



Medicine, Nursing and Health Sciences

# 2016 Postgraduate and Honours Project Index booklet

Central Clinical School





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# Honours and postgraduate study through Central Clinical School

Monash University's Central Clinical School (CCS) undertakes translational research – developing insights from laboratory bench research for use in therapies and treatments. Our departments and research affiliates have strong links with health care providers, ensuring that our research rapidly translates to clinical practice.

Undertaking Honours and postgraduate study with us will give you a wide range of opportunities to continue your studies and develop your career path into many areas of medical and clinical research.



## How to use this index booklet

This index booklet lists the Honours/PhD projects on offer for 2016. For further information about a particular research project, see the project description in the online database at:

<http://studentresearchprojects.med.monash.edu.au/>.

For further information regarding individual research projects, students should approach the nominated researcher associated with that project.

## For general information regarding Honours and postgraduate study at CCS:

**Ms Laisa Tigarea**

CCS Student Services Officer:

E: [Laisa.Tigarea@monash.edu](mailto:Laisa.Tigarea@monash.edu)

T: 03 9903 0027

## Projects are listed under the following headings:

- [Australian Centre for Blood Diseases \(ACBD\)](#)
- [Baker IDI Heart and Diabetes Institute](#)
- [Cabrini-Monash Clinical School](#)
- [Department of Allergy, Immunology and Respiratory Medicine \(AIRmed\)](#)
- [Department of Immunology](#)
- [Department of Infectious Diseases](#)
- [Department of Medicine](#)
- [Department of Surgery/NTRI](#)
- [Melbourne Sexual Health Centre \(MSHC\)](#)
- [Monash Alfred Psychiatry research centre \(MAPrc\)](#)

## Making your application

Applications are completed centrally through Monash University. Prospective applicants should complete an application form, which can be downloaded or obtained from the Faculty Office.

Links below for further information, entry requirements and to download application forms:

[Honours](#)

[Masters and PhD](#)

[Graduate Certificate](#)

[AMREP Scholarships](#)

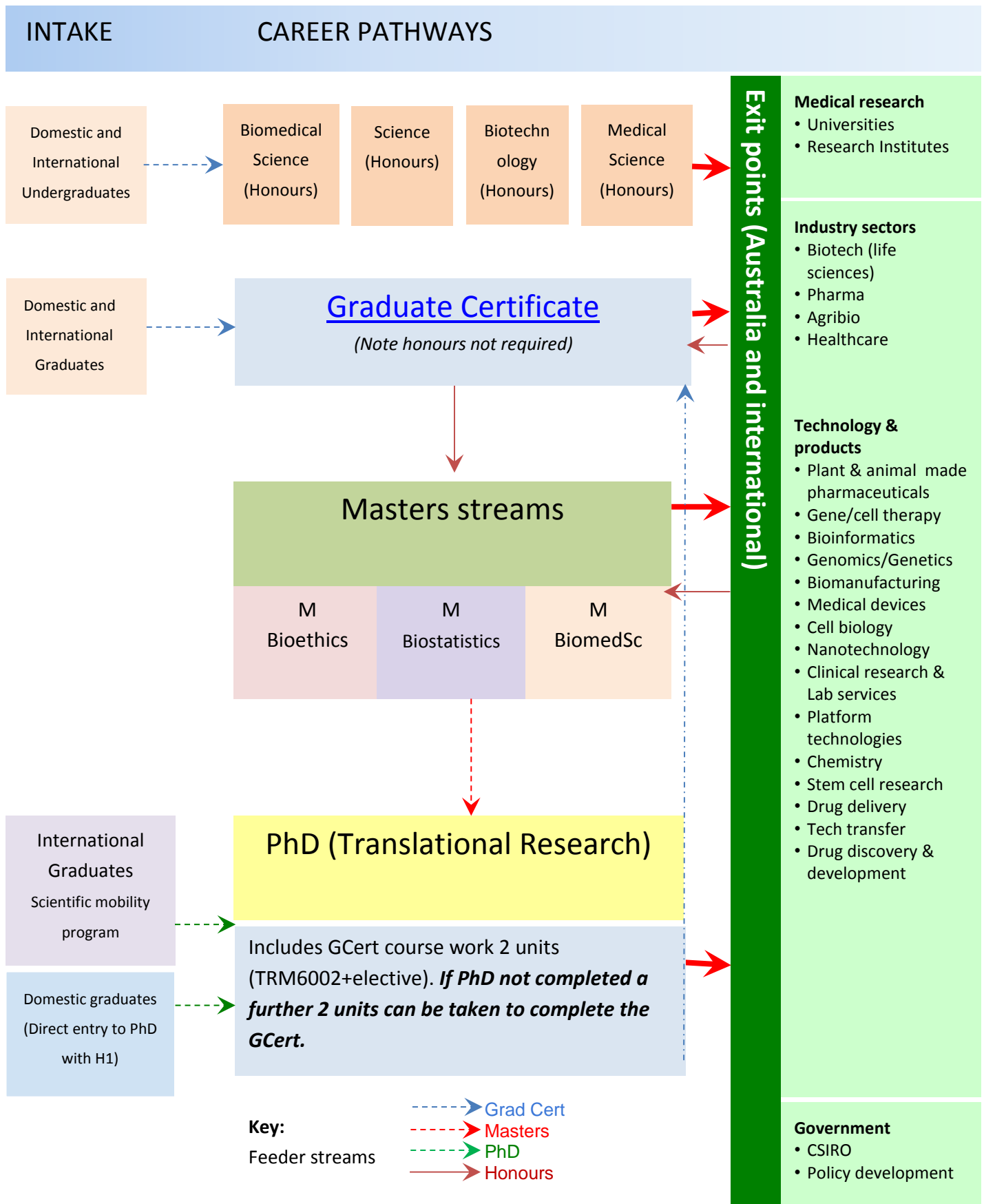
[Honours](#)

[PhD](#)

### \*Key to specify the streams applicable for each project

<b>BMedSc</b> – Bachelor of Medical Science (Honours)	<b>BBiomedSc</b> – Bachelor of Biomedical Science (Honours)
<b>BBiotech</b> – Bachelor of Biotechnology (Honours)	<b>BSci</b> – Bachelor of Science (Honours)
<b>M</b> – Masters	<b>PhD</b> – PhD

# Courses at the Central Clinical School



## Department of Allergy, Immunology and Respiratory medicine (AIRmed)

The Department of Allergy, Immunology and Respiratory Medicine (AIRMed) has a comprehensive spectrum of expertise in advanced lung diseases including asthma, lung transplantation, cystic fibrosis, pulmonary hypertension, COPD and sleep disordered breathing, allergy and clinical immunology. The Department integrates clinical services with extensive human and experimental research programs, linking senior clinician scientists, bench scientists, allied health professionals, primary care physicians and the community. The clinical and academic base of AIRMed is located at the Alfred Hospital, with experimental and clinical research laboratories located both within the hospital and in the laboratories of related Departments within Central Clinical School.



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

**Projects Available:**

[The molecular immunology of penicillin allergy](#)

Supervisors: Dr Nicole Mifsud, Dr Patricia Illing, Prof Robyn O’Hehir and Prof Anthony Purcell

Email: [Nicole.Mifsud@monash.edu](mailto:Nicole.Mifsud@monash.edu)

Key: BBiomedSc, BSci, BMedSc

[The Clinical Utility of Biomarkers of Immune Function following Lung Transplantation](#)

Supervisors: A/Prof Glen Westall and Prof Anton Peleg

Email: [G.Westall@alfred.org.au](mailto:G.Westall@alfred.org.au)

Key: BSci, BMedSc

[Social Media in Lung Transplantation](#)

Supervisors: A/Prof Glen Westall and Dr Miranda Paraskeva

Email: [G.Westall@alfred.org.au](mailto:G.Westall@alfred.org.au)

Key: BBioMedSc, BSci, BMedSc

[Defining the role of B cells in chronic allograft dysfunction following lung transplantation](#)

Supervisors: A/Prof Glen Westall and Prof Greg Snell

Email: [G.Westall@alfred.org.au](mailto:G.Westall@alfred.org.au)

Key: BBioMedSc, BSci, BMedSc

## Australian Centre for Blood Diseases (ACBD)

The Australian Centre for Blood Diseases (ACBD) is a leading national and international blood diseases centre with recognised research, treatment, and educational programs for blood diseases.

The ACBD is affiliated with Monash University, The Alfred hospital, Eastern Health and Southern Health, and is organised into three integrated divisions:

- Clinical and Diagnostic Haematology/Oncology
- Clinical and Basic Research Programs
- Teaching and Education

The ACBD's research falls into two main areas, Non-Malignant Haematology, and Malignant Haematology & Stem Cell Transplantation.



### \*Key to specify the streams applicable for each project

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**BSci** – Bachelor of Science (Honours)

**M** – Masters

**PhD** – PhD



**Projects Available:**

[Investigating the Effects of Aberrant Expression of Prmt5 in haematopoiesis](#)

Supervisors: A/Prof David Curtis, Dr Emma Toulmin and Dr Stefan Sonderegger

Email: [David.Curtis@monash.edu](mailto:David.Curtis@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech

[Targeting Protein arginine methyltransferase 5 \(PRMT5\) in Acute Myeloid Leukaemia](#)

Supervisors: A/Prof David Curtis, Dr Emma Toulmin and Dr Stefan Sonderegger

Email: [David.Curtis@monash.edu](mailto:David.Curtis@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech

[Targeting the Immediate Early Gene Response to Sensitize Leukemic Cells to Chemotherapy](#)

Supervisors: A/Prof David Curtis and Dr Cedric Tremblay

Email: [David.Curtis@monash.edu](mailto:David.Curtis@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

[Characterisation of a Potentially Novel Molecular Marker of Early Epigenetic Treatment Response in Myeloid Malignancies](#)

Supervisors: Dr Anthony Dear and Dr Hong Bin Liu

Email: [anthony.dear@monash.edu](mailto:anthony.dear@monash.edu)

Key: BBioMedSc, BSci, BMedSc

[Reversible control of AML self-renewal and differentiation](#)

Supervisors: A/Prof Ross Dickins and Dr Margherita Ghisi

Email: [Ross.Dickins@monash.edu](mailto:Ross.Dickins@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

[The role of Ikaros in B-ALL tumour suppression and treatment resistance](#)

Supervisors: A/Prof Ross Dickins and Dr Margherita Ghisi

Email: [Ross.Dickins@monash.edu](mailto:Ross.Dickins@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

[Metalloproteases in thrombosis and Alzheimer's disease](#)

Supervisors: Dr Elizabeth Gardiner, A/Prof Robert Andrews, Dr Justin Hamilton and Dr Jane Arthur

Email: [Elizabeth.Gardiner@monash.edu](mailto:Elizabeth.Gardiner@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

[Metalloproteolysis of activation receptors from the platelet surface in disease](#)

Supervisors: Dr Elizabeth Gardiner, A/Prof Robert Andrews, Prof Huyen Tran and Dr Jane Arthur

Email: [Elizabeth.Gardiner@monash.edu](mailto:Elizabeth.Gardiner@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

[Blood Force](#)

Supervisors: Dr Elizabeth Gardiner, A/Prof Robert Andrews and Dr Jane Arthur

Email: [Elizabeth.Gardiner@monash.edu](mailto:Elizabeth.Gardiner@monash.edu)

Key: PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [Targeting cell survival pathways in acute myeloid leukemia \(AML\)](#)

Supervisors: A/Prof Mark Guthridge and Dr Nhu-Y Nguyen

Email: [Mark.Guthridge@monash.edu](mailto:Mark.Guthridge@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, PhD

### [New therapeutic approaches for targeting cancer metabolism to overcome therapeutic resistance](#)

Supervisors: A/Prof Mark Guthridge and Dr Giovanni Monaco

Email: [Mark.Guthridge@monash.edu](mailto:Mark.Guthridge@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, PhD

### [A new screening platform for the identification of new treatments and therapies for the treatment of acute myeloid leukemia \(AML\)](#)

Supervisors: A/Prof Mark Guthridge, Dr Andrew Wei and Dr Donia Moujalled

Email: [Mark.Guthridge@monash.edu](mailto:Mark.Guthridge@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, PhD

### [Understanding the role of Snai1 in hematopoiesis and leukemic transformation](#)

Supervisors: A/Prof Jody Haigh and Dr Catherine Carmichael

Email: [Jody.Haigh@monash.edu](mailto:Jody.Haigh@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Characterizing the role of Zeb2 in B/T cell leukemia](#)

Supervisors: A/Prof Jody Haigh and Dr Catherine Carmichael

Email: [Jody.Haigh@monash.edu](mailto:Jody.Haigh@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Use of iPS cell technologies to study leukemic transformation](#)

Supervisors: A/Prof Jody Haigh and Dr Magdaline Costa

Email: [Jody.Haigh@monash.edu](mailto:Jody.Haigh@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Role of the transcriptional modulators Zeb2 and Snai1 in Cellular Reprogramming and lineage directed differentiation](#)

Supervisors: A/Prof Jody Haigh and Dr Thao Nguyen

Email: [Jody.Haigh@monash.edu](mailto:Jody.Haigh@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Use of Rosa26-iPS mouse model to study molecular determinants of cellular reprogramming, memory and differentiation](#)

Supervisors: A/Prof Jody Haigh and Dr Magdaline Costa

Email: [Jody.Haigh@monash.edu](mailto:Jody.Haigh@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Targeting the human platelet thrombin receptor, par4, as a novel anti-thrombotic therapy](#)

Supervisors: Dr Justin Hamilton and A/Prof Robert Andrews

Email: [Justin.Hamilton@monash.edu](mailto:Justin.Hamilton@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [Developing isoform-specific pi3k inhibitors as novel anti-platelet agents](#)

Supervisors: Dr Justin Hamilton and A/Prof Robert Andrews

Email: [Justin.Hamilton@monash.edu](mailto:Justin.Hamilton@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, M, PhD

### [Cytokine signalling in myeloid leukaemia](#)

Supervisors: Dr Anissa Jabbour and Dr Mark Guthridge

Email: [Anissa.Jabbour@monash.edu](mailto:Anissa.Jabbour@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

### [Rho-kinase and LDL-receptor inhibition as a novel strategy to protect the blood-brain barrier during ischaemic stroke; an in vitro study](#)

Supervisors: Prof Robert Medcalf and Dr Be'eri Niego

Email: [Robert.Medcalf@monash.edu](mailto:Robert.Medcalf@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

### [t-PA effects on the blood-brain barrier in a rat model of ischaemic stroke](#)

Supervisors: Prof Robert Medcalf, Dr Be'eri Niego and A/Prof David Howells

Email: [Robert.Medcalf@monash.edu](mailto:Robert.Medcalf@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

### [Progranulin as a novel blood-brain barrier-protecting agent during ischaemic stroke; an in vitro study](#)

Supervisors: Prof Robert Medcalf, Dr Be'eri Niego and Dr Katherine Jackman

Email: [Robert.Medcalf@monash.edu](mailto:Robert.Medcalf@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

### [Targeted inhibition of chaperones as therapy in myeloma](#)

Supervisors: Prof Harshal Nandurkar and Dr Hang Quach

Email: [harshal.nandurkar@monash.edu](mailto:harshal.nandurkar@monash.edu)

Key: BBioMedSc, BSci, BMedSc

### [Development of a new endothelial targeted antithrombotic to preserve organ function after ischaemic injury](#)

Supervisors: Prof Harshal Nandurkar, Prof Peter Cowan and Prof Karlheinz Peter

Email: [harshal.nandurkar@monash.edu](mailto:harshal.nandurkar@monash.edu)

Key: BBioMedSc, BSci, BMedSc, PhD

### [Role of purinergic nucleotides in thrombosis associated with antiphospholipid syndrome](#)

Supervisors: Prof Harshal Nandurkar, Prof Peter Cowan and Prof Karlheinz Peter

Email: [harshal.nandurkar@monash.edu](mailto:harshal.nandurkar@monash.edu)

Key: BBioMedSc, BSci, BMedSc, M, PhD

### [Development of a novel microfluidic system for the monitoring of antiplatelet therapies and assessment of platelet dysfunction](#)

Supervisors: Dr Warick Nesbitt and Prof Harshal Nandurkar

Email: [Warick.Nesbitt@monash.edu](mailto:Warick.Nesbitt@monash.edu)

Key: BBiomedSc, BBiotech, BMedSc

## 2016 Postgraduate and Honours Project Index Booklet

### [Development of a novel shear micro-gradient system for the diagnosis of von Willebrands Disease](#)

Supervisors: Dr Warick Nesbitt and Prof Harshal Nandurkar

Email: [Warick.Nesbitt@monash.edu](mailto:Warick.Nesbitt@monash.edu)

Key: BBiomedSc, BBiotech, BMedSc

### [Development of a novel microfluidic system for the investigation of platelet membrane tether function under haemodynamic shear and elongation forces](#)

Supervisors: Dr Warick Nesbitt and Dr Justin Hamilton

Email: [Warick.Nesbitt@monash.edu](mailto:Warick.Nesbitt@monash.edu)

Key: BBiomedSc, BMedSc

### [Investigating the use of matrix metalloprotease inhibitors in preventing blood-brain barrier damage following traumatic brain injury](#)

Supervisors: Dr Maithili Sashindranath and Prof Robert Medcalf

Email: [Maithili.Sashindranath@monash.edu](mailto:Maithili.Sashindranath@monash.edu)

Key: BBiomedSc, BSci, BMedSc, PhD

### [Understanding the mechanism of tranexamic acid treatment for brain injury](#)

Supervisors: Dr Maithili Sashindranath and Prof Robert Medcalf

Email: [Maithili.Sashindranath@monash.edu](mailto:Maithili.Sashindranath@monash.edu)

Key: BBiomedSc, BSci, BMedSc, BBiotech, PhD

### [Bromodomain inhibitors: novel therapeutic targets for multiple myeloma](#)

Supervisors: Prof Andrew Spencer and Dr Tiffany Khong

Email: [aspencer@netspace.net.au](mailto:aspencer@netspace.net.au)

Key: BBiomedSc, BMedSc, BSci, M, PhD

### [The role of the tumour microenvironment in conferring drug resistance in multiple myeloma](#)

Supervisors: Prof Andrew Spencer and Dr Sridurga Mithraprabhu

Email: [aspencer@netspace.net.au](mailto:aspencer@netspace.net.au)

Key: BBiomedSc, BMedSc, BSci, M, PhD

### [Targeting Ras/Raf/MAPK and PI3K/Akt pathways as potential therapeutic targets in multiple myeloma](#)

Supervisors: Prof Andrew Spencer and Dr Tiffany Khong

Email: [aspencer@netspace.net.au](mailto:aspencer@netspace.net.au)

Key: BBiomedSc, BMedSc, BSci, M, PhD

### [Investigating Ap2a2 & Gpsm2 in leukemia stem cells](#)

Supervisors: Dr Stephen Ting and Dr Sara Rhost

Email: [Stephen.Ting@monash.edu](mailto:Stephen.Ting@monash.edu)

Key: BBiomedSc, BSci, BMedSc

### [Linking endocytic Ap2a2 to haematopoietic stem cell metabolism](#)

Supervisors: Dr Stephen Ting and Dr Sara Rhost

Email: [Stephen.Ting@monash.edu](mailto:Stephen.Ting@monash.edu)

Key: BBiomedSc, BSci, BMedSc

2016 Postgraduate and Honours Project Index Booklet

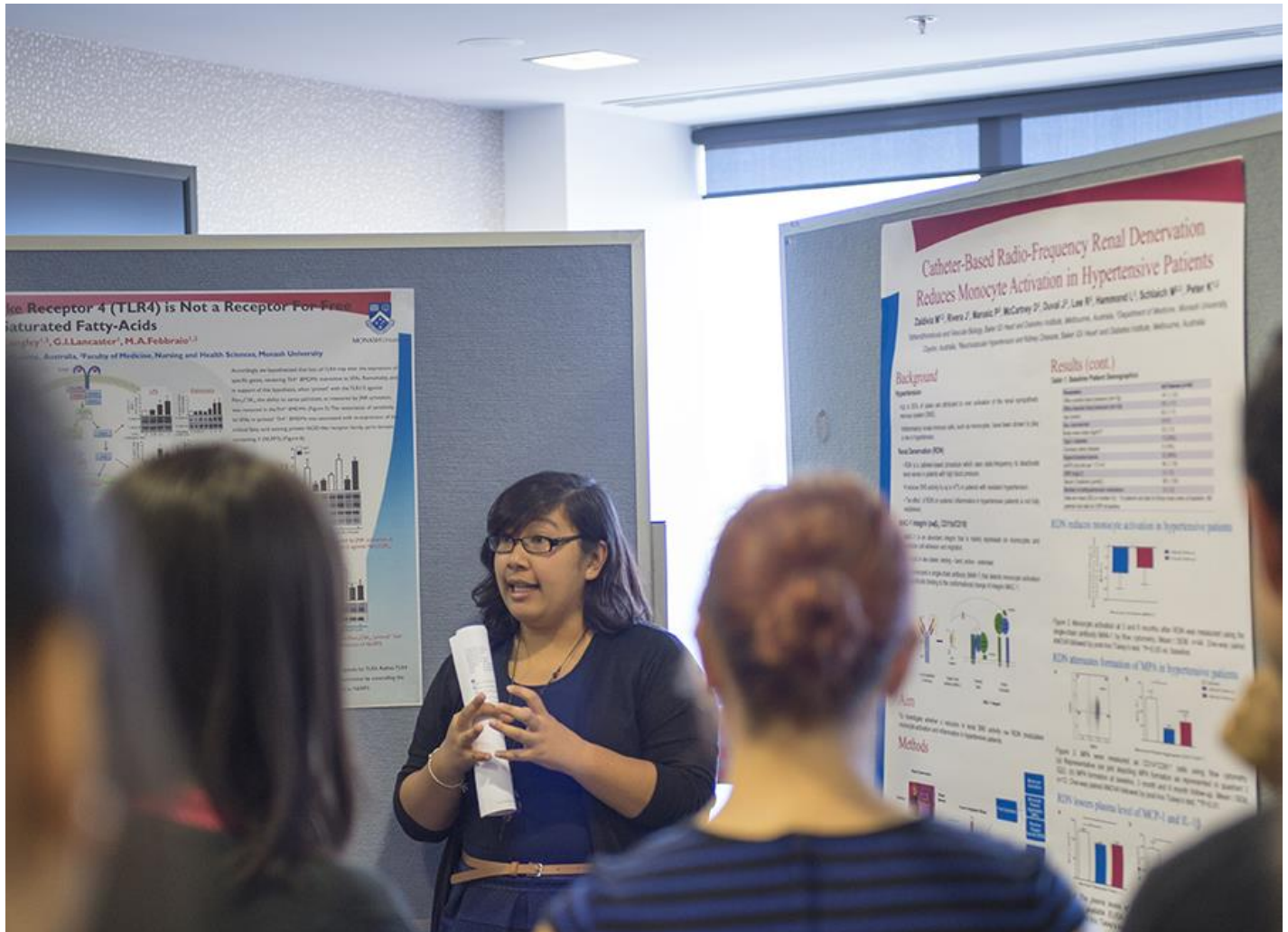
[Developing humanized models of hematopoiesis and leukaemia](#)

Supervisor: A/Prof Andrew Wei

Email: [a.wei@alfred.org.au](mailto:a.wei@alfred.org.au)

Key: BBiomedSc, BSci, BMedSc, PhD

Baker IDI Heart and Diabetes Institute is an independent, internationally-renowned medical research facility, with a history spanning more than 88 years. The Institute's work extends from the laboratory to wide-scale community studies with a focus on diagnosis, prevention and treatment of diabetes and cardiovascular disease. The comprehensive range of research undertaken to target these deadly diseases, combined with the flexibility and innovation to respond to changing health and community needs, is unique and sets Baker IDI apart from other health and research Institutes. The Institute's main laboratory facilities are located on the Alfred Medical Research and Education Precinct.



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

**Projects Available:**

[Role of the At2 receptor in diabetic atherosclerosis](#)

Supervisors: A/Prof Terri Allen and Dr Christine Koulis

Email: [terri.allen@bakeridi.edu.au](mailto:terri.allen@bakeridi.edu.au)

Key: BMedSc, BBioMedSc, BSci, M, PhD

[IDOL-mediated regulation of lipid metabolism in skeletal muscle and the heart](#)

Supervisors: Dr Anna Calkin and Dr Brian Drew

Email: [anna.calkin@bakeridi.edu.au](mailto:anna.calkin@bakeridi.edu.au)

Key: BBioMedSc, BMedSc, BSci

[A Novel Enzyme with Potential in Preventing Obesity induced Diabetes](#)

Supervisors: Dr Brian Drew and Dr Anna Calkin

Email: [brian.drew@bakeridi.edu.au](mailto:brian.drew@bakeridi.edu.au)

Key: BBioMedSc, BSci, M, PhD

[A novel mechanism to promote mitochondrial health and prevent skeletal muscle insulin resistance and diabetes](#)

Supervisors: Dr Brian Drew and Dr Anna Calkin

Email: [brian.drew@bakeridi.edu.au](mailto:brian.drew@bakeridi.edu.au)

Key: BBioMedSc, BMedSc, BSci

[Recombinant agents for efficient and safe anticoagulation and thrombolysis](#)

Supervisor: Prof Christoph Hagemeyer

Email: [Christoph.Hagemeyer@monash.edu](mailto:Christoph.Hagemeyer@monash.edu)

Key: BBioMedSc, BMedSc, BSci, BBiotech, M, PhD

[Single-chain antibody-targeted nanoparticles for diagnosis of vascular diseases](#)

Supervisor: Prof Christoph Hagemeyer

Email: [Christoph.Hagemeyer@monash.edu](mailto:Christoph.Hagemeyer@monash.edu)

Key: BBioMedSc, BMedSc, BSci, BBiotech, M, PhD

[Targeted virus particles for genetic transfer of fusion proteins to inhibit atherosclerosis](#)

Supervisor: Prof Christoph Hagemeyer

Email: [Christoph.Hagemeyer@monash.edu](mailto:Christoph.Hagemeyer@monash.edu)

Key: BBioMedSc, BMedSc, BSci, BBiotech, M, PhD

[The role of intrarenal nerves in the diabetic and hypertensive kidney](#)

Supervisors: Prof Karin Jandeleit-Dahm and Dr Anna Watson

Email: [Karin.Jandeleit-Dahm@bakeridi.edu.au](mailto:Karin.Jandeleit-Dahm@bakeridi.edu.au)

Key: BBioMedSc, BMedSc, BSci, PhD

[The role of Nox5 in diabetic complications](#)

Supervisors: Prof Karin Jandeleit-Dahm and Dr Stephen Gray

Email: [Karin.Jandeleit-Dahm@bakeridi.edu.au](mailto:Karin.Jandeleit-Dahm@bakeridi.edu.au)

Key: BBioMedSc, BMedSc, BSci, PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [Development of brown adipose tissue for treatment of obesity](#)

Supervisors: Prof Bronwyn Kingwell and Dr Andrew Carey

Email: [bronwyn.kingwell@bakeridi.edu.au](mailto:bronwyn.kingwell@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Eplerenone in the management of abdominal aortic aneurysm](#)

Supervisors: Prof Bronwyn Kingwell and Dr Anna Ahimastos

Email: [bronwyn.kingwell@bakeridi.edu.au](mailto:bronwyn.kingwell@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [High-density lipoprotein \(HDL\) and cardiac metabolism](#)

Supervisors: Prof Bronwyn Kingwell and Dr Andrew Siebel

Email: [bronwyn.kingwell@bakeridi.edu.au](mailto:bronwyn.kingwell@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Peripheral artery disease, glucose metabolism and skeletal muscle blood flow](#)

Supervisors: Prof Bronwyn Kingwell and Dr Julian Sacre

Email: [bronwyn.kingwell@bakeridi.edu.au](mailto:bronwyn.kingwell@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Plasmalogen Modulation: A New Treatment for Atherosclerotic Heart Disease](#)

Supervisors: A/Prof Peter Meikle and Dr Judy de Haan

Email: [peter.meikle@bakeridi.edu.au](mailto:peter.meikle@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, BBiotech, M, PhD

### [High Density Lipoprotein and Oxidized Lipids in the Prediction of Acute Coronary Syndromes](#)

Supervisors: A/Prof Peter Meikle and Prof Bronwyn Kingwell

Email: [peter.meikle@bakeridi.edu.au](mailto:peter.meikle@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, BBiotech, M, PhD

### [Plasma Lipid Profiling in Type 2 Diabetes and Coronary Artery Disease](#)

Supervisor: A/Prof Peter Meikle

Email: [peter.meikle@bakeridi.edu.au](mailto:peter.meikle@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, BBiotech, M, PhD

### [Annexin-A1 Mimetics: a Novel Therapeutic Approach for Targeting the Cardiac Complications of Diabetes](#)

Supervisors: A/Prof Rebecca Ritchie and Dr Helena Qin

Email: [rebecca.ritchie@bakeridi.edu.au](mailto:rebecca.ritchie@bakeridi.edu.au)

Key: BBioMedSc, BSci, M, PhD

### [Circumventing Impaired Nitric Oxide Function in the Cardiovascular Complications of Diabetes](#)

Supervisors: A/Prof Rebecca Ritchie and Dr Helena Qin

Email: [rebecca.ritchie@bakeridi.edu.au](mailto:rebecca.ritchie@bakeridi.edu.au)

Key: BBioMedSc, BSci, M, PhD



## 2016 Postgraduate and Honours Project Index Booklet

### [Therapeutic targeting of the cardiac hexosamine biosynthesis - ROS axis to protect the diabetic heart](#)

Supervisors: A/Prof Rebecca Ritchie and Dr Miles deBlasio

Email: [rebecca.ritchie@bakeridi.edu.au](mailto:rebecca.ritchie@bakeridi.edu.au)

Key: BBioMedSc, BSci, M, PhD

### [Interactions between RAGE and GLP-1 in diabetes and diabetic nephropathy](#)

Supervisors: Dr Karly Sourris and Dr Melinda Coughlan

Email: [karly.sourris@bakeridi.edu.au](mailto:karly.sourris@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Anti-atherosclerotic properties of CTLA4](#)

Supervisors: Prof Merlin Thomas, Dr Chris Tikellis and Dr Raelene Pickering

Email: [merlin.thomas@bakeridi.edu.au](mailto:merlin.thomas@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Metabolic memory - the bitter legacy of high glucose levels](#)

Supervisors: Prof Merlin Thomas, Dr Chris Tikellis and Dr Raelene Pickering

Email: [merlin.thomas@bakeridi.edu.au](mailto:merlin.thomas@bakeridi.edu.au)

Key: BBiomedSc, BMedSc, BSci, PhD

### [Cardiovascular Atherosclerotic Inflammatory Disease](#)

Supervisors: Prof Ban-Hock Toh and Professor Alexander Bobik

Email: [Ban-Hock.Toh@monash.edu](mailto:Ban-Hock.Toh@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech



The Burnet Institute combines medical research in the laboratory and at a population level with public health action and advocacy to address major health issues of disadvantaged populations in Australia and communities in the developing world. Three major health themes underpin the Burnet’s work: Infectious diseases, maternal and child health, and young people’s health.



**\*Key to specify the streams applicable for each project**

<b>BMedSc</b> – Bachelor of Medical Science (Honours)	<b>BBiomedSc</b> – Bachelor of Biomedical Science (Honours)
<b>BBiotech</b> – Bachelor of Biotechnology (Honours)	<b>BSci</b> – Bachelor of Science (Honours)
<b>M</b> – Masters	<b>PhD</b> – PhD

**Projects available:**

[Vaccines against malaria](#)

Supervisors: Prof James Beeson and Dr Freya Fowkes

Email: [beeson@burnet.edu.au](mailto:beeson@burnet.edu.au)

Key: BBiomedSc, BSci, M

[Elucidating the regulatory mechanisms controlling viral transcription within the CNS and the establishment of a HIV viral reservoir](#)

Supervisors: A/Prof Melissa Churchill, Dr Lachlan Gray and Prof Paul Gorry

Email: [churchil@burnet.edu.au](mailto:churchil@burnet.edu.au)

Key: BBioMedSc, BSci, BMedSc, PhD

[Development of a prophylactic hepatitis C virus vaccine](#)

Supervisors: A/Prof Heidi Drummer, Dr Robert Center and Dr Andy Pountourios

Email: [hdrummer@burnet.edu.au](mailto:hdrummer@burnet.edu.au)

Key: BBiomedSc, BMedSc, BSci, BBiotech, PhD

[Host genetics and susceptibility to malaria during pregnancy](#)

Supervisors: Dr Freya Fowkes and Prof James Beeson

Email: [fowkes@burnet.edu.au](mailto:fowkes@burnet.edu.au)

Key: BBiomedSc, BSci, M, PhD

[The impact of Nutrition, Malaria and STIs on pregnancy and infant outcomes](#)

Supervisors: Dr Freya Fowkes and Prof James Beeson

Email: [fowkes@burnet.edu.au](mailto:fowkes@burnet.edu.au)

Key: BBiomedSc, BSci, M, PhD

[Determining the roles of Nuclear Factor-kB1 in Follicular Helper CD4+ T cells](#)

Supervisors: Dr Raffi Gugasyan and Elisha de Valle

Email: [gugasyan@burnet.edu.au](mailto:gugasyan@burnet.edu.au)

Key: BBioMedSc, BSci, BMedSc, PhD

[The inflammatory monocyte subset as a reservoir for HIV](#)

Supervisors: A/Prof Anthony Jaworowski and Dr Anna Hearps

Email: [anthonyj@burnet.edu.au](mailto:anthonyj@burnet.edu.au)

Key: BBiomedSc, BSci

[The role of monocytes in immunity to blood stage malaria parasites](#)

Supervisors: A/Prof Anthony Jaworowski and Dr Anna Hearps

Email: [anthonyj@burnet.edu.au](mailto:anthonyj@burnet.edu.au)

Key: BBiomedSc, BSci

## Cabrini Monash Department of Medicine

The Cabrini clinical school is part of the undergraduate medical education program coordinated by Central Clinical School, Monash University. The Cabrini teaching program is coordinated by the Clinical Dean, Associate Professor Michele Levinson. Current research focuses on ICU for those aged over 80 years, Doctor –patient discourse analysis and End-of-life studies. Please visit the Cabrini Monash Department of Medicine website for publications and new studies: <http://www.med.monash.edu.au/cecs/education/umed/cabrini.html>



### \*Key to specify the streams applicable for each project

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

### Projects available:

[Language around concepts of 'do not resuscitate'](#)

Supervisors: A/Prof Michele Levinson and Dr Amber Mills

Email: [mlevinson@cabrini.com.au](mailto:mlevinson@cabrini.com.au)

Key: BSci, BMedSc, M

### [Open Project Opportunity](#)

Supervisors: A/Prof Michele Levinson and Dr Amber Mills

Email: [mlevinson@cabrini.com.au](mailto:mlevinson@cabrini.com.au)

Key: BSci, BMedSc, M

## Department of Immunology

The Monash University Department of Immunology is internationally renowned for its combined expertise in research, teaching and service delivery in immunology and immuno-pathology.

There are extensive research programs in basic and translational immunology, including highly successful collaborations with The Alfred hospital and other AMREP partners. The department's research activities target diseases including allergy, asthma, autoimmunity, inflammation, diabetes, lupus, organ fibrosis, cancer and malaria. The department also focuses on engineering novel treatments such as nanoparticle-based vaccines in cancer and infection.



### \*Key to specify the streams applicable for each project

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

**Projects available:**

[Mining the mouse non-classical MHC for regulators of innate immunity](#)

Supervisors: Dr Dan Andrews and Ms Katharine Goodall

Email: [Dan.andrews@monash.edu](mailto:Dan.andrews@monash.edu)

Key: PhD

[Regulation of the immune response by non-classical MHC](#)

Supervisors: Dr Dan Andrews and Ms Katharine Goodall

Email: [Dan.andrews@monash.edu](mailto:Dan.andrews@monash.edu)

Key: BBiomedSc

[Examining pathogenic macrophages in chronic obstructive pulmonary disease \(COPD\)](#)

Supervisors: A/Prof Margaret Hibbs and Dr Evelyn Tsantikos

Email: [Margaret.Hibbs@monash.edu](mailto:Margaret.Hibbs@monash.edu)

Key: BBioMedSc, BSci, BMedSc, PhD

[Examining the temporal development of disease comorbidities in models of chronic lung disease](#)

Supervisors: A/Prof Margaret Hibbs and Dr Evelyn Tsantikos

Email: [Margaret.Hibbs@monash.edu](mailto:Margaret.Hibbs@monash.edu)

Key: BBioMedSc, BSci, BMedSc, PhD

[Immunotherapy of ovarian cancer](#)

Supervisors: Prof Magdalena Plebanski, Prof Michael Quinn, Prof Cordelia Selomulya and Prof Orla McNally

Email: [Magdalena.Plebanski@monash.edu](mailto:Magdalena.Plebanski@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M, PhD

[Nanoparticles, neurotransmitters and diet that prevents asthma and allergic inflammation](#)

Supervisors: Prof Magdalena Plebanski and Prof Cordelia Selomulya

Email: [Magdalena.Plebanski@monash.edu](mailto:Magdalena.Plebanski@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M, PhD

[Nanovaccines against malaria](#)

Supervisors: Prof Magdalena Plebanski and A/Prof Cordelia Selomulya

Email: [Magdalena.Plebanski@monash.edu](mailto:Magdalena.Plebanski@monash.edu)

Key: BSci, BmedSc, BBiotech, M, PhD

[New therapeutics against cancer, allergy and asthma using nanotechnology](#)

Supervisors: Prof Magdalena Plebanski, Dr Sue Xiang and Dr Andrew Stephens

Email: [Magdalena.Plebanski@monash.edu](mailto:Magdalena.Plebanski@monash.edu)

Key: BSci, BmedSc, BBiotech, M, PhD

[Non-specific effects of vaccines in the elderly](#)

Supervisors: Prof Magdalena Plebanski and A/Prof Katie Flanagan

Email: [Magdalena.Plebanski@monash.edu](mailto:Magdalena.Plebanski@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M, PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [Infection and immunity](#)

Supervisors: Prof Jamie Rossjohn, Dr Hugh Reid, Mr Julian Vivian, Dr Jerome Le Nours, Dr Stephanie Gras and Dr Richard Berry

Email: [Jamie.Rossjohn@monash.edu](mailto:Jamie.Rossjohn@monash.edu)

Key: BMedSc

### [Does a salty diet influence retinal disease via the adaptive immune system?](#)

Supervisors: Prof Jennifer Wilkinson-Berka and Dr Devy Deliyanti

Email: [jennifer.wilkinson-berka@monash.edu](mailto:jennifer.wilkinson-berka@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M, PhD

### [The contribution of NOX5, NADPH oxidase 5, to vision loss in animal models of diabetic retinopathy](#)

Supervisors: Prof Jennifer Wilkinson-Berka and Dr Devy Deliyanti

Email: [jennifer.wilkinson-berka@monash.edu](mailto:jennifer.wilkinson-berka@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech

### [How does tetraspanin CD53 regulate lymphocytes on patrol?](#)

Supervisors: A/Prof Mark Wright and A/Prof Michael Hickey

Email: [Mark.Wright@monash.edu](mailto:Mark.Wright@monash.edu)

Key: BBioMedSc, BSci, BBiotech, M, PhD

### [Tetraspanins CD37 and CD82: The Yin and Yang of Dendritic cell biology](#)

Supervisors: A/Prof Mark Wright and Dr Janet Wee

Email: [Mark.Wright@monash.edu](mailto:Mark.Wright@monash.edu)

Key: BBioMedSc, BSci, M

### [A superagonist antibody to human IL-21 in cancer immunotherapy](#)

Supervisors: Dr Di Yu and Mr Yew Ann Leong

Email: [di.yu@monash.edu](mailto:di.yu@monash.edu)

Key: BMedSc, BSci, PhD

### [Identification of immunological and genetic defects in patients with a primary antibody deficiency](#)

Supervisors: A/Prof Menno van Zelm, Prof Robyn O'Hehir and Emeritus Prof Jennifer Rolland

Email: [menno.vanzelm@monash.edu](mailto:menno.vanzelm@monash.edu)

Key: BBioMedSc, BSci

## Department of Infectious Diseases

The Department of Infectious Diseases, Central Clinical School, and Alfred Health, is a premier center for clinical and biomedical research and education, offering undergraduate and postgraduate study programs.

The Department incorporates a large clinical service with active research programs in the fields of HIV, viral hepatitis, infections in the immunosuppressed (such as those with malignancy, in intensive care and post-splenectomy), influenza, drug resistant organisms, antibiotic use and infection prevention and hospital epidemiology. The Department integrates clinical services with clinical and basic science research.



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD



**Projects available:**

[National cross sectional study of women living with HIV in Australia](#)

Supervisor: A/Prof Michelle Giles

Email: [m.giles@alfred.org.au](mailto:m.giles@alfred.org.au)

Key: BMedSc

[Predicting Chronic Kidney Disease in HIV Positive Patients](#)

Supervisors: Prof Jennifer Hoy and Dr Janine Trevillyan

Email: [jennifer.hoy@monash.edu](mailto:jennifer.hoy@monash.edu)

Key: BMedSc

[Clinical Utility of Bronchoalveolar Lavage \(BAL\) and Blood Aspergillus Galactomannan and PCR for Guiding Antifungal Therapy in Lung Transplant Recipients](#)

Supervisors: Dr C Orla Morrissey, Prof Anton Peleg, A/Prof Glen Westall and Dr Harini de Silva

Email: [o.morrissey@alfred.org.au](mailto:o.morrissey@alfred.org.au)

Key: BMedSc

[Determining the Impact of Host Immune Responses, and Aspergillus Genotypes on Patients Post-Lung Transplantation: A Roadmap to Developing Improved Antifungal Strategies](#)

Supervisors: Dr C Orla Morrissey, Prof Anton Peleg, Prof Greg Snell, A/Prof Andy Fisher

Email: [o.morrissey@alfred.org.au](mailto:o.morrissey@alfred.org.au)

Key: PhD

[Elucidating Immune Function in Haematology Patients undergoing Chemotherapy: Novel Methods for Developing Improved Antifungal Strategies](#)

Supervisors: Dr C Orla Morrissey, Prof Anton Peleg, Prof Andrew Spencer, Dr Harini de Silva

Email: [o.morrissey@alfred.org.au](mailto:o.morrissey@alfred.org.au)

Key: PhD

[New Kid on the Block to Prevent or Treat Life-threatening Invasive Fungal Disease](#)

Supervisors: Dr C Orla Morrissey and Prof Anton Peleg

Email: [o.morrissey@alfred.org.au](mailto:o.morrissey@alfred.org.au)

Key: BMedSc

[The Impact of Infections on the Development of Chronic Rejection Post-Lung Transplantation](#)

Supervisors: Dr C Orla Morrissey, Prof Anton Peleg, Prof Greg Snell, A/Prof Andy Fisher

Email: [o.morrissey@alfred.org.au](mailto:o.morrissey@alfred.org.au)

Key: BMedSc

[Identification of Novel Bacterial Chemoattractants using the Zebrafish Model](#)

Supervisors: Prof Anton Peleg and Prof Graham Lieschke

Email: [anton.peleg@monash.edu](mailto:anton.peleg@monash.edu)

Key: PhD

[Tackling Medically Important Biofilm-related Infections](#)

Supervisors: Prof Anton Peleg and Prof David McGiffen

Email: [anton.peleg@monash.edu](mailto:anton.peleg@monash.edu)

Key: BBioMedSc, BSci, BMedSc, BBiotech, PhD

## Department of Medicine

The Central Clinical School's Department of Medicine within the Division of Clinical Sciences is based at the Alfred Medical Research and Education Precinct (AMREP). Co-located with a number of world class research institutions and Alfred Health, the Department of Medicine is a premier centre for clinical and biomedical research and education, offering undergraduate and postgraduate study programs.

Research in the Department of Medicine encompasses programs in Dermatology, Developmental biology, Hormones and Vasculature, Molecular Endocrinology, Neuroscience, Oncology, Pathology and Skin Cancer. Many of the research programs are integrated with clinical services at Alfred Health, facilitating the translation of basic research findings to medical practice, therapeutics and improved health care.



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

**Projects available:**

[Determinants of diabetes after lung transplantation](#)

Supervisors: Prof Leon Bach, Dr Kathryn Hackman and Prof Greg Snell

Email: [leon.bach@monash.edu](mailto:leon.bach@monash.edu)

Key: BMedSc

[Expression profile of skin tumours with high risk of malignant conversion](#)

Supervisors: Dr Charbel Darido and Prof Stephen Jane

Email: [charbel.darido@monash.edu](mailto:charbel.darido@monash.edu)

Key: BBioMedSc, BSc, BMedSc, BBiotech

[Investigating the molecular mechanisms in epidermal homeostasis and cancer](#)

Supervisors: Dr Charbel Darido and Prof Stephen Jane

Email: [charbel.darido@monash.edu](mailto:charbel.darido@monash.edu)

Key: BBioMedSc, BSc, BMedSc, M, PhD

[Investigating the requirements of pro-inflammatory signaling in skin and head & neck SCC](#)

Supervisors: Dr Charbel Darido and Dr Smitha Georgy

Email: [charbel.darido@monash.edu](mailto:charbel.darido@monash.edu)

Key: BBioMedSc, BSc, BMedSc, M, PhD

[Understanding the genetic and molecular mechanisms which regulate craniofacial development](#)

Supervisors: Dr Sebastian Dworkin and Prof Stephen Jane

Email: [sebastian.dworkin@monash.edu](mailto:sebastian.dworkin@monash.edu)

Key: BMedSc, BBioMedSc, BSci, PhD

[What signals direct neural crest cells to form the craniofacial skeleton?](#)

Supervisors: Dr Sebastian Dworkin and Dr Marina Carpinelli

Email: [sebastian.dworkin@monash.edu](mailto:sebastian.dworkin@monash.edu)

Key: BMedSc, BBioMedSc, BSci, M, PhD

[Therapeutic targeting of Grhl3 dependent pathways in Head and Neck SCC](#)

Supervisors: Dr Smitha Georgy, Dr Charbel Darido and Professor Stephen Jane

Email: [smitha.georgy@monash.edu](mailto:smitha.georgy@monash.edu)

Key: BBioMedSc, BSci, BMedSc

[Augmented eXperience Modules \(AXM\) Usage Patterns and Acceptability for 3rd Year Medical Students](#)

Supervisors: A/Prof Rob Selzer and Ms Fiona Foley

Email: [rob.selzer@monash.edu](mailto:rob.selzer@monash.edu)

Key: BMedSc

[Haemodynamic instability during renal replacement therapy - clinical and modelling analyses](#)

Supervisors: Prof Rowan Walker and Dr Scott Wilson

Email: [r.walker@alfred.org.au](mailto:r.walker@alfred.org.au)

Key: BMedSc, BBioMedSc, BBiotech, M

## Melbourne Sexual Health Centre

The Melbourne Sexual Health Centre (MSHC) is a specialised unit for the diagnosis and treatment of sexually transmissible infections (STI/HIV) and is a principal centre for training health professionals in Victoria. The Centre conducts epidemiological, public health and clinical research primarily aimed at improving the services offered at MSHC.



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**M** – Masters

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BSci** – Bachelor of Science (Honours)

**PhD** – PhD

**Projects available:**

[Detection of Mycoplasma genitalium \(MG\) in sexual contacts and implications for clinical management](#)

Supervisors: A/Prof Catriona Bradshaw, Prof Christopher Fairley and A/Prof Marcus Chen

Email: [CBradshaw@mshc.org.au](mailto:CBradshaw@mshc.org.au)

Key: BBioMedSc, BSc, BMedSc, BBiotech

[Mycoplasma genitalium, determining the effectiveness of extended azithromycin for the treatment of this emerging sexually transmitted infection](#)

Supervisors: A/Prof Catriona Bradshaw, Dr Tim Read, A/Prof Marcus Chen, Prof Christopher Fairley and Dr Melanie Bissessor

Email: [cbradshaw@mshc.org.au](mailto:cbradshaw@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, M

[Partner treatment to reduce recurrence of bacterial vaginosis in women](#)

Supervisors: A/Prof Catriona Bradshaw, Dr Tim Read, A/Prof Marcus Chen and Prof Christopher Fairley

Email: [cbradshaw@mshc.org.au](mailto:cbradshaw@mshc.org.au)

Key: BMedSc

[Analysis of the “Let Them Know partner” notification web site - how people exposed to STIs were contacted by their partners](#)

Supervisors: A/Prof Marcus Chen, Prof Christopher Fairley and A/Prof Catriona Bradshaw

Email: [MChen@mshc.org.au](mailto:MChen@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech

[Bacterial load in urethral gonorrhoea and implications for gonorrhoea transmission](#)

Supervisors: A/Prof Marcus Chen, Prof Christopher Fairley and A/Prof Catriona Bradshaw

Email: [MChen@mshc.org.au](mailto:MChen@mshc.org.au)

Key: BBioMedSc, BMedSc

[Sexually transmitted infections in men who have sex with men](#)

Supervisor: A/Prof Marcus Chen

Email: [MChen@mshc.org.au](mailto:MChen@mshc.org.au)

Key: PhD

[Analysis of the accuracy of a self diagnosis web site for common sexually transmitted infections](#)

Supervisors: Prof Christopher Fairley, A/Prof Marcus Chen and A/Prof Catriona Bradshaw

Email: [CFairley@mshc.org.au](mailto:CFairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M, PhD

[Epidemiology of STI since 1917](#)

Supervisors: Prof Christopher Fairley and Dr Eric Chow

Email: [cfairley@mshc.org.au](mailto:cfairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, M, PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [Prospective case control study of the risk factors for anal and throat gonorrhoea](#)

Supervisors: Prof Christopher Fairley, A/Prof Marcus Chen and A/Prof Catriona Bradshaw

Email: [CFairley@mshc.org.au](mailto:CFairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech, M

### [Research in Sexual Health Medicine](#)

Supervisors: Prof Christopher Fairley, Dr Eric Chow and A/Prof Catriona Bradshaw

Email: [cfairley@mshc.org.au](mailto:cfairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, M

### [Symptoms and microbiological findings of women attending as partners of men diagnosed with urethritis at MSHC](#)

Supervisors: Prof Christopher Fairley, A/Prof Marcus Chen and A/Prof Catriona Bradshaw

Email: [cfairley@mshc.org.au](mailto:cfairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech

### [Systematic review of the cost effectiveness of screening for gonorrhoea in very low prevalence populations](#)

Supervisors: Prof Christopher Fairley, A/Prof Marcus Chen and A/Prof Catriona Bradshaw

Email: [cfairley@mshc.org.au](mailto:cfairley@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech

### [Clinical and microbiological features of epididymitis.](#)

Supervisors: Dr Tim Read, A/Prof Marcus Chen, A/Prof Catriona Bradshaw and Prof Christopher Fairley

Email: [Tread@mshc.org.au](mailto:Tread@mshc.org.au)

Key: BMedSc

### [Secondary analysis of a trial dataset of reasons why gay men have HIV tests](#)

Supervisors: Dr Tim Read, A/Prof Marcus Chen and Prof Christopher Fairley

Email: [Tread@mshc.org.au](mailto:Tread@mshc.org.au)

Key: BBioMedSc, BSci, BMedSc, BBiotech

# Monash Alfred Psychiatry research centre



MAPrc is one of Australia’s largest clinical research centres in psychiatry. The centre has a long track record of producing world class research with direct clinical translation. The key goal of MAPrc is to conduct clinical research aimed at developing new treatments with direct, effective, and immediate applications. The research covers all ages and many different mental illnesses. MAPrc research is integrated with clinical practice, based in the Alfred Hospital in affiliation with Monash University. We have a multidisciplinary group of researchers with a research agenda that meets clinical and social needs and has a short 1-5 year timeline to real clinical impact.



**\*Key to specify the streams applicable for each project**

<b>BMedSc</b> – Bachelor of Medical Science (Honours)	<b>BBiomedSc</b> – Bachelor of Biomedical Science (Honours)
<b>BBiotech</b> – Bachelor of Biotechnology (Honours)	<b>BSci</b> – Bachelor of Science (Honours)
<b>M</b> – Masters	<b>PhD</b> – PhD

**Projects available:**

[Does mindfulness decrease the emotional bias for memories? A study of emotional memory related brain activity in mindful individuals](#)

Supervisors: Dr Neil Bailey and Dr Rebecca Seagrave

Email: [neil.bailey@monash.edu](mailto:neil.bailey@monash.edu)

Key: BBioMedSc, BSc, BMedSc

[Does regular mindfulness meditation enhance positivity and resilience? An EEG investigation](#)

Supervisors: Dr Neil Bailey and Dr Rebecca Seagrave

Email: [neil.bailey@monash.edu](mailto:neil.bailey@monash.edu)

Key: BSc, BMedSc

[Learning to meditate: how long before regular mediation practice alters brain activity?](#)

Supervisors: Dr Neil Bailey and Dr Rebecca Seagrave

Email: [neil.bailey@monash.edu](mailto:neil.bailey@monash.edu)

Key: BSc, BMedSc

[Investigation of the efficacy of a novel treatment for metabolic syndrome in patients with schizophrenia](#)

Supervisors: Prof David Barton and Prof Gavin Lambert

Email: [david.barton@bigpond.com](mailto:david.barton@bigpond.com)

Key: BMedSc, M

[Major Depression and the effect on cardiac function](#)

Supervisors: Prof David Barton and Prof Gavin Lambert

Email: [david.barton@bigpond.com](mailto:david.barton@bigpond.com)

Key: BMedSc, M, PhD

[Prevalence of psychiatric disorders in patients admitted to an acute brain injury unit](#)

Supervisors: Prof David Barton and Dr Arup Dhar

Email: [david.barton@bigpond.com](mailto:david.barton@bigpond.com)

Key: BMedSc, M

[Review of guidelines for the management of aggression in patients with an acute brain injury and the evaluation of their efficacy](#)

Supervisors: Prof David Barton and Prof Gavin Lambert

Email: [david.barton@bigpond.com](mailto:david.barton@bigpond.com)

Key: BMedSc, M

[Improving social cognition in schizophrenia with deep TMS](#)

Supervisor: Prof Paul Fitzgerald

Email: [Paul.Fitzgerald@monash.edu](mailto:Paul.Fitzgerald@monash.edu)

Key: BMedSc, PhD

[Improving symptoms of obsessive compulsive disorder with brain stimulation](#)

Supervisor: Prof Paul Fitzgerald

Email: [Paul.Fitzgerald@monash.edu](mailto:Paul.Fitzgerald@monash.edu)

Key: BMedSc, PhD



## 2016 Postgraduate and Honours Project Index Booklet

### [Developing optimal methods for theta burst prefrontal brain stimulation](#)

Supervisor: Prof Paul Fitzgerald

Email: [Paul.Fitzgerald@monash.edu](mailto:Paul.Fitzgerald@monash.edu)

Key: BMedSc, PhD

### [An investigation into the physiology and psychology of ultra-runners](#)

Supervisors: Dr Bernadette Fitzgibbon and Dr Donna Urquhart

Email: [bernadette.fitzgibbon@monash.edu](mailto:bernadette.fitzgibbon@monash.edu)

Key: BSci, BMedSc

### [Hypothalamic-Pituitary-Gonadal Axis Hormones and Psychopathology in Women with Schizophrenia](#)

Supervisors: Dr Jasmin Grigg and Prof Jayashri Kulkarni

Email: [jasmin.grigg@monash.edu](mailto:jasmin.grigg@monash.edu)

Key: BmedSc

### [How eye movements can inform us about cognition and schizophrenia symptoms](#)

Supervisors: Dr Caroline Gurvich and Prof Susan Rossell

Email: [caroline.gurvich@monash.edu](mailto:caroline.gurvich@monash.edu)

Key: BBioMedSc, BMedSc, BSci

### [Increasing the speed of thought: Using brain stimulation to enhance speed of information processing](#)

Supervisors: Dr Kate Hoy and Dr Rebecca Seagrave

Email: [Kate.hoy@monash.edu](mailto:Kate.hoy@monash.edu)

Key: BSci, BMedSc

### [A comparison of the behavioural and biological effects of Transcranial Magnetic Stimulation and Theta Burst Stimulation on cognition](#)

Supervisors: Dr Kate Hoy and Dr Neil Bailey

Email: [Kate.hoy@monash.edu](mailto:Kate.hoy@monash.edu)

Key: BSci, BMedSc

### [Lost in translation: assessing the applicability of motor cortical tDCS findings to the DLPFC](#)

Supervisors: Dr Kate Hoy and Prof Paul Fitzgerald

Email: [Kate.hoy@monash.edu](mailto:Kate.hoy@monash.edu)

Key: PhD

### [Antipsychotic use and effect in women compared with men](#)

Supervisors: Prof Jayashri Kulkarni, Dr Jasmin Grigg and Ms Emmy Gavriliadis

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: PhD

### [Depression, Alcohol and Substance Use in Medical Students](#)

Supervisors: Prof Jayashri Kulkarni and Dr Stewart Lee

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

## 2016 Postgraduate and Honours Project Index Booklet

### [Depression and the Oral Contraceptive Pill](#)

Supervisors: Prof Jayashri Kulkarni and Dr Roisin Worsley

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [Interpersonal Violence in Women and Depression](#)

Supervisors: Prof Jayashri Kulkarni and Ms Emmy Gavrilidis

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu) Key: BMedSc

### [Investigating Emotion Regulation for Coping During Perimenopause](#)

Supervisors: Prof Jayashri Kulkarni and Ms Emmy Gavrilidis

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BmedSc

### [Mood stabilisers in women during pregnancy: outcomes for mother and baby](#)

Supervisors: Prof Jayashri Kulkarni and Ms Heather Gilbert

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [Neonatal abstinence syndrome at birth, and subsequent outcomes at 12 months of age, in infants whose mothers took antipsychotic medication during pregnancy](#)

Supervisors: Prof Jayashri Kulkarni and Ms Heather Gilbert

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [Neonatal respiratory distress at birth, and subsequent outcomes at 12 months of age, in infants whose mothers who took antipsychotic medication during pregnancy](#)

Supervisors: Prof Jayashri Kulkarni and Ms Heather Gilbert

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [Obesity and Early Trauma in Women](#)

Supervisors: Prof Jayashri Kulkarni, Dr Roisin Worsley and Ms Emmy Gavrilidis

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [Safety of low dose quetiapine use in pregnant women](#)

Supervisors: Prof Jayashri Kulkarni and Ms Heather Gilbert

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BmedSc

### [The causes, phenomenology and treatments of Borderline Personality Disorder](#)

Supervisors: Prof Jayashri Kulkarni and Dr Roisin Worsley

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: PhD

## 2016 Postgraduate and Honours Project Index Booklet

### [The Effect of Gender and Hypothalamic-Pituitary-Gonadal \(HPG\) Axis Hormones on Dimensions of Positive Symptoms in Schizophrenia](#)

Supervisors: Prof Jayashri Kulkarni and Dr Jasmin Grigg

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [The impact of gestational diabetes mellitus in women who took antipsychotic medication during pregnancy, on the outcomes for mother and baby up to 12 months postnatally](#)

Supervisors: Prof Jayashri Kulkarni and Ms Heather Gilbert

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Key: BMedSc

### [The Relationship between Internalised Stigma, Symptom Severity and Response to Hormone Treatment in Patients with Schizophrenia](#)

Supervisors: Prof Jayashri Kulkarni and Dr Jasmin Grigg

Email: [jayashri.kulkarni@monash.edu](mailto:jayashri.kulkarni@monash.edu)

Key: BMedSc

### [The Women's Mental Health Clinic Evaluation](#)

Supervisors: Prof Jayashri Kulkarni and Dr Roisin Worsley

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Key: BMedSc

### [Self management workbook to prevent psychological distress during haemopoietic stem transplantation](#)

Supervisors: Dr Stuart Lee and Ms Lynda Katona

Email: [Stuart.lee@monash.edu](mailto:Stuart.lee@monash.edu)

Key: BBioMedSc, BMedSc, BSci, M, PhD

### [Youth Recovery/Discovery College to Promote Social Connection and Self Management for Young People with Mental Illness?](#)

Supervisors: Dr Stuart Lee and Ms Lara Nikitin

Email: [Stuart.lee@monash.edu](mailto:Stuart.lee@monash.edu)

Key: BBioMedSc, BMedSc, BSci, M, PhD

### [Vestibular function in healthy and mild traumatic brain injury rats](#)

Supervisors: Dr Jerome Maller and Prof Ramesh Rajan

Email: [jerome.maller@monash.edu](mailto:jerome.maller@monash.edu)

Key: PhD

### [Modulating parietal activity to influence emotional processing: an investigation into theta burst stimulation](#)

Supervisors: Dr Rebecca Seagrave and Dr Kate Hoy

Email: [rebecca.segrave@monash.edu](mailto:rebecca.segrave@monash.edu)

Key: BMedSc, BBioMedSc, BSci

## 2016 Postgraduate and Honours Project Index Booklet

### [Is bigger better? The impact of electrode size on cognitive enhancement with tDCS](#)

Supervisors: Dr Rebecca Seagrave and Dr Kate Hoy

Email: [rebecca.segrave@monash.edu](mailto:rebecca.segrave@monash.edu)

Key: BMedSc, BBioMedSc, BSci

### [How reliable are the effects of tDCS? A study of intra-individual reliability](#)

Supervisors: Dr Rebecca Seagrave and Dr Kate Hoy

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Key: BMedSc, BBioMedSc, BSci

### [Investigating the physiological response to transcranial magnetic stimulation \(TMS\)](#)

Supervisor: Dr Richard Thomson

Email: [richard.thomson@monash.edu](mailto:richard.thomson@monash.edu)

Key: BmedSc

### [Optimising the dosage of Transcranial Magnetic Stimulation](#)

Supervisors: Dr Richard Thomson and Prof Paul Fitzgerald

Email: [richard.thomson@monash.edu](mailto:richard.thomson@monash.edu)

Key: BMedSc, BBioMedSc

### [Understanding the impact of childhood trauma on emotion regulation and bipolar/anxiety tendencies across genders](#)

Supervisors: Dr Tamsyn Van Rheenen and Prof Jayashri Kulkarni

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Key: BmedSc

## Department of Surgery

The Department of Surgery, part of the CCS's Division of Clinical Sciences, is a premier centre for clinical and surgical research and education, contributing to Monash's MBBS and offering postgraduate study programs. Research in the Department of Surgery includes programs in a wide variety of areas including trauma, burns, cardiothoracic, colorectal, endocrine, upper gastrointestinal, urology, orthopaedics, spine injury, general surgery and neurosurgery specialisations. The Department of Surgery is closely associated with the National Trauma Research Institute



**\*Key to specify the streams applicable for each project**

**BMedSc** – Bachelor of Medical Science (Honours)

**BBiomedSc** – Bachelor of Biomedical Science (Honours)

**BBiotech** – Bachelor of Biotechnology (Honours)

**BSci** – Bachelor of Science (Honours)

**M** – Masters

**PhD** – PhD

**Projects available:**

[Use of Human-derived Feeders and Nutrients for Cultured Epithelial Autograft](#)

Supervisors: Dr Shiva Akbarzadeh, Dr Heather Cleland and Dr Marisa Herson

Email: [shiva.akbarzadeh@monash.edu](mailto:shiva.akbarzadeh@monash.edu)

Key: BBioMedSc, BSci, BMedSc

[Computer Assisted Resuscitation Decision Support in Trauma](#)

Supervisors: Prof Mark Fitzgerald and Prof Stephen Bernard

Email: [m.fitzgerald@alfred.org.au](mailto:m.fitzgerald@alfred.org.au)

Key: PhD

[Pre-hospital Notification and Structured Handover on Hospital Arrival: development and implementation in India](#)

Supervisors: Prof Mark Fitzgerald and Dr Joseph Mathew

Email: [m.fitzgerald@alfred.org.au](mailto:m.fitzgerald@alfred.org.au)

Key: PhD

[Validation of a computer assisted decision support software system for resuscitation of trauma patients](#)

Supervisors: Prof Mark Fitzgerald and A/Prof Biswadev Mitra

Email: [m.fitzgerald@alfred.org.au](mailto:m.fitzgerald@alfred.org.au)

Key: BMedSc

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Project database: <http://studentresearchprojects.med.monash.edu.au/>

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