERSHIP AND RETURNS

Students – own their IP (unless assigned)
HDR Students – the University asserts ownership
Staff – the University asserts ownership

• We pay!

• IP Policy; (split 50:50)

Research team

University
• Contact the Office of Commercialisation
• Complete an Innovation Disclosure form
• Meeting
• If under licence or option we confer with the licensee or option holder
• IP Commercialisation Advisory Committee
Publishing

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

[Waiver = with the exception of obligations under agreement]
Commercialisation folk are a service providers for you.

I know I do not have, and I think my colleagues and counterparts are similar… we lack ESP!

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** for more information.
Got an invention or a question?

Contact the **Office of Commercialisation** for more information.

**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.
THESIS BY PUBLICATION

Slides by Associate Professor Judi Homewood, Associate Dean, HDR, Faculty of Human Sciences
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.
Number and Presentation of Papers

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
Responsible Research and Research Ethics
A GUIDE FOR PHD CANDIDATES

Dr Ben Pitcher
Research Integrity Officer
Research Ethics and Integrity
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
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

WHY DOES IT MATTER?

• Reliability of research
• University’s reputation
• Reliability of degrees
• Health and safety
• Funding
• Criminal investigation
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
Principles and Practices

MAIN TOPICS ADDRESSED:
• General principles of responsible research
• Management of research data and primary materials
• Supervision of research trainees
• Publication and dissemination of research findings
• Authorship
• Peer Review
• Conflicts of Interest
• Collaborative research across institutions
Where to get information

The Macquarie Code:
http://mq.edu.au/policy/category.html#research

The Australian Code:

Online resources...
• Epigeum Research Integrity Course on iLearn
• The Lab - http://ori.hhs.gov/thelab
• The Research Clinic - http://ori.hhs.gov/TheResearchClinic
Research Misconduct

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

Research misconduct involves all of 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
Why does misconduct occur?

Often not malevolence/bad character but rather *pressure*

**PERSONAL**
- Competitive pressures (scholarships, grants, publications, promotions, peer recognition)
- Time pressures
- Financial pressures (limited research funding, end of scholarship, etc.)

**INSTITUTIONAL**
- Universities want to maximise successful grant applications, HDR completions
- Competition between universities for research funding, scholarly standing, academic staff, postgraduate students
Research Integrity Advisors

- Associate Deans of Higher Degree Research and Research

- RIAs can provide advice on good research practice
  - Talk about issues before they become problems

- RIAs also provide advice about reporting breaches

- If you have concerns:
  - Talk to any RIA, not just in your faculty
  - Talk in hypotheticals
  - Get their help and advice in preparing your complaint
• We all have an obligation to report suspected breaches or misconduct

• Discuss your concerns with an Advisor

• Reports made to Director, Research Ethics and Integrity

• Research.integrity@mq.edu.au
Ghostwriting and plagiarism

- Plagiarism in any form is unacceptable
- http://libguides.mq.edu.au/Referencing
- Do not use ghost writers or writing services
- You must discuss using professional editing services with your supervisor
- http://www.iped-editors.org/About_editing/Editing_theses.aspx
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
When the balance is wrong

CASE STUDY: TUSKEGEE SYphilis TRIAL (1932-1970s)

• 600+ African-American men; poor, many illiterate, syphilis-sufferers

• Longitudinal study of untreated disease progression

• Informed consent never given, deceived into participating – offered free medical ‘treatment’, placebo treatments, free autopsies/burials

• By 1940s, it was known that penicillin provided simple, fast, effective treatment, but participants were not treated

• Findings of study published in peer-reviewed journals

• Neither editors/referees/members of medical profession who read articles, questioned ethics of trial

• Even following media publicity after public health official raised concerns, scandal largely ignored by medical profession
## 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>
</table>
| Human         | National Statement on Ethical Conduct in Human Research (2014) | • MQ Human Research Ethics Committees x 2  
• Faculty Committees | 10 meetings/year  
See website |
| Animal        | Australian for the care and use of animals for scientific purposes (2013) | • MQ Animal Ethics Committee | 10 meetings/year  
See website |
| Biosafety     | Office of the Gene Technology Regulator (OGTR) (2000) | • MQ Institutional Biosafety Committee | 3 meetings/year plus virtual meetings as necessary  
See website |

http://www.research.mq.edu.au/research_ethics
Approval must be obtained from an HREC

**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

Animal research ethics
Responsibilities to non-human research participants

All work with animals must be approved by the AEC

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
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.?
Contact us
WHERE TO SEEK ADVICE

HUMAN RESEARCH ETHICS
- Ethics.Secretariat@mq.edu.au

ANIMAL RESEARCH ETHICS
- Animal.Ethics@mq.edu.au

BIOSAFETY
- Biosafety@mq.edu.au

RESEARCH INTEGRITY
- Research.Integrity@mq.edu.au
Thank you
Good luck with your research!
Biosafety, biosecurity and gene technology

CENTRAL COMMENCEMENT PROGRAM

Dr. Liette Vandine
February 2017
Agenda

BIOSAFETY, BIOSECURITY AND GENE TECHNOLOGY

- Biosafety
- Biosecurity and gene technology
- Facilities
- Institutional Biosafety Committee
Biological Safety

EMERGING INFECTIOUS DISEASE HOTSPOTS, 1940 - 2012

Image source: Nature 2008
Biosafety (Biological safety)

WHAT IS BIOSAFETY?

- Safe handling of infectious micro-organisms and hazardous biological agents

- Classifies micro-organisms into four risk groups (RG)
  - RG1 – *E. coli* K-12, *Lactobacillus*, *Saccharomyces cerevisiae*
  - RG2 – *Cryptosporidium*, HIV
  - RG3 – Lyssa Virus, HIV
  - RG4 – Ebola Virus

- Defines the containment level, facility design and specialist equipment required for work involving risk group micro-organisms

- Encompasses work practices and training required for working with each risk group
  - Must follow AS/NZS 2243.3 Microbiological Safety and Containment
WHO DOES BIOSAFETY APPLY TO?

- Basic biosafety principles apply to **everyone** who works with biological agents
  - Sample integrity – protect from contamination
  - Reputational risks – publication retraction, non-repeatable results

- Lower risk research
  - Tagging or capturing wild animals
  - Pre-screened human clinical samples
  - Molecular analyses on plants and RG1 or inactivated microorganisms

- Higher risk research
  - Culturing of RG2 and above microorganisms
  - Zoonotic pathogens
  - Genetically and synthetically modified organisms
  - Materials requiring biosecurity containment
  - Un-screened clinical samples
High risk biological research

GENE TECHNOLOGY

- Genetically modified organisms and synthetically modified organisms

- Four GMO Dealing classifications:
  - Exempt Dealings
  - Notifiable Low Risk Dealings (NLRD)
  - Dealings NOT involving Intentional Release (DNIR)
  - Dealings involving Intentional Release (DIR)

- Strict approval processes, containment requirements, training and monitoring requirements to maintain our *Accreditation and DNIR licences*


- Regulator: *Office of the Gene Technology Regulator (OGTR)*
High risk biological research

BIOSECURITY

- Importation of products which have originated outside of Australian borders
- Individual certification process, **Fit and Proper Person** self declaration and Import Permits are required
- Strict approval processes, containment requirements, training and monitoring requirements to maintain our Institutional **Approved Arrangements**
- Legislation: *Biosecurity Act, 2015*
- Regulators: **Department of Agriculture and Water Resources** (DAWRs)
- Additional enforcement agencies: **NSW Environmental Protection Authority (EPA)** and **NSW Department of Primary Industries (DPI)**
Facilities
LABORATORIES FOR HIGH RISK RESEARCH

- **ALWAYS** follow door signage
- Physical Containment Facilities (OGTR)
  - PC1 – FSE
  - PC2 – FSE and FHMS
- Approved Arrangements (DAWRs) (OGTR)
  - BC1 – FSE
  - BC2 Microbiological – FSE
  - BC2 Microbiological and Animal – MARS and FMHS
Institutional Biosafety Committee (IBC)

OUR RESPONSIBILITIES

1. Overseas research approvals for all work involving:
   • RG2 and above microorganisms and zoonoses
   • GMO and SMO projects
   • Projects involving materials requiring biosecurity containment
   • Security Sensitive Biological Agents

2. Monitoring lower risk research projects

3. Monitoring and auditing laboratory compliance and laboratory personnel behaviour

4. Reporting annually to DVC-R and external regulators (OGTR and DAWRs)

http://www.research.mq.edu.au/current_research_staff/gene_technology_and_biosafety

You will not graduate if you do not include your IBC approval in the back of your thesis
Your responsibilities

FOR YOURSELF AND YOUR MINION

1. To undertake training and be informed with the biosafety risks present in your work

2. Work safely in the laboratory

3. Ensure that any volunteer or intern is supervised, trained and also understands biosafety risks associated with the research
Contact Details

**Liette Vandine**  [liette.vandine@mq.edu.au](mailto:liette.vandine@mq.edu.au)
Biosafety and Biosecurity Officer, Risk and Assurance

Emma Kirk  [biosafety@mq.edu.au](mailto:biosafety@mq.edu.au)
Secretary, Institutional Biosafety Committee, Research Office
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 (students in joint PhD programs are required to meet examination requirements of the partner University, which might include an oral examination or public defence)
• In general all examiners are external to the University ~60% are not resident in Australia
• 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, including recommendation of examiners and reserve 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)
Choosing PhD/MPhil Examiners

- Examiners should be chosen carefully – they are an important resource and potential influence on your ongoing career. Appropriate examiners are:
  - a significant figure in the field identified through publications
  - a session chair or panellist at a conference presentation you have made
  - an editor/subeditor of a journal in your area
  - otherwise be aware of your work through a seminar/visit to another university or through your supervisors’ networks of colleagues
  - not personally close to you or your supervisors (e.g. no recent joint publications)
Choosing PhD/MPhil Examiners

Examiners add value by

• making comments on strengths and weaknesses of your thesis and giving suggestions on how to address the latter
• providing a benchmark of quality in the field of your thesis
• commenting on publishable material in the thesis
• subsequently being a reviewer of the work for publication
• subsequently acting as a referee for applications for fellowships/positions or otherwise a mentor
• Note – always ensure contributions by the examiners to the field are appropriately identified and properly referenced
### 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>
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</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>
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<td>(c)</td>
<td>is satisfactory as regards its literary presentation;</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>(d)</td>
<td>contains a substantial amount of material suitable for publication</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>(e) (i) Would you consider this thesis to be in the top 10% of doctoral level research in the field?</td>
<td>☐</td>
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<tr>
<td>(e) (ii) Would you consider this thesis to be in the top 5% of doctoral level research in the field?</td>
<td>☐</td>
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<td>(f) How many research theses have you examined?</td>
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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 Thesis Examination Process – key sources

- *HDR Thesis Preparation, Submission & Examination - policy & procedure, from Policy Central*

- *Appointment of Examiners form (3 months pre-submission, including candidate and supervisor signatures), policy and procedure*

- *Submission of HDR thesis for examination form*

- *Digital Thesis Submission guidelines and the ADT publication project*
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 PESC, which forwards a recommendation to HDRC
- HDRC 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.