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# We have stood in your shoes

All of the doctors teaching at The Australian National University (ANU) Medical School, myself included, know that choosing a medical school is a big deal.

Having been through the process ourselves, and being still tied to our respective schools through alumni networks and the indelible memories of our impressionable years as a medical student, we are very aware of the critical importance of this decision.

So it is not lightly that I recommend the ANU Medical School. It is in the full knowledge that this is a big deal for you. You are, after all, entrusting your indelible memories to us.

But I can say, with confidence and great pride, that we are the right choice.

You will find at the ANU Medical School the support you need to get through what will be a tough four years, and graduate as the kind of doctor you want to be.

You will not be lost in the crowd here. Your teachers will be your mentors, your classmates will be your best friends, and your new city will be your home.

The best of luck to you as you begin your journey to becoming a doctor. I hope I will be able to welcome you to ANU, personally, soon.

Professor Imogen Mitchell
Dean of the ANU Medical School

**Image**: Professor Imagen Mitchell at The Canberra Hospital, where she was Director of the Intensive Care Unit for 15 years



## WHY STUDY AT ANU?

# The right choice

#### **Excellence in education**

The best thing about the ANU Medical School is also the most important thing. Our teachers. They are inspiring, award-winning and deliver results: dedicated doctors of the highest standard. That could be you.

#### A personal learning environment

Our class sizes are among the smallest of any medical school in Australia, meaning our expert teaching staff are accessible to you when you need them, which at some point, you will.

#### A supportive clinical experience

Because we're the only medical school in Canberra, you'll find familiar faces—your teachers, and students from the years ahead of you—in every hospital corridor, ready to show you the ropes.

#### A community of your own

We have a vibrant postgraduate student body many of whom have moved to Canberra just for ANU, and are looking for new friends and new adventures. It's not just a campus, it's a community.

#### A world-class degree

An ANU degree says something. It says you're a graduate from one of the world's top 20 universities, and the very best in Australia (QS World University Rankings, 2018). A medical degree opens doors, but one from ANU opens even more.

"I came to Australia from Botswana, and as an international student I feel so welcome here. Everyone is open to making new friends and supporting each other. Also, I live a stone's throw from the hospital—just over there in fact."

**Gautam Bhanot**, MChD graduate, at The Canberra Hospital



#### WHY CANBERRA?

# Where you want to be

#### Better than anywhere else-seriously

What could be better than living in the world's 'most liveable city' as chosen by the OECD? Having the winners of the Australian barista championships a short walk from campus.

#### The international capital

The numbers speak for themselves: ANU is ranked the 10th most international uni in the world (*The Times Higher Education World University Rankings*) and one quarter of Canberra's population was born overseas.

#### Safe and sound

Canberra has all the advantages of a capital city, like national institutions and amenities, but without the daily grind of crowds and commutes. It's also one of the safest cities in the world. Life is easy here.

#### We know what they said about us

But in fact we have more students per capita than any Australian city and we're actually one of the best student cities in the world (QS Best Student Cities, 2018). Trust the data.

"I did my undergrad in Canberra and for a little while I thought about going to another city for my medical degree, but I'm so glad I didn't. The vibe in Canberra is so different to anywhere else. I ride my bike everywhere and I have a lot of freedom and independence. It's such a tight-knit community too. Compared to other places, there's just no drama."

**Hillary McArthur**, MChD student at Music on the Meadow, a campus O-Week event.



#### YOUR ANU EXPERIENCE

# Your campus life

#### Your new home

ANU has village-style accommodation dedicated to postgraduate students, and just a short walk or bike ride from the Medical School. Choose from a studio flat or a one-, three- or five-bedroom apartment.

#### **Commute? What commute?**

Even if you're not living on campus, Canberra has the shortest commute time of any Australian capital city. It's almost like you literally have more hours in your day, when you're not on a train for half of it.

#### Find your people

Our SET4ANU program connects you with likeminded students as soon as you arrive on campus. As most ANU students are actually postgrads just like you, your social life will soon be SET4LIFE.

#### Get extra-curricular

We promise you will have free time. Escape the textbooks and get on stage at the annual Med Revue, join the editorial board of the Medical Students Journal of Australia, or go bush with ANU Rural Medical Society.

"It's so great living here. The areas around campus are so, so beautiful, and it's a great studying environment. When I first arrived here, I couldn't cook. I even gave myself food poisoning once! But now I've got actual life skills as well as half a medical degree, and I've made so many more new friends than if I just stayed at home in Sydney."

Jacqueline Chen, MChD student, seen here onscreen in her college room.



#### YOUR FUTURE

# **Doctors** you can look up to

This is Dr Simon Robertson, a doctor on the crew of the Toll Rescue Helicopter Service. He is also Senior Lecturer in Intensive Care, Anaesthesia and Retrieval Medicine at the ANU Medical School.

We could tell you he's an inspiration, but you'd be better off listening to his students and colleagues:

"Simon has the smoothest, calmest, most compassionate demeanour when dealing with anxious children and their families. It's like a freaking magic trick: watch carefully and you still can't see how he does it."

"If there are any medical students or junior doctors out there looking for someone to model themselves upon you can stop."

"Whenever I watch Dr Robertson interact with patients and families, I am in complete awe!"

"One of the finest docs I know. I learned a lot from him."

Your teachers should be your heroes, and at ANU, they will be.

"When we get a call dispatching us to an emergency, we have ten minutes to get the helicopter in the air. We don't even find out the condition of the patient until we're in flight. We just shut up and go."

Dr Simon Robertson



#### YOUR OPPORTUNITIES

# You can make an impact

#### **Rural placement**

The award-winning ANU Rural Program offers rural opportunities throughout the course. During your sixweek placement in South East NSW, you will develop an understanding of the challenges unique to rural medicine through first-hand experience and engagement with the local community.

#### **Rural Stream**

In the Rural Stream, you spend a year living and working in a rural town, well supported by local academics and clinicians. You will follow an integrated, patient-based, longitudinal study program, combining medicine, surgery, and community and child health. You will contribute to the rural community through our strong partnerships with general practices, local hospitals and community services.

#### Indigenous health

Our whole-of-curriculum perspective on Indigenous health is complemented by the Indigenous Health Stream. You will be supported to undertake your research project in Indigenous Health, participate in cultural immersion trips and clinical placements in Indigenous communities, as well as working with the community and Indigenous health-service providers.

#### International opportunities

Our students have had life-changing experiences during elective terms in international locations: anywhere from a clinic in the remote Scottish Highlands to a bustling hospital in a Chinese metropolis.

"Now I'm at the hospital full time, I just love it. All your emotions and senses are heightened so you're taking everything in."

**Amanda Steele**, MChD graduate and recipient of the Dr Peter Sharpe Scholarship



#### YOUR MEDICAL DEGREE

Our Doctor of Medicine and Surgery, called the MChD or Medicinae ac Chirurgiae Doctoranda, is a comprehensive and varied four-year program for graduate students looking to enter the rewarding field of medicine. Our training produces graduates who are committed to compassionate, ethical healthcare and the expansion of medical knowledge.

#### What do you study?

The MChD is underpinned by four themes:

- > Medical sciences covers a vast scope of ever-changing and expanding knowledge that forms the basis of modern medicine.
- > Clinical skills ensures the acquisition of knowledge is accompanied by communication skills, the ability to examine patients and critically appraise information.
- > Population health addresses the relationship between humans, their society and environment.
- > Professionalism and leadership develops these vital skills of a good doctor.

The curriculum is built on important frameworks that explore the social foundations of medicine, develop understanding of the indigenous health context in Australia, and provide insights and experience in health care in rural and/or remote Australian settings. Consistent with the research-intensive nature of ANU, our program also develops the research skills of our students.

#### What can you expect?

#### Years one and two

During the first two years of the course, the curriculum is built around problem based learning (PBL) tutorials. PBL sessions are designed to promote creative and analytical thinking through both cooperative and self-directed learning.

Each week, students are presented with a PBL case study, working through hypotheses and diagnoses in a scientific manner. The PBL sessions are supported by lectures, practical tutorials and a weekly clinical day in one of Canberra's hospitals. All learning resources are easily accessed through the studentstaff web interface, Wattle.

During each of the first two years, students also spend one week in a rural location around Canberra and the south-east region of NSW. In second year, rural week focuses on Indigenous health.

Students also conduct a research project during this time, expanding their knowledge and research skills through collaboration with the world class research teams here at ANU.

#### Years three and four

From the end of the second year, students spend almost all of their contact hours in the health sector. During this time, they are immersed in all the major medical disciplines through rotations of four or more weeks.

The ANU Medical School Canberra Hospital campus is the principal teaching location. Its facilities are complemented by those of Calvary Public Hospital, Calvary John James Hospital, Calvary Private Hospital and National Capital Private Hospital.

During third year, students again venture into the rural clinical realm, this time for six weeks. Students enrolled in the Rural Stream will spend their entire third year as an active member of a rural community.

At the beginning of fourth year, students undertake an elective term of four or more weeks at a worldwide location of their choice. The main objective of this term is to broaden students' clinical horizons beyond the established curriculum and to gain personal life experience.

#### MChD program structure

Phase	Year	Description	Courses	Codes
1	1	Block 1: Foundation Block	Medicine 1A  Medicine 1B	MEDI8011
		Block 2: Cardiorespiratory and Renal		MEDI8012
		Block 3: Endocrinology and Reproductive Health	Research project	MEDI8013
	2	Block 4: Musculoskeletal and Neuroscience	Medicine 2	MEDI8020A MEDI8020B
		Block 5: Digestive Diseases and Nutrition	Research project	
		Block 6: Haematology, Oncology and Infectious Diseases		
		Block 7: Consolidation		
2	3	Two curriculum blocks	Medicine 3	MEDI8030A
		comprised of a series of clinical rotations:		MEDI8030B
		Foundations of Internal Medicine and Surgery		
		Integrated Community and Child Health		
	4	Four clinical rotations:	Elective	
		Senior Medicine and Surgery Block	Medicine 4	MEDI8040A
		Acute Care Block		MEDI8040B
		Psychiatry and Addiction Medicine Block		
		Women's Health and Newborn Care Block		



#### YOUR APPLICATION: DOMESTIC

Applicants must have completed or be in the final year of their Bachelor degree in the year of application. Two-year accelerated Bachelor degrees will be accepted but must be complete at the time of application. ANU will include Masters by Coursework results in the three-year GPA.

#### Step 1: GAMSAT

For domestic applicants, the first step towards studying the MChD is sitting the Graduate Australian Medical School Admissions Test (GAMSAT), held in March and September each year.

#### **Step 2: Application**

The second step is to apply for admission to the program through the Graduate Entry Medical School Admission System (GEMSAS) website at gemsas.edu.au

On the application form you will be asked to rank your preference for the types of government-funded places available:

- > Commonwealth Supported Places: 64 available
- > Bonded Medical Places: 26 available

#### Step 3: Interview

Selection for interview is based on:

- > Your weighted grade point average (GPA). Applicants must have a Bachelor degree or be in the final year of a Bachelor degree, and the weighted GPA is calculated from the results of the last three years of your most recent Bachelor degree (the minimum score for interview consideration is 5.6).
- > Your GAMSAT score. You must pass all sections (minimum score of 50) and achieve an Overall Score of 55 or more.

Your GPA and Overall GAMSAT score will be weighted 50:50 to produce a ranked list of applicants. Interviews are offered to applicants with a range of GPA/GAMSAT score combinations. A percentage bonus for one of the following degrees: Honours, Masters by Research, or PhD (if applicable), may be applied to the combined weighted GPA and Overall GAMSAT score.

Applicants should be aware that meeting the minimum criteria does not guarantee an interview.

The interview takes place at the ANU Medical School, ANU Acton campus, and covers several topics and scenarios.

#### Step 4: Offers

Offers of a place will be based on a total score of 50:50 weighting of the composite score (used for the interview ranking) and the interview score.

Successful domestic applicants will receive an offer letter by email in early-mid November. Later round offers will be made from December to February.

Unsuccessful domestic applicants will receive formal notification by email from GEMSAS.

YOUR APPLICATION: INTERNATIONAL

Applicants must have completed or be in the final year of their Bachelor degree in the year of application. Two-year accelerated Bachelor degrees will be accepted but must be complete at the time of application. ANU will include Masters by Coursework results in the three-year GPA.

#### **Step 1: GAMSAT or MCAT**

For international applicants, the first step towards the MChD is sitting the Medical College Admissions Test (MCAT) or the Graduate Australian Medical School Admissions Test (GAMSAT).

The MCAT is held at various times from January each year. The GAMSAT is held in March and September each year.

#### **Step 2: Application**

The second step is to apply for admission to the program directly to the ANU Medical School.

Applicants may apply online through the ANU website and must include the following documentation in their application:

- > original transcript for your Bachelor degree or equivalent
- > your official MCAT or GAMSAT results
- > proof of English language proficiency.

Up to 20 full-fee paying places are available.

Note: international students should be aware of the Medical Board of Australia's English requirements for internship registration in Australia, which requires a minimum of IELTS level 7 in all four components.

#### **Step 3: Interview**

Selection for interview is based on:

- > Your weighted grade point average (GPA). This is calculated from the results of the last three years of your most recent Bachelor degree (the minimum score for interview consideration is 5.6).
- Your MCAT or GAMSAT score. You must achieve a minimum MCAT score of 500 with a minimum of 125 in each section or minumum GAMSAT score of 55 with a minimum of 50 in each section.

Your GPA and MCAT/GAMSAT score will be weighted 50:50 to produce a ranked list of applicants. Interviews will be offered to applicants with a range of weighted GPA/MCAT/GAMSAT score combinations. A percentage bonus for one of the following degrees: Honours, Masters by Research, or PhD (if applicable), may be applied to the combined weighted GPA and Overall GAMSAT score. Applicants should be aware that meeting the minimum criteria does not guarantee interview.

International applicants will be interviewed online.

#### Step 4: Offers

Offers of a place will be based on a total score of 50:50 weighting of the composite score (used for the interview ranking) and the interview score.

Successful international applicants will receive an offer letter by email in late August, or between October and December for later round offers.

Unsuccessful international applicants will receive formal notification via email from the ANU Medical School.

This information is correct at the time of printing, but can change. Please visit the ANU Medical School website at **medicalschool.anu.edu.au** for the most up-to-date information.



#### ADMISSIONS INFORMATION

#### **Admissions timeline**

Date	Activity
Late January- Early February	Orientation Week for Year 1 MChD students
March	GAMSAT sitting for students
May	GEMSAS applications open
	GAMSAT results released
	GEMSAS applications close
June	International student applications close
	Indigenous pathway applications close
July	International student interviews
	Indigenous pathway interviews
August	International student offers released
	Indigenous pathway offers released
	ANU Open Day
September	Domestic student interviews
	GAMSAT sitting for students
November	Domestic student offers released
December-January	Late round offers released
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<sup>\*</sup>Please note these dates are subject to change.

#### Accepting your offer

You are asked to accept or decline your offer by the date specified in your letter of offer, usually within two weeks. This provides the opportunity for other applicants to be offered any vacant places. Your offer letter will outline the prerequisites for enrolment,

- > providing evidence of degree completion
- > completing screening and vaccination requirements Your offer letter will also include information on:
- > enrolment and orientation week
- > guaranteed accommodation for students relocating to Canberra.

#### **Pathways**

The ANU Medical School offers a pathway to the MChD for high-achieving ANU students in the science stream of the Bachelor of Philosophy (PhB) Honours program. The PhB (Hons)-MChD pathway enables early acceptance into the medical program without completion of the GAMSAT. The two degrees can be completed in eight years. Some preference will be provided to students originating from rural backgrounds. The ANU Bachelor of Health Science also offers a pathway to the MChD without having to sit the GAMSAT. At the end of their second year in the Bachelor of Health Science, up to 30 students will receive an offer of entry to the MChD, contingent upon their grade point average (GPA), an interview process and successful completion of the Bachelor of Health Science program. Ten of the 30 places in the MChD program are

reserved for rural and Indigenous students from the Bachelor of

For more information on eligibility, visit the ANU Medical School website.

#### **Fees**

Domestic students study the MChD in Commonwealth Supported Places (CSPs) and Bonded Medical Places (BMPs), both of which are government funded.

International students are required to pay the full cost of their medical training. The tuition fee is subject to change. Further information can be found on the ANU student fees website.

"I look at my teachers and I say, 'That's what I want to be doing, that's who I want to be'. They're very aspirational figures. Almost all of our lecturers are also clinicians at the hospital, and they have a holistic approach to teaching."

**Kyle Davies**, 2016 graduate from the MChD, and now an intern with Canberra Hospital and Health Services



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#### SCHOLARSHIPS

#### **General scholarships**

#### Bill Nicholes "Willigobung" Scholarship for Medicine

#### \$20,000 per annum

Funding for this award has been provided by the late Bill Nicholes who bequeathed more than \$4.2 million to support students studying graduate medicine.

Eligibility: The applicant must be an Australian citizen, holder of an Australian permanent resident visa or a permanent humanitarian visa, have been offered a place in the MChD program, have achieved a GPA of 7.0 in their final year of undergraduate study (excluding Honours), be able to attend an interview and demonstrate the attributes of a Nicholes scholar.

One of the two scholarships offered annually is reserved for a student from a rural, regional or remote area who will have to meet additional requirements and provide supporting documentation.

Provider: The ANU Medical School.

#### **Reginald Kitchin Honours Scholarship**

#### \$5,000 per annum

This scholarship has been established through the generous support of the ACT Musculoskeletal and Orthopaedic Research Foundation. It will be offered for research in a field or discipline relevant to musculoskeletal or orthopaedic disease and/or trauma.

Eligibility: Enrolled in second or third year of the MChD Program at the ANU Medical School.

Provider: ANU College of Health and Medicine, and ANU College of Physical and Mathematical Sciences.

#### ANU National Indigenous Medicine Scholarship

#### \$72,000

The scholarship is to assist Indigenous students to study medicine at the ANU Medical School. No formal application is required as eligible candidates will be automatically considered for the scholarship.

Eligibility: The scholarship shall be available for award each year to a student who is an Indigenous Australian and is enrolled in and will remain enrolled in the MChD at ANU.

Provider: The ANU Medical School.

#### Ken Wanganeen Scholarship

#### Variable Value

The scholarship has been generously established in memory of the distinguished Indigenous Australian, Ken Wanganeen.

Eligibility: Applicants must be an Indigenous Australian AND enrolled in or will be enrolled in a graduate coursework program at the University OR enrolled in or will be enrolled in the Australian National Internships Program.

Provider: The Australian National University.

#### **Peter Sharp Scholarship**

#### \$72,000

The Peter Sharp Scholarship Program supports ANU medical students enrolled in the Indigenous health stream.

Eligibility: ANU Medical Students enrolled in the Indigenous Health Stream.

Provider: ACT Health, administered by the ANU Medical School.

#### **MMF Indigenous Tertiary Scholarship Program**

#### Variable value

Mary MacKillop Foundation's Indigenous Tertiary Scholarship Program was established in 1998 to assist in the education, wellbeing and self-determination of Aboriginal and Torres Strait Islander students. The aim is to build a more connected society with a strong representation of Indigenous graduates.

Eligibility: Available only to Aboriginal and/or Torres Strait Islander students.

Provider: Mary Mackillop Foundation, administered by The Australian National University.

#### **Elspeth Young Memorial Grant**

#### Variable value

The Elspeth Young Memorial Grants have been made possible by the generous bequest from Dr Elspeth Young to provide financial support to Indigenous Australian undergraduate and graduate students at The Australian National University. This support will be directed to costs necessary and incidental to studies, but not including any fees.

 $\hbox{Eligibility: Applicants must be Indigenous Australian.}$ 

Provider: The Australian National University.

#### **John Flynn Placement Program (JFPP)**

#### Variable value

Since 1997 the JFPP has been providing medical students with a unique opportunity to spend quality time in a rural or remote community under the professional guidance of an experienced rural doctor.

Eligibility: Currently enrolled in an accredited medical course at one of the 20 participating universities, of which ANU is part of, and able to complete the eight weeks of placements over a three- to four-year period.

Provider:Department of Health, administered by The Australian National University.

#### John James Indigenous Medical School Scholarship

#### \$72,000

The John James Foundation sponsors a research scholarship at the John Curtin School of Medical Research at The Australian National University in Canberra, which provides financial assistance over a four year period to the selected student.

Eligibility: Available only to Aboriginal and/or Torres Strait Islander students.

Provider: The John James Foundation, administered by the ANU Medical School.

#### Manning Clark House Indigenous Fellowship

#### \$26,000

The successful recipient will receive 12 months' rent-free accommodation at 'The Gamekeeper's Cottage', in the grounds of Manning Clark House.

Eligibility: The applicant must be Aboriginal, Torres Strait Islander or Maori, enrolled at ANU in a higher degree research or postgraduate coursework program, or affiliated with ANU and pursuing postdoctoral or externally funded research. Honours students will also be considered and able to demonstrate financial need.

Provider: National Centre for Indigenous Studies at The Australian National University

#### **ANU Medical School Travel Grants**

#### Up to \$750

Research is an integral part of post-graduate medical training at ANU, and the 'Research Projects' component of the curriculum provides an important background for this aspect of your training and future career in medicine. As a consequence of your involvement in a project, your research may be submitted for presentation to a national conference. The experience that students would receive from attending and presenting their research at a conference is substantial both from an educational perspective as well as encouraging and promoting research as a positive aspect of a career in medicine. Financial costs of attending conferences are out of the reach of the majority of medical students and as such the ANU Medical School has funding available to support attendance at national meetings.

#### **Year Three Rural Stream Scholarships**

#### Bega Cheese Scholarship

#### \$3,000

Applicants are asked to submit a 1,000-word essay addressing a current health issue affecting a rural farming community.

#### **Veolia Mulwaree Scholarship**

#### \$6,000

Available to Rural Stream students undertaking their placement in the Goulburn Mulwaree shire and surrounding areas. Applicants are asked to submit a 500-word statement describing their financial circumstances and how the scholarship will help them enhance their rural attachment.

#### **Rotary Club Batemans Bay Scholarship**

#### \$3,000

Applicants are asked to submit a 500-word statement outlining their previous experience of living in a regional area and how the scholarship will benefit their studies during their rural year.

#### **NSW Farmers Association**

#### \$500

Available to Rural Stream students with a rural background undertaking their placement in the Goulburn Mulwaree shire and surrounding areas. Applicants are asked to submit a 250-word statement outlining their previous experience living in a regional, rural or remote area, and how the scholarship would benefit their studies during the Rural Stream.

## External Scholarships available to ANU Medical School Students

#### **John Murtagh First Wave Scholarship Program**

#### Variable Value

The program allows medical students to embark on an experience of general practice that are positive and inspiring. The benefits of the general practice experience is supplemented by structured exposure to affiliated allied health services, reinforcing the growing importance of the multidisciplinary approach in patient care.

Eligibility: Students enrolled in the MChD at The Australian National University, among others.

Provider: General Practice Students Network.

#### **Indigenous Health Scholarship**

#### \$5000 per annum

This scholarship can be used to assist Indigenous students with their day-to-day expenses while they undertake a course in a wide range of health related professions. The scholarship is paid in addition to the Government Abstudy allowance.

Eligibility: Indigenous Medical students enrolled in a health program. Provider: Australian Rotary Club and the State or Commonwealth Government.

#### **Rural Medical Scholarships**

#### Variable Value

The scholarships provide an incentive for medical students to complete one year working in a rural area. It is hoped the positive experience of rural life and the fellowship of Rotarians will encourage students to practice medicine in rural Australia.

Eligibility: Indigenous Medical students enrolled in a health program. Provider: Australian Rotary Health.

#### Puggy Hunter Memorial Scholarship Scheme

#### \$60,000

PHMSS is an Australian Government initiative designed to encourage and assist Aboriginal and Torres Strait Islander undergraduate students in health-related disciplines to complete their studies and join the health workforce.

Eligibility: Applicants must identify as and be able to confirm their Aboriginal and/or Torres Strait Islander status, and enrolled or intending to enrol in an entry level or graduate entry level health related course.

Provider: The Australian Government.

#### **Bush Bursary and CWA Scholarships**

#### \$3,000

The Bush Bursaries and the County Women's Association (CWA) scholarships provide selected medical students in NSW/ACT with \$3,000 each to assist with costs associated with their studies. In return, students spend two weeks on a rural placement in country NSW during their university holidays. The placement combines the enjoyable aspects of country life and rural medicine.

Eligibility: Rural and urban students are eligible to apply.

Provider: NSW Rural Councils and the Country Women's Association of NSW, administered by the NSW Rural Doctors Network.

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Medicine at ANU 21

## We are leading researchers

Medicine and health research has high value to our society and is of strategic importance to our nation. The creation of new knowledge through research and its translation underpins improvements in the patient experience, health service delivery and the health of our nation. The research can be fundamental in nature or be applied, directly addressing clinical problems, public health issues or how health services are delivered.

The ANU Medical School is home to world-class researchers at the forefront of medical practice and discovery. Through our two postgraduate research degrees, the Master of Philosophy (MPhil) and the Doctor of Philosophy (PhD), you can join them in producing research that changes lives.

You will have access to cutting-edge research facilities and work alongside influential and innovative academics from across our campus, as well as joining our vibrant postgraduate student body.

#### **Conjoint degrees**

We offer conjoint postgraduate programs for students who want to enter the medical profession but also want to pursue their research interests.

#### MChD/MPhil

The MPhil degree is available by deferral to MChD students who perform well and successfully complete their second year of the MChD. Research plans require approval by the Dean.

#### MChD/PhD

In the conjoint MChD/PhD program, students complete their PhD program whilst undertaking the MChD. Students will be considered for the conjoint program based on their performance in the first two years of the MChD and meeting the general PhD requirements.

#### How to apply for a PhD or a MPhil

#### **Step 1: Expression of interest**

Prospective research students first need to identify a research project and find an academic supervisor. If you are not sure which area of research or supervisor matches your interest please visit the ANU Medical School's Research website medicalschool.anu.edu.au/research for further information. Questions regarding Higher Degree by Research (HDR) in the ANU Medical School can be emailed to hdr.medicalschool@

#### **Step 2: Academic supervisor**

Email your proposed academic supervisor directly to enquire about projects and supervision. You may also submit a short research proposal. Once an academic supervisor has been confirmed to support your application you may proceed to step three.

#### **Step 3: Application**

Applicants should apply online at applyonline.anu.edu.au. Further information regarding the application process can be found on the ANU website: anu.edu.au/study/apply/anupostgraduate-research-domestic-and-international-applications

#### **Step 4: Scholarships**

A number of scholarships are available and are awarded on a merit basis. You can also talk to your academic supervisor about alternative sources of funding you might access to assist with living expenses and tuition fees. Please note, international research scholarships are only awarded to the most outstanding students and are extremely competitive. Information on scholarships and the application process can be found on our website anu.edu.au/study/scholarships-fees.

"I am doing my PhD on Indigenous health, a topic that interested me in my undergraduate years. Through a scholarship at ANU I am able to continue my research and study medicine at the same time—which I didn't think was possible before."

Phillippa Dossetor, conjoint PhD/MChD student



#### OUR RESEARCH AREAS

Research is firmly embedded in the Medical School and enhances education and healthcare with direct benefits to patients and the public, now and in the future. National and international collaborations demonstrate the commitment to translating knowledge in fundamental biomedical research from bench to bedside.

Strengths in inter-disciplinary collaboration are found in:

- > Data analytics (clinical registries/administrative big data/ computational biology)
- > Control of transcription in disease
- > Health services research (translation/public policy)
- Clinical methods
- Population health
- Primary health care
- > Behavioural sciences/psychology
- Critical care
- > Aboriginal and Torres Strait Islander health and wellbeing
- > End-of-life care

#### **Aboriginal and Torres Strait Islander** studies

Studies on literacy, climate effects, cardiovascular risk as well as hearing in children are a focus of academics of the Medical School and are led by the Academic Unit of General Practice, and done in done in conjunction with Population Health and Epidemiology units.

#### Aged and chronic care

As Australia's population ages, research into aged and chronic care is paramount. We are currently researching fall prevention and aged-related diseases such as dementia and osteoporosis. Chronic disease focuses include asthma, cardiovascular disease, diabetes and cancer.

#### Cancer

Our research is addressing fundamental questions related to the causes and pathogenesis of several different types of cancer as well as exploring new drugs and treatments across a broad range of different cancers. Partnerships have been formed with pharmaceutical companies, cooperative clinical trials groups as well as national and international academic collaborators in this research. Additional topics of research include supportive care, cancer survivorship, Indigenous health, biobanking and translational research. We are also aiming to optimise patient care and improve prognosis by examining best practices in cancer management.

#### Cardiovascular and renal disease

Advanced kidney disease is associated with an increased risk of cardiovascular mortality, and dialysis patients have a higher incidence of nutrient deficiency, sleep disorder and mental health disease. Our research is directed at the interaction between kidney disease and these related disorders. We also have expertise in conducting Cochrane systematic reviews in transplantation medicine and vasculitis and research in cardiology.

#### Critical care and emergency medicine

Our research focuses on optimising the way intensive care and emergency units operate. Projects in critical care focus on pharmaceutical trials and research into mobilisation, cortisol use, enteral nutrition, and recognition and response to patient deterioration. Our research into emergency medicine is internationally recognised for exploring emergency room processing, flow and patient satisfaction, cyclist and vehicle trauma and geriatric medicine.

#### Diabetes and endocrinology

The Endocrinology and Diabetes researchers are involved in investigator-led and pharmaceutical industry-sponsored clinical research as well as in a very active basic research laboratory. We are currently conducting research into how the insulin producing cells of the pancreas either adapt to chronic nutrient overload or fail to adapt, leading to diabetes. We are particularly interested in the influence of maternal health during pregnancy on diabetes risk. We are also conducting research into possible susceptibility factors in the development of Type 1 diabetes. Other projects currently underway range from studies of placental function in obese and diabetic pregnancy through to new medications in clinical trials. There is a strong focus on research training of medical students and postgraduate research students.

#### **Immunology**

Our research effort focuses on understanding the genetic and cellular basis of autoimmunity and immune deficiency. We conduct research into understanding the genetic and cellular basis of sarcoidosis, vasculitis, and other forms of autoimmune disease. We participate in a number of clinical trials for new therapies, particularly investigating biological therapies for lupus and systemic vasculitis.

Together with the Centre for Personalised Immunology we aim to understand causes of genetic variations in patients in order to deliver treatment strategies targeted to the individual.

#### Infectious disease

Our research covers a diverse range of topics, from seeking to understand the basic biology of pathogens to the design of public health approaches to control the diseases they cause. Areas of particular interest include screening and treatment programs for sexually transmitted infections; innovative treatment of head lice in schools: the development of mathematical models of infectious disease transmission; and the emergence of antibiotic resistance in human pathogens.

#### Liver disease and gastroenterology

We are currently conducting clinical studies of non-alcoholic fatty liver disease in Type 2 diabetes, outcomes of antiviral treatment of hepatitis B and hepatitis C, as well as laboratory investigation into the mechanisms and hepatoprotective therapies for ischemiareperfusion injury in the liver, pathogenesis of non-alcoholic steatohepatitis (NASH) and liver cancer. Our gastroenterology research focuses on understanding the mechanisms underlying ulcerative colitis, irritable bowel syndrome and Crohn's disease. We are particularly interested in the interplay between gut microbes and the host immune system.

#### Medical education

Our research focuses on education assessment. Our main area of interest is how students learn, particularly within a problembased learning environment such as that applied in the MChD (Doctor of Medicine and Surgery) program. We also conduct benchmarking activities to obtain data that inform our strategies for achieving and maintaining excellence in teaching.

#### Men, women and children's health

Our men's health research focuses on prostate cancer, depression and cardiovascular disease, while research conducted into women's health is revealing the mechanisms behind breast, ovarian and cervical cancers, gestational diabetes and menopause. Our children's health research is exploring child fitness, behaviour, growth and endocrine problems, respiratory problems, music and issues in paediatric surgery. Research in babies is focussed on changes in technology, pharmacology and care that have improved the short- and long-term outcomes of neonates worldwide. Research topics are focussing on cardiac, renal and brain problems; there is also significant epidemiological expertise among academics, supporting medical students and medical trainees.

#### Neurosciences and vision

Our research is concerned with stroke management, eye movement control and the development of vision-based diagnostics for multiple sclerosis. Our core interests also include the mechanisms behind synaptic transmission, retinal degeneration and age-related macular degeneration.

#### Primary healthcare, public healthcare and health services

We lead and contribute to primary health care research and policy. Our current projects focus on obesity management in general practice, including the role of the General Practitioner in managing adult patients with obesity and the therapeutic alliance in general practice. GP Academic Registrars (Trainees) are exploring physical and mental health aspects of physical inactivity in ACT children; how comfortable doctors feel with discussing nutrition care in general practice,

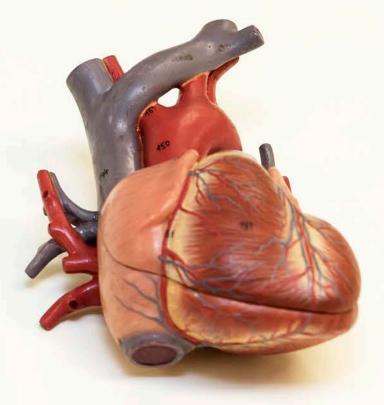
and the experiences of doctors-in-training on patient care and empathy. We contribute to population health research projects including GP management of cardiovascular disease risk assessment in ATSI communities, refugee health, exploring the geo-social determinants of overweight/obesity in rural NSW, and guidelines in chronic disease management.

#### Psychiatry and addiction medicine

Our psychiatry and addiction medicine research delves into a wide range of topics, including: perinatal mental health; childhood adversity, trauma, loss and grief; population and disaster mental health; older persons' mental health; and neuropsychiatry. We employ a range of techniques, including epidemiologic, neurobiological, e-health and qualitative approaches and our projects have a strong focus on the design, implementation and evaluation of health interventions and tools.

#### Trauma and orthopaedic surgery

Our trauma and orthopaedic research aims to improve the clinical outcomes of musculoskeletal conditions, such as repetitive stress disorder and back pain. We are currently investigating a wide range of exciting areas. These include novel imaging techniques; joint kinematics, wear dynamics, bone regeneration, and tendon and ligamentous injury; biomechanical analysis of surgical techniques; and database design and implementation.



#### CONTACT US

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