Eastern Hill Academic Precinct: Student information night

2020

Dr Amanda Edgley
University of Melbourne
Academic Co-ordinator for Research Training
Acknowledgement of Country

I would like to show my respect and acknowledge the Traditional Custodians of the Land, the Wurundjeri people, upon whose ancestral lands the University stands.

I would also like to pay my respect to the Elders both past and present of the Kulin Nation, and extend that respect to other Indigenous Australians present.
Overview of Proceedings

• University of Melbourne at St Vincent’s Hospital
• Eastern Hill Precinct Partners
• Uni Melb Research Pathways
• Research highlights from the precinct
• Student panel discussion and Q & A
• Break-out into researcher/ institute sessions

* Please submit any questions using the Q&A function
Eastern Hill Precinct - where are we?

St Vincent's Hospital Melbourne
41 Victoria Parade
Fitzroy VIC 3065

The Royal Victorian Eye and Ear Hospital
32 Gisborne Street,
East Melbourne
Victoria 3002 Australia

20 minute scenic walk from Parkville
University of Melbourne at Eastern Hill

Department of Surgery, SVH

Professor Peter Choong
Sir Hugh Devine Chair of Surgery
Director of Orthopaedics at St Vincent’s Hospital Melbourne
Chair of the Bone and Soft Tissue Sarcoma Service at the Peter MacCallum Cancer Centre.

Department of Surgery (Ophthalmology)

Professor Mark Cook.
The Sir John Eccles Chair of Medicine, Director of Clinical Neurosciences at St. Vincent’s Hospital and Director of the Graham Clark Institute

Department of Medicine, SVH

Professor Keith Martin.
The Ringland Anderson Chair of Ophthalmology and the Managing Director of the Centre for Eye Research Australia (CERA)

Department of Medical Bionics

Associate Professor James Fallon

Professor Stephen O’Leary. William Gibson Chair of Otolaryngology at the University of Melbourne.
University of Melbourne Research Training – Eastern Hill Campus:

Academic Co-ordinator Research Training
• Dr Amanda Edgley: aedgley@unimelb.edu.au

Honours and Graduate Research Programs Co-ordinator
• Nora Hanafi & Meredith Faragher: easternhill-gr@unimelb.edu.au

Student Co-ordinator (Otolaryngology):
• Dr Hayden Eastwood: haydente@unimelb.edu.au

Research Co-ordinators (Education), Ophthalmology/ CERA:
• A/Prof Ian Trounce: i.trounce@unimelb.edu.au
• Dr Rachel Lee: cera-education@unimelb.edu.au

Bionics Institute student Co-ordinator:
• Professor Colette McKay: student.enquiries@bionicsinstitute.org

St Vincents Institute of Medical Research Student Co-Ordinator:
• Dr Tom Brodnicki: tbrodnicki@svi.edu.au
Research Pathways

Undergraduate Bachelor of Science/Biomedical Science, or equivalent WAM 65

Bachelor of Science/Bachelor of Biomedical Science Honours (BH-SCI / BH-BMED)
- 1 year / 100 points
- 75 point research project
- 25 points coursework

Masters of Biomedical Science (MC-BMEDSC)
- 2 year / 200 point coursework Masters
- 125 point research project
- 75 points coursework (discipline and professional skills)

Doctor of Medicine (MC-DMED)
- 4 year graduate entry medical coursework degree
- Includes a 1 year MDRP research project subject
- Commencement of RHD degree usually at resident/registrar.

Post-graduate Research Higher Degrees – PhD / MPhil

rewarding

challenging
Research Pathways – How to apply

Honours (BH-SCI / BH-BMED)
- [https://mdhs-study.unimelb.edu.au/degrees/honours/apply-now#apply-now](https://mdhs-study.unimelb.edu.au/degrees/honours/apply-now#apply-now)
- Semester 1, 2021 - First round application closing October 31\(^{st}\), 2020

Masters of Biomedical Science (MC-BMEDSC)
- [https://study.unimelb.edu.au/find/courses/graduate/master-of-biomedical-science/how-to-apply/](https://study.unimelb.edu.au/find/courses/graduate/master-of-biomedical-science/how-to-apply/)
- Semester 1, 2021 - First round application closing November 30\(^{th}\) 2020
- Both 1\(^{st}\) and 2\(^{nd}\) semester entry

PhD/MPhil
- [https://study.unimelb.edu.au/how-to-apply/graduate-research](https://study.unimelb.edu.au/how-to-apply/graduate-research)
- Can apply any time but the main scholarship round closes October 31\(^{st}\), 2020
Research at Eastern Hill – Finding a project and supervisor

• Link to the Eastern Hill Project Booklet – provided in Q&A and emailed to registrants.
• Eastern Hill Graduate Research Team: easternhill-gr@unimelb.edu.au

For Honours and Masters Students:
• SONIA project database. https://mdhs-study.unimelb.edu.au/degrees/honours/overview#overview

• Affiliated Research Institute websites and information sessions

For Graduate Research Projects
• https://mdhs.unimelb.edu.au/research/research-library
• https://medicine.unimelb.edu.au/research/research-by-department

• Affiliated Research Institute websites and information sessions!

Tips for finding a supervisor!
• Do your homework
• Email introduction include transcripts and CV
• Meet in person (or via zoom)
• Talk to other students or staff in the lab
Research highlights – Dept of Medicine, St Vincents Hospital

Prof Jennifer Philip
Chair Of Palliative Medicine - St Vincent’s Hospital
Partnering with VCCC
Head of Palliative Nexus Research Group

Improving equity, access, and quality of care in serious illness
https://www.palliativenexus.org/

Professor Kumar Visvanathan
Innate Immunity and Infectious Diseases

Human Liver Organoids to study the innate immune response and cytotoxicity towards tumour cells and hepatitis infected cells.
Research highlights – Department of Medicine, St Vincents Hospital

Clinical Neurosciences

Led by Professor Mark Cook and his team - developed and tested a device implanted in the brain that can predict epilepsy seizures in humans

Neural Engineering and Brain Dynamics Research Group

- Decoding brain signals for prosthetic limbs
- Epilepsy research
- Neural dynamics and subject-specific brain modelling

Seizure Prediction Device

NeuroVista implantable seizure warning device

True cross disciplinary collaboration: engineering, mathematics, physics, physiology and clinical medicine – commercialisation SEER medical
St Vincent’s Hospital Departments

RHEUMATOLOGY
Associate Professor Mandana Nikpour
PhD scholarship for research into systemic sclerosis
https://mdhs.unimelb.edu.au/study/scholarship/s/n/harrison-pennicott-phd-scholarship

GASTROENTEROLOGY

ENDOCRINOLOGY
Aiming to improve the lives of people with diabetes through exceptional research that drives advancement in innovative technologies...


ONCOLOGY
IMMUNOLOGY
EMERGENCY PRACTICE
CARDIOLOGY
Research highlights – Department of Surgery, St Vincents Hospital

Advanced Limb Reconstruction

NHMRC Centre for Research Excellence in Total Joint Replacement - OPUS
https://opus-tjr.org.au/

Professor Peter Choong

Cartilage Regeneration Program

Epidemiology, Outcomes & Clinical Trials Orthopaedic Group

A/Prof Michelle Dowsey
Career Development Clinical Fellow
Research highlights – BioFab3D

www.biofab3D.org
@biofab3d
Research highlights – BioFab3D

Tissue Engineering and 3D printing -

3D printed muscle

Professor Peter Choong

Development of the Biopen - A handheld device for printing cells in surgery.

Three-dimensional neural cultures produce networks that mimic native brain activity

Journal of Tissue Engineering and Regenerative Medicine
Volume 12, Issue 2, pages 490-493, 12 DEC 2017
St Vincent’s Institute

Virtual Student Open Day
Thursday, 24 September @ 4pm

To register, please go to:
https://www.svi.edu.au/careers_students/students/student_open_day/

Immunology & Diabetes
Protein Chemistry & Metabolism
Bone Cell Biology
Cancer & RNA Biology
Genome Stability
Bioinformatics & Cellular Genomics
Vascular Biology
Structural Biology
Lympathic & Regenerative Surgery
Molecular Genetics
Cardiac Regeneration

Discover the experience!
Enjoy the camaraderie!
Come join us!

www.svi.edu.au
The Bionics Institute is a global leader in medical bionics research

Medical bionics is an exciting area where biology, medicine and engineering intersect

The BI’s mission is **improve people’s lives** by translating research into clinical use devices that monitor or modulate neural activity for managing health conditions

The BI’s multidisciplinary research teams work in three key areas: bionic hearing, bionic vision and neurobionics
**BIONIC HEARING**

**Techniques:** Psychophysics, fNIRS brain imaging, EEG, signal processing, animal physiology, safety studies, optogenetics, clinical studies

- Improving how cochlear implants work for individual participants
- Optimising language development in infants born with a hearing loss
- Developing new implantable hearing devices
- Delivering drugs into the cochlear to preserve cochlear hair cells and nerves

**BIONIC VISION**

**Techniques:** Psychophysics, EEG, signal processing, optogenetics, clinical studies

- Improving the patient benefit for those with the first versions of the Melbourne Bionic Eye
- Applying optogenetics for a novel Bionic Eye

**NEUROBIONICS**

Neurobionics aims to develop clinical devices designed to monitor, diagnose and treat a variety of intractable neurological disorders using neural stimulation and neural activity monitoring.

**Techniques:** Pre-clinical *in vivo* and *in vitro* basic studies, first-in-human clinical trials, signal processing, engineering

- Deep brain stimulation (DBS) for Parkinson’s Disease and other neurological conditions
- Implantable devices for Vagus nerve stimulation to treat a variety of conditions
- Devices to monitor and prevent epilepsy seizures
The Bionics Institute Student Recruitment Event!

Come along to meet some of our research team and find out how you could join one of our exciting new projects at the forefront of medical bionics research!

**Wednesday 23rd September; 6-7pm**

**Zoom**
Meeting ID: 847 7902 0533  
Passcode: 963922
Ophthalmology, Department of Surgery/Centre for Eye Research Australia (CERA) Research

CERA: Snapshot of our Research

Bionic Eye Research  Macular Research  Ophthalmic Neuroscience

Clinical Trials Research Centre  Ophthalmic Epidemiology  Surgical Research
St Vincents Student Society

Annual Student Retreat

Welcome and Farewell events for Honours Students

GSA Postgrad Ball

Monthly social events
Student Panel Discussion and Q&A

Annabelle Choong: Current Honours Student

Ayeshah Augusta Rosdah: Current PhD student based in St Vincent's Institute

Crystal Nguyen: Current PhD student based in the Centre for Eye Research Australia

Daniel Gould: Current MD / PhD student based in Department of Surgery – future research pathways in the new Doctor of Medicine in 2022.
Thank you!
Eastern Hill Campus Precinct at the University of Melbourne

The Melbourne Medical School’s Eastern Hill Campus Precinct offers Honours, Masters and Graduate Research admissions through the following University departments:

- Medicine (St Vincent’s Hospital)
- Surgery (St Vincent’s Hospital)
- Otolaryngology
- Ophthalmology (Centre for Eye Research Australia)
- Medical Bionics (Bionics Institute)

Our students conduct their research in our affiliated medical research institutes and in the various departments/units within St Vincent’s Hospital.

Minimum WAM for Admissions

The Faculty of Medicine, Dentistry and Health Sciences (MDHS) require a minimum of 65% for admissions into any of these degrees: Bachelor of Science (Honours), Bachelor of Biomedicine (Honours), and Master of Biomedical Science. Do note some supervisors may request for a higher WAM.

Entry into graduate research degrees require a minimum of 75% (Masters by Research) or 80% (PhD, Doctor of Medical Science).

SONIA Project Platform

SONIA is a research project database containing all the projects that are available to Honours applicants for 2021 Start Year Intake. Prospective students can access SONIA using the following login details:

Username: MDHSHonours
Password: MDHSHonours

Where do I apply?

https://study.unimelb.edu.au/how-to-apply

Other Research Placements

Depending on the degree you’re currently enrolled in, there are may be opportunities to undertake a research placement in your final year.

Bachelor Science and Bachelor of Biomedicine students, for instance, have the opportunity to enrol in the Science and Technology Internship (SCIE30002) subject as part of their degree. Please contact your course coordinator for more information.

Postal address:
29 Regent Street, Fitzroy VIC 3065

Email:
easternhill-gr@unimelb.edu.au
Towards 2022 – An intercalated MD/PhD Pathway

As part of the Doctor of Medicine curriculum re-design, the Melbourne Medical School is planning to offer an intercalated MD/PhD pathway for students. The new Doctor of Medicine program is in development and will be launched in 2022.

Current MD students should speak to Prof Steve Trumble and their MDRS supervisors to discuss options for an MD/PhD pathway.

Volunteering Opportunities

Students are welcome to inquire about volunteering opportunities within individual laboratories or research groups. Our affiliated medical research institutes may also offer summer vacation scholarships for undergraduate students.

Scholarships

- Frances Elizabeth Thomson Trust Scholarship (Honours)

  The scholarship is offered to highly ranked full-time students who have enrolled in an MDHS program through the Bachelor of Biomedicine (Degree with Honours) and the Bachelor of Science (Degree with Honours) and demonstrated a level of financial needs. The scholarship will award eligible students with a one-off payment of $5,000.

- Research Training Program Scholarship (Graduate Research)

  This scholarship is provided by the Australian Commonwealth Government and the University of Melbourne and offered to high-achieving domestic and international research students. Students are offered full fee remissions and/or a living allowance for up to 3.5 years.

- Faculty Trust Scholarships

  MDHS administers a range of scholarships funded from trust income and as such, the purpose of these funds is limited by the rules of the trust and the level of funding available in each round.

  https://scholarships.unimelb.edu.au/

Honours Timelines

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<tr>
<th>ACTIVITY</th>
<th>DEADLINE</th>
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<tbody>
<tr>
<td>Round 1 Applications Closing Date</td>
<td>Saturday 31st October 2020</td>
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<tr>
<td>Round 1 Project Preference submissions</td>
<td>Friday 13th November</td>
</tr>
<tr>
<td>Round 1 Application Outcomes</td>
<td>Wednesday 23rd December</td>
</tr>
<tr>
<td>Round 2 Applications Closing Date</td>
<td>Monday 25th January 2021</td>
</tr>
<tr>
<td>Round 2 Project Preference Submissions</td>
<td>Monday 1st February</td>
</tr>
<tr>
<td>Round 2 Application Outcomes</td>
<td>Monday 8th February</td>
</tr>
<tr>
<td>Honours Commencement</td>
<td>Monday 15th February</td>
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Graduate Research 2021

Graduate research applications can be submitted at any time of the year, but students should be aware of the following scholarship timelines:

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<tr>
<th>ROUND</th>
<th>CLOSING DATE</th>
<th>OUTCOMES</th>
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<tbody>
<tr>
<td>1</td>
<td>31st October 2020</td>
<td>By 18th December 2020</td>
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<tr>
<td>2</td>
<td>31st January 2021</td>
<td>By 26th March</td>
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<tr>
<td>3</td>
<td>14th May</td>
<td>By 9th July</td>
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Tips for Prospective Students

- Speak to supervisors early!
- Speak to current research students about their experience.
- Be mindful of any relevant deadlines.

International Students

We welcome queries for prospective international students wanting to enrol in Honours, Master of Biomedical Sciences or graduate research within the Eastern Hill Campus Precinct. Please contact us at easternhill-gr@unimelb.edu.au.