HONOURS IN PATHOLOGY

Coordinator: Theo Mantamadiotis
theom@unimelb.edu.au
HONOURS IN PATHOLOGY

Undertake a project investigating the biological mechanisms underlying a human disease

Access to experience cutting edge molecular and cellular biology technologies

Research themes:
• Neurodegenerative diseases – prion disease
• Inflammation
• Immunopathology
• Immune oncology
• Diabetes
• Cancer
Research in the Department

The Department of Microbiology and Immunology is a research and research-lead teaching department of the School of Biomedical Science in the Faculty of Medicine, Dentistry and Health Sciences. The Department’s research laboratories are located in the Peter Doherty Institute for Infection and Immunity (Doherty Institute) which is in the heart of the Parkville research precinct on the corner of Grattan street and Royal parade. The Doherty Institute is a centre of excellence where leading scientists and clinicians collaborate to improve human health globally.
Research Student Projects in Pathology 2021

Honours
Master in Biomedical Science
PhD

Department of Microbiology & Immunology
School of Biomedical Sciences
MDHS
University of Melbourne

PATHOLOGY PROJECT PDF AT:
https://biomedicalsciences.unimelb.edu.au/departments/microbiology-immunology/study/opportunities-for-honours-students

Contact supervisor listed about availability and which degree each project is being offered for
The BSc / BBiomed Honours Degree is a qualification that prepares graduates within a discipline:

- for a higher-level qualification involving research
- advances the knowledge, learning skills and application gained in their Bachelor Degree
- A prerequisite for a RHD (MPhil / PhD)
- A path to graduate studies
- Improved job prospects due to practical research experience
How does Honours differ from undergraduate courses?

• “More like a job than study!”

• A need to regularly communicate with supervisors & mentors

• Independent thinking, problem-solving, planning, time and project management

• Most students find their Honours year the most challenging and worthwhile of their university experience....and simultaneously their “best and worst year at university”......

• Best because it involves new fields of study in a collaborative space

• Conversely, the Honours year is challenging - independent research – no textbooks!
ENTRY REQUIREMENTS

Faculty of MDHS

Details at: http://mdhs-study.unimelb.edu.au/degrees/honours/entry-requirements

Bachelor of Biomedicine (Degree with Honours) or the Bachelor of Science (Degree with Honours), applicants must:

- a weighted average mark (WAM) of at least H3 (65%)

Honours in Pathology:

- completed a major in Pathology, OR a major in a discipline relevant to the proposed project together with a second-year pathology or pathophysiology subject, or equivalent

- applications from otherwise qualified graduates who have not completed undergrad pathology but have practical experience in another biomedical science discipline will be considered on a case-by-case basis by the Selection Committee
How to Apply


• STEP 1: Look for Projects and Contact Potential Supervisor(s)
• STEP 2: Submit an Online Application
• STEP 3: Submit Project Preferences in Sonia
• STEP 4: Respond to Your Offer
## KEY DATES

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Round 1 Application Closing Date</td>
<td>Saturday 31 October 2020</td>
</tr>
<tr>
<td>Round 1 Project Preferences Submission Deadline</td>
<td>Friday 13 November 2020</td>
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<tr>
<td>Round 1 Application Outcomes Issued By</td>
<td>Wednesday 23 December 2020</td>
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<tr>
<td>Round 2 Application Closing Date</td>
<td>Monday 25 January 2021</td>
</tr>
<tr>
<td>Round 2 Project Preferences Submission Deadline</td>
<td>Monday 1 February 2021</td>
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<tr>
<td>Round 2 Application Outcomes Issued By</td>
<td>Monday 8 February 2021</td>
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<tr>
<td>Course Commencement Date</td>
<td>Monday 15 February 2021</td>
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Honours is a 100 points course

**SEMESTER 1**

- **COURSEWORK**
  - BIOM40001 12.5 points

**SEMESTER 2**

**RESEARCH PROJECT ONLY**

- **PATHOLOGY COURSEWORK**
  - PATH40002 12.5 points

**RESEARCH PROJECT**

- PATH40005* 50 points

**COURSEWORK**

- PATH40001* 25 points

**Course Descriptions**

- BIOM40001 Introduction To Biomedical Research
- PATH40002 Critical Analysis of Pathology Research
- PATH40001/40005 Pathology Research Project
### HONOURS IN PATHOLOGY COURSEWORK
#### PATH40002 Critical Analysis of Pathology Research

- skills in reading and understanding of scientific research articles
- skills for the critical analysis of research articles

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<thead>
<tr>
<th>Description</th>
<th>Timing</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>An oral presentation critically evaluating components of a research paper</td>
<td>During the teaching period</td>
<td>20%</td>
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<tr>
<td>Students are required to perform critical analysis of a research article. This is an open book examination •4 hours</td>
<td>During the teaching period</td>
<td>80%</td>
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### HONOURS IN PATHOLOGY RESEARCH PROJECT ASSESSMENTS

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</thead>
<tbody>
<tr>
<td><strong>Hurdle requirement:</strong> Submission of draft</td>
<td>Due in May</td>
<td>N/A</td>
</tr>
<tr>
<td>literature review</td>
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<tr>
<td>An introductory seminar</td>
<td>Due in May</td>
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<td>• 15 minutes</td>
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<tr>
<td>A literature Review</td>
<td>Due in October</td>
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</tr>
<tr>
<td>Research thesis</td>
<td>Due in October</td>
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<td>A defense-of-thesis seminar</td>
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Lawson laboratory: Neurodegenerative disease caused by prions

Head of Laboratory
Associate Professor Vicki Lawson
v.lawson@unimelb.edu.au
View researcher’s webpage
+61 3 8344 4049

Barrow laboratory: Tissue immunosurveillance strategies

Head of Laboratory
Dr Alexander David Barrow
alexanderdav@unimelb.edu.au
View researcher’s webpage
+61390356297

Mantamadiotis laboratory: Brain Cancer Molecular Biology

Dr Theo Mantamadiotis
theom@unimelb.edu.au
View researcher’s webpage
+61 3 8344 4065

Prostate Cancer
Head of Research Group

Professor Chris Hovens

Karagiannis research group

Epigenomic Medicine

Key terms: Chromatin biology, epigenetics, DNA damage, nutrigenomics, diabetic foot, wound healing

Group Leader

Dr Tom Karagiannis

Monash University Central Clinical School
Alfred Precinct