



# MEDI712

## Research Frontiers in Medical Science 2

S2 Day 2017

*Department of Biomedical Sciences*

### Contents

---

<u>General Information</u>	2
<u>Learning Outcomes</u>	2
<u>General Assessment Information</u>	3
<u>Assessment Tasks</u>	3
<u>Delivery and Resources</u>	5
<u>Policies and Procedures</u>	6
<u>Graduate Capabilities</u>	7
<u>Changes from Previous Offering</u>	10

---

#### **Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

## General Information

Unit convenor and teaching staff

Unit Convenor

Dr Marina Junqueira Santiago

[marina.junqueirasantiago@mq.edu.au](mailto:marina.junqueirasantiago@mq.edu.au)

Level 1, 75 Talavera Rd

Consultation by appointment

Unit Convenor

Dr Danè Turner

[daneh.turner@mq.edu.au](mailto:daneh.turner@mq.edu.au)

Level 1, 75 Talavera Rd

Consultation by appointment

Credit points

4

Prerequisites

Admission to MRes

Corequisites

Co-badged status

Unit description

Building on MEDI711, students will continue to acquire an advanced conceptual knowledge of breakthrough discoveries relevant to a range of topics within the field of medical research.

Through mentoring by senior research-active staff and post-doctoral researchers within the Faculty of Medicine and Health Sciences, students will gain discipline specific knowledge that will be relevant to their future research careers. Students will: 1. Attend seminars and lectures focused on ongoing research projects from the Faculty of Medicine and Health Sciences and from invited speakers from leading national and international research institutes 2. Participate in self-directed tasks in which they will develop skills related to writing grant applications and reviews.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

Acquire advanced knowledge of current research in medical science

Identify and discuss complex problems and issues in medical research with intellectual independence

Synthesise and analyse information from a wide variety of sources on medical research

Develop oral and written communication skills, related to grant applications, and self-directed learning.

Identify pertinent areas of research and formulate a suitable methodology to test out a research question

Evaluate and appraise a research protocol based on quality, feasibility and significance.

## General Assessment Information

Grade descriptors and other information concerning grading are contained in the Macquarie University Grading Policy, which is available at: <http://www.mq.edu.au/policy/docs/grading/policy.html>

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes.

Further details for each assessment task will be available on iLearn including marking rubrics.

All final grades are determined by a grading committee and are not the sole responsibility of the Unit Convenors.

## Extensions

Applications for assessment task extensions must be submitted via: [www.ask.mq.edu.au](http://www.ask.mq.edu.au).

For further details please refer to the Disruption to Studies Policy available at: [http://mq.edu.au/policy/docs/disruption\\_studies/policy.html](http://mq.edu.au/policy/docs/disruption_studies/policy.html)

## Late Submission

All assignments which are officially received after the due date, and where no extension has been granted, will incur a deduction of 10% for the first day, and 10% for each subsequent day including the actual day on which the work is received. Weekends and public holidays are included. For example:

Due date	Received	Days late	Deduction	Raw mark	Final mark
Friday 14th	Monday 17th	3	30%	75%	45%

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">Shark-Tank Grant Pitch</a>	20%	No	Week 7

Name	Weighting	Hurdle	Due
<a href="#"><u>Grant Application</u></a>	40%	No	Week 9
<a href="#"><u>Peer Review and Rebuttal</u></a>	30%	No	Week 11/12
<a href="#"><u>Seminar Attendance</u></a>	10%	No	Week 13

## Shark-Tank Grant Pitch

Due: **Week 7**

Weighting: **20%**

Having attended six weeks of research talks, students will be asked to decide on a research question within the areas covered. They will then pitch their grant to an audience of research peers. This will be a 10-minute talk and 5-minute question session in a Shark-Tank style live pitch.

On successful completion you will be able to:

- Identify and discuss complex problems and issues in medical research with intellectual independence
- Develop oral and written communication skills, related to grant applications, and self-directed learning.
- Identify pertinent areas of research and formulate a suitable methodology to test out a research question

## Grant Application

Due: **Week 9**

Weighting: **40%**

Students will submit a mock grant application based on the [MQ New Staff application](#).

On successful completion you will be able to:

- Acquire advanced knowledge of current research in medical science
- Identify and discuss complex problems and issues in medical research with intellectual independence
- Synthesise and analyse information from a wide variety of sources on medical research
- Develop oral and written communication skills, related to grant applications, and self-directed learning.
- Identify pertinent areas of research and formulate a suitable methodology to test out a research question

## Peer Review and Rebuttal

Due: **Week 11/12**

Weighting: **30%**

Students will provide a peer review of another's grants (Strengths, weaknesses, significance and innovation). A week later (week 12), the students will discuss and respond to the comments of the peer reviewers (staff as well as peers).

On successful completion you will be able to:

- Acquire advanced knowledge of current research in medical science
- Identify and discuss complex problems and issues in medical research with intellectual independence
- Synthesise and analyse information from a wide variety of sources on medical research
- Develop oral and written communication skills, related to grant applications, and self-directed learning.
- Evaluate and appraise a research protocol based on quality, feasibility and significance.

## Seminar Attendance

Due: **Week 13**

Weighting: **10%**

MRes students are expected to attend a minimum of 15 seminars (medical related and at least 30 minutes each) over the Semester. These can include Research Seminars hosted by Biomedical Sciences, AIHI, the Department of Health Professions or other Faculties. In addition to the log book attendance record, you must prepare a detailed critique for five of the attended seminars. Log book and critique will need to be submitted via Turnitin on week 13. If the log book is incomplete or insufficient seminars have been attended, a zero grade for this component will be recorded.

On successful completion you will be able to:

- Acquire advanced knowledge of current research in medical science
- Synthesise and analyse information from a wide variety of sources on medical research
- Evaluate and appraise a research protocol based on quality, feasibility and significance.

## Delivery and Resources

Throughout the semester students will be provided with references to various journal papers which they will be expected to read and reflect on. Students are also encouraged to expand their knowledge and understanding of topics presented by further reading of the current literature (using databases such as Scopus and PubMed).

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy [http://mq.edu.au/policy/docs/academic\\_honesty/policy.html](http://mq.edu.au/policy/docs/academic_honesty/policy.html)

Assessment Policy [http://mq.edu.au/policy/docs/assessment/policy\\_2016.html](http://mq.edu.au/policy/docs/assessment/policy_2016.html)

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Complaint Management Procedure for Students and Members of the Public [http://www.mq.edu.au/policy/docs/complaint\\_management/procedure.html](http://www.mq.edu.au/policy/docs/complaint_management/procedure.html)

Disruption to Studies Policy (in effect until Dec 4th, 2017): [http://www.mq.edu.au/policy/docs/disruption\\_studies/policy.html](http://www.mq.edu.au/policy/docs/disruption_studies/policy.html)

Special Consideration Policy (in effect from Dec 4th, 2017): <https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration>

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of Policy Central.

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: [https://students.mq.edu.au/support/student\\_conduct/](https://students.mq.edu.au/support/student_conduct/)

## Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](http://ask.mq.edu.au).

Macquarie University policies and procedures are accessible from [Policy Central](#). Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy [http://mq.edu.au/policy/docs/academic\\_honesty/policy.html](http://mq.edu.au/policy/docs/academic_honesty/policy.html)

Assessment Policy <http://mq.edu.au/policy/docs/assessment/policy.html>

Grading Policy <http://mq.edu.au/policy/docs/grading/policy.html>

Grade Appeal Policy <http://mq.edu.au/policy/docs/gradeappeal/policy.html>

Grievance Management Policy [http://mq.edu.au/policy/docs/grievance\\_management/policy.html](http://mq.edu.au/policy/docs/grievance_management/policy.html)

Disruption to Studies Policy [http://www.mq.edu.au/policy/docs/disruption\\_studies/policy.html](http://www.mq.edu.au/policy/docs/disruption_studies/policy.html) *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the [Learning and Teaching Category](#) of Policy Central.

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: [https://students.mq.edu.au/support/student\\_conduct/](https://students.mq.edu.au/support/student_conduct/)

## Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](http://ask.mq.edu.au).

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module for Students](#)
- [Ask a Learning Adviser](#)

## Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

## Graduate Capabilities

### PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and

decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

### **Learning outcome**

- Synthesise and analyse information from a wide variety of sources on medical research

### **Assessment tasks**

- Grant Application
- Peer Review and Rebuttal
- Seminar Attendance

## **PG - Discipline Knowledge and Skills**

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

### **Learning outcome**

- Acquire advanced knowledge of current research in medical science

### **Assessment tasks**

- Shark-Tank Grant Pitch
- Grant Application
- Peer Review and Rebuttal

## **PG - Critical, Analytical and Integrative Thinking**

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

### **Learning outcomes**

- Identify and discuss complex problems and issues in medical research with intellectual independence
- Synthesise and analyse information from a wide variety of sources on medical research
- Develop oral and written communication skills, related to grant applications, and self-directed learning.
- Identify pertinent areas of research and formulate a suitable methodology to test out a



research question

- Evaluate and appraise a research protocol based on quality, feasibility and significance.

## Assessment tasks

- Shark-Tank Grant Pitch
- Grant Application
- Peer Review and Rebuttal
- Seminar Attendance

## PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

### Learning outcomes

- Identify and discuss complex problems and issues in medical research with intellectual independence
- Synthesise and analyse information from a wide variety of sources on medical research
- Identify pertinent areas of research and formulate a suitable methodology to test out a research question
- Evaluate and appraise a research protocol based on quality, feasibility and significance.

## Assessment tasks

- Shark-Tank Grant Pitch
- Grant Application
- Peer Review and Rebuttal
- Seminar Attendance

## PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

### Learning outcomes

- Develop oral and written communication skills, related to grant applications, and self-

directed learning.

- Identify pertinent areas of research and formulate a suitable methodology to test out a research question
- Evaluate and appraise a research protocol based on quality, feasibility and significance.

### **Assessment tasks**

- Shark-Tank Grant Pitch
- Grant Application
- Peer Review and Rebuttal

## **PG - Engaged and Responsible, Active and Ethical Citizens**

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

### **Learning outcomes**

- Acquire advanced knowledge of current research in medical science
- Identify and discuss complex problems and issues in medical research with intellectual independence
- Develop oral and written communication skills, related to grant applications, and self-directed learning.
- Identify pertinent areas of research and formulate a suitable methodology to test out a research question

### **Assessment tasks**

- Shark-Tank Grant Pitch
- Grant Application
- Peer Review and Rebuttal

## **Changes from Previous Offering**

This unit, similar to previous years, is an extension of MEDI711 from Semester 1. The core research topics have been modified to reflect current research within the Department of Biomedical Sciences.

