MEDI7011
Research Frontiers in Medical Science 1
Session 1, In person-scheduled-weekday, North Ryde 2024
Macquarie Medical School

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**General Information**

<table>
<thead>
<tr>
<th>Unit convenor and teaching staff</th>
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<tbody>
<tr>
<td>Sarah Hemley</td>
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| Credit points | 10 |

<table>
<thead>
<tr>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>Admission to MRes</td>
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| Corequisites |

| Co-badged status |

| Unit description |

In this unit you will develop 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 postdoctoral researchers within the Faculty of Medicine, Health and Human Sciences, you will gain discipline-specific knowledge that will be relevant to your future research career. You will attend seminars and lectures focused on ongoing research projects from the Faculty of Medicine, Health and Human Sciences and from invited speakers from leading national and international research institutes. You will also participate in self-directed and group tasks in which you will learn to conduct research, read and critically review seminal research findings that have shaped contemporary thinking, and to disseminate these findings in written and oral form.

**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](https://www.mq.edu.au/study/calendar-of-dates)

**Learning Outcomes**

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

- **ULO1**: Explain the ethical and practical requirements for research with humans and animals.
- **ULO2**: Synthesise and analyse information regarding medical/health research from a
wide variety of sources.

**ULO3**: Identify and discuss complex problems and issues in medical research with intellectual independence

**ULO4**: Articulate cogent arguments in written and oral form for a variety of audiences.

**ULO5**: Apply skills in research literacy and research related information technology.

### General Assessment Information

Grade descriptors and other information concerning grading are contained in Schedule 1 of the Macquarie University Assessment Policy, which is available at: [https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment).

All final grades are determined by a grading committee, in accordance with the Macquarie University Assessment Policy, and are not the sole responsibility of the Unit Convenor. Students will be awarded a final grade, which corresponds to the grade descriptors specified in the Assessment Procedure (clause 128).

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes, meet any ungraded requirements including professionalism, and achieve a final mark of 50 or better.

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

### Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Hurdle</th>
<th>Due</th>
</tr>
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<tbody>
<tr>
<td>Scientific News Article</td>
<td>20%</td>
<td>No</td>
<td>Week 4</td>
</tr>
<tr>
<td>Journal Club Presentation</td>
<td>25%</td>
<td>No</td>
<td>Week 8</td>
</tr>
<tr>
<td>Critical Review Essay</td>
<td>35%</td>
<td>No</td>
<td>Week 12</td>
</tr>
<tr>
<td>Seminar attendance and critique</td>
<td>20%</td>
<td>No</td>
<td>Week 13</td>
</tr>
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**Scientific News Article**

Assessment Type 1: Media presentation

Indicative Time on Task 2: 19 hours

Due: **Week 4**

Weighting: **20%**

Popular science article of a recent publication.
On successful completion you will be able to:

- Synthesise and analyse information regarding medical/health research from a wide variety of sources.
- Identify and discuss complex problems and issues in medical research with intellectual independence.
- Articulate cogent arguments in written and oral form for a variety of audiences.
- Apply skills in research literacy and research related information technology.

**Journal Club Presentation**

Assessment Type 1: Presentation
Indicative Time on Task 2: 24 hours
Due: **Week 8**
Weighting: **25%**

Presentation of seminal research paper in journal club format.

On successful completion you will be able to:

- Explain the ethical and practical requirements for research with humans and animals.
- Synthesise and analyse information regarding medical/health research from a wide variety of sources.
- Identify and discuss complex problems and issues in medical research with intellectual independence.
- Articulate cogent arguments in written and oral form for a variety of audiences.
- Apply skills in research literacy and research related information technology.

**Critical Review Essay**

Assessment Type 1: Essay
Indicative Time on Task 2: 33 hours
Due: **Week 12**
Weighting: **35%**

Critical essay on selected topic from the unit.

On successful completion you will be able to:

- Synthesise and analyse information regarding medical/health research from a wide
variety of sources.

- Identify and discuss complex problems and issues in medical research with intellectual independence
- Articulate cogent arguments in written and oral form for a variety of audiences.
- Apply skills in research literacy and research related information technology.

Seminar attendance and critique

Assessment Type: Participatory task
Indicative Time on Task: 18 hours
Due: Week 13
Weighting: 20%

Attendance log and critical review of seminar presentations.

On successful completion you will be able to:

- Explain the ethical and practical requirements for research with humans and animals.
- Synthesise and analyse information regarding medical/health research from a wide variety of sources.

1 If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

2 Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Classes

The weekly format of MEDI7011 will be: 2 hour lectures every Monday, 10am-12noon. Classes will predominantly be onsite. However, online or recorded lectures will be made available as needed.

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
Technology used
Active participation in learning activities throughout the unit will generally require students to have access to a tablet, laptop or similar device. Students who do not own their own laptop computer may borrow one from the university library.

Policies and Procedures
Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct
Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results
Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) 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 or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity
At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing an
Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit 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.
Unit guide MEDI7011 Research Frontiers in Medical Science 1

Unit information based on version 2024.01R of the Handbook