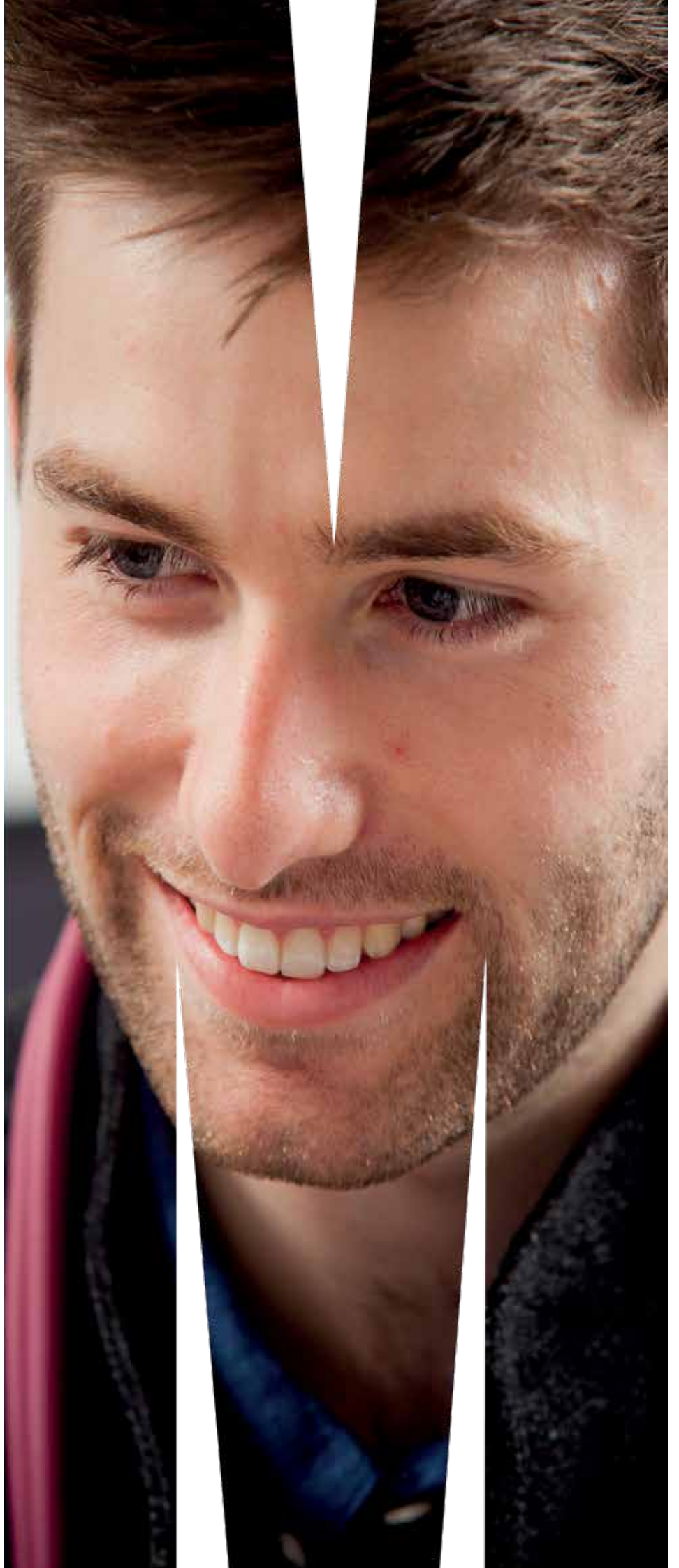


2018
BMedSc(Hons)
RESEARCH
PROJECTS

MONASH
RURAL
HEALTH

med.monash.edu.au/srh



A WORD FROM OUR DEPUTY HEAD OF SCHOOL

One in three Australians lives outside a major metropolitan centre. Hidden behind that number are two things. Most of those people wouldn't live anywhere else. But for all they value a rural or regional lifestyle, generally, they also suffer poorer health and poorer access to healthcare than their city counterparts. Depending on who you are and how far away you live, some of those outcomes can be very poor indeed.

Bridging the gap in healthcare outcomes and access is what the School of Rural Health is all about. We give medical students the opportunity to come and learn in rural and regional placements. Once they see for themselves what great places they are to live and work, many choose to come back and work after graduating. We also have a team of experienced researchers working on the challenges of health equity outside the big cities.

That's where you come in. The honours projects on offer here are all part of our wider research agenda. They cover clinical research in regional settings, educational topics and workforce issues. Working on these projects you'll be making a valuable – and valued – contribution to the progress of that agenda. As well as developing your research skills, you'll also be working with experts in their fields and will make connections with clinicians and health services right across Victoria.

These projects are based at our regional clinical school sites. After negotiation with your project supervisor you may be given the option of undertaking components of the project from Melbourne. We're offering generous support for Honours students in the form of bursaries, as well as living allowances for time spent at our sites. The researchers who are offering these projects are all passionate about their work and generous in their support of students and your development as researchers.

Do get in touch with the supervisors to talk about how we can help you take part improving rural health and your career outcomes. I hope I'll have the pleasure of seeing you involved in one of our projects next year.

Associate Professor Shane Bullock
Deputy Head, School of Rural Health
School of Rural Health Course Coordinator, BMedSc (Hons)



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INTRODUCING MONASH RURAL HEALTH

Monash Rural Health is a multi-site school within the Faculty of Medicine, Nursing and Health Sciences. The school is committed to improving rural health and developing a sustainable rural health workforce. It seeks to make a difference to rural people and their communities, locally, nationally and internationally through its commitment to excellence in education and research.

Our footprint extends across Victoria from Mildura in the west to Bairnsdale in the east. It operates through two distinct hubs: one in the Loddon Mallee Region in north-west Victoria and one in the Gippsland region in south-east Victoria.

The main focuses of the school are to:

- provide the rural/regional base for undergraduate medical education programs at Monash University
- provide support for nursing and allied health students undertaking rural/regional placements
- support pre-vocational, vocational training and continuing education for medical and health graduates
- lead and foster a program of rural health research that will improve the health status of rural/regional and Indigenous communities, and
- develop innovative interprofessional education and health service models.

How “rural” drives our research agenda

The needs of rural communities drive our school's research agenda and the honours projects on offer, including:

- distribution of doctors and where graduates decide to practice
- population health in rural and regional Australia
- health impacts of disasters on rural communities
- preparing graduates for medical practice in prescribing
- rural clinical research



Monash Rural Health has sites and partners across north-west Victoria and Gippsland

SUPPORT AND FINANCIAL ASSISTANCE

The School of Rural Health is offering all students who work on rural health research projects a \$10,000 bursary. If you're based at a regional site for the duration of the project, you are eligible for subsidised accommodation.

If you opt to undertake a component of your research project from a Melbourne base, you are eligible to apply for a living allowance to support visits to and from the principal regional or rural site.

Researchers and staff at the school frequently use Zoom web conferencing and teleconferencing for meetings. Zoom can be used on desktop or mobile devices via a free app.

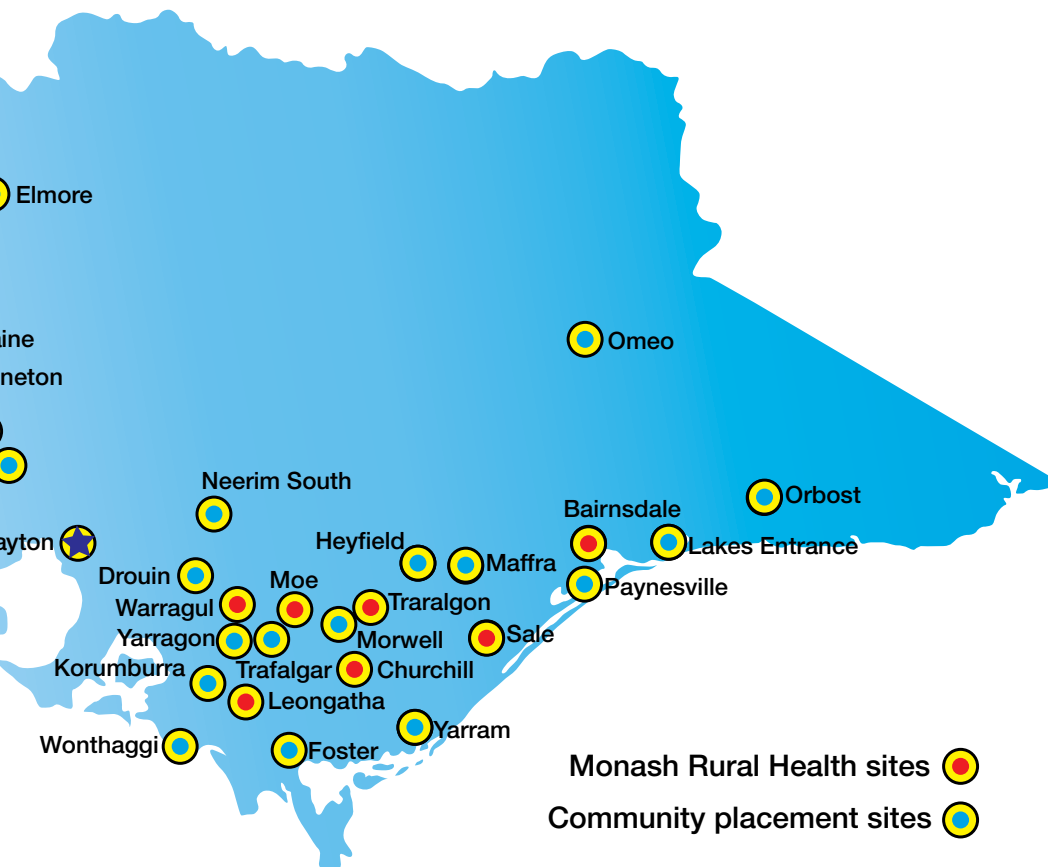
Where you can work from

All the projects offered by the School of Rural Health are based at regional or rural sites in central Victoria and Gippsland.

You can spend the academic year at that site staying in Monash subsidised accommodation. Some projects allow you to work from another rural health site or Melbourne.

If you opt to work remotely from the rural health site, you may still need to travel to the site during the course of the research for data collection or any presentations regarding your project. These times will be negotiated with your supervisor at the start of the project.

Talk to the project supervisor about how you'd like to work.



ABOUT THE SITES OFFERING HONOURS PROJECTS

Bairnsdale

Bairnsdale is one of the three sites that make up Monash Rural Health East & South Gippsland. Located 280 km east of Melbourne and with a population of about 14,000, Bairnsdale is close to Alpine national parks, the Gippsland Lakes and beautiful ocean beaches. Monash Rural Health is co-located with Bairnsdale Regional Health Service. With 84 inpatient beds, it provides acute (including emergency department), sub-acute and aged care services.

Bendigo

Bendigo is a vibrant regional city of around 100,000 people situated about 160 km north of Melbourne. The medical community in Bendigo has long hosted medical students from both Monash University and the University of Melbourne who study together at Monash Rural Health Bendigo. The clinical training site is located in the health education and research precinct along with the Bendigo Primary Care Centre and the La Trobe University Rural Health School and right at the front door of the new 372-bed Bendigo Hospital.

Churchill

Churchill is a small town in the Latrobe Valley located close to major population centres of Morwell and Traralgon. Monash Rural Health Churchill delivers Year A of the four-year graduate entry medical program. Co-located with the Gippsland campus of Federation University, Monash Rural Health Churchill offers complete library services, a sophisticated clinical skills simulation environment and close ties with practising clinicians.

Moe

The Monash UDRH (University Department of Rural Health) is located in Moe, 130 km east of Melbourne. The UDRH has a special focus on mental health, interprofessional education and workforce issues associated with rural nursing and allied health professions. Moe is located close to Warragul, Traralgon and Churchill.

Traralgon/Warragul

Warragul with a population of around 17,000 is located 100 km south-east of Melbourne, while Traralgon with around 25,000 people is a further 60 km down the highway. Monash Rural Health Latrobe Valley & West Gippsland has clinical training sites in both towns based at the regional hospitals. Both towns are located close to historic villages, the Baw Baw ski fields and beaches around Wilson Promontory.

Latrobe Regional Hospital in Traralgon is a purpose-built, 257-bed teaching hospital offering a suite of medical services. The hospital treats close to 115,000 people every year, more than a quarter of them in its emergency department. West Gippsland Healthcare Group's hospital in Warragul is an 83-bed acute facility that treats approximately 11,000 inpatients and 13,500 emergency visits each year.



Nicholas
Dewhurst
BMedSc(Hons)
2016

THE REGIONAL EXPERIENCE

Evidence based practice is the key to good patient care. For Nicholas Dewhurst part of the value of his BMedSc(Hons) lies in the skills he gained evaluating literature. "I think it will make me a better practitioner. Not all evidence is good evidence and being able to critique it is an important skill," he said. "I'm now much more aware of the common pitfalls in research."

Nicholas undertook his research project in Bendigo in 2016 working with ophthalmologist, Mr Peter Burt. He didn't know it was possible to do research at regional sites until he spent Year 3B in Bendigo. "Many specialists teach into the program here and you get to know them during the year," he said. So he planned a research project in ophthalmology.

He had ownership of the entire project starting with developing the question and methodology, obtaining ethics approval, collecting data, analysing it and writing up the results. But he wasn't on his own. "Bendigo's a tight-knit community and the support is great. I had help with statistics, IT support and all my questions were answered quickly. Rural offers many opportunities you don't get in the city."

The clinical setting was an advantage too. He learned a lot more about ophthalmology; seeing patients, testing vision and assisting in theatre. He also learned how to deal with different kinds of people. "A BMedSc is a good path for a speciality as well as research. Everyone should do this."

Nicholas's project – *A clinical comparison of contrast sensibility between a monofocal and extended range of vision intraocular lens* – compared binocular contrast sensitivity with different levels of lighting at six months postoperatively in patients implanted with extended range of vision and monofocal intraocular lenses. It's the first use of statistical analysis to account for between-eye correlation in a study of intraocular lenses.

You can see Nicholas talk about his experience at:
bit.ly/2pCAHJ1

THE PROJECTS

Improving regional clinical care

The uptake and communication of Advance Care Plans between primary health and hospital services in rural Victoria

Discussion about end-of-life choices in the public sphere has brought advance care planning (ACP) to the forefront of acute and primary health care services. While 14% of the Australian population has some form of ACP in place, this lags behind other OECD countries such as Canada where almost a third of the population have ACPs completed. The overwhelming majority of research into end of life choices and ACPs has been conducted overseas in acute care settings. The aim of this study is to improve the uptake, communication, integration and implementation of ACPs for those aged 75 years and over across primary and acute rural health services. Following ethics approval, a retrospective study of hospital and general practice ACPs will be conducted. This will be followed by an education based 'nudge' intervention for clinicians and general practice staff. It is expected that this research will result in a co-authored publication in a refereed journal. The project is offered in Bendigo (based at ICU, community care and/or Monash University). The student will work with general practice staff, physicians and ICU staff and will be provided with career mentoring by an ICU physician and GP.

Supervisors: Dr Jason Fletcher
(Director, Intensive Care, Bendigo Health)
Dr Dennis O'Connor
(GP Academic
Monash Rural Health Bendigo)

Project contacts: bernadette.ward@monash.edu or
pam.harvey@monash.edu

Project location: Bendigo

Your location: Flexible, but you will need to be in Bendigo for data collection and the intervention phase

Chronic pain management by rural Gippsland primary healthcare practitioners

The majority of chronic pain management occurs in the primary care setting. In rural areas, there are often limited professional development opportunities for health professionals and access to pain management clinics for their patients. It is important to better understand the experiences and needs of primary healthcare professionals in the Gippsland region. This project will involve a cross-sectional study, utilising a survey to ascertain the experiences, training and challenges of chronic pain management.

Supervisor: Dr Eleanor Mitchell
eleanor.mitchell@monash.edu
Ms Launea Atkinson
launea.atkinson@monash.edu

Project location: Bairnsdale

Your location: Flexible, but you will need to be in Bairnsdale for critical components of the study

Resuscitation for in-hospital cardiac arrest: analysis of outcomes in a regional hospital

This project provides an opportunity to work with ICU clinicians in the new Bendigo Hospital, researching outcomes of resuscitation for in-hospital cardiac arrest (IHCA). The proposed project is a retrospective observational cohort study, to determine the association, if any, between duration of resuscitation and functional outcome after IHCA, and whether patients are given longer resuscitation if, based on their characteristics, they have higher predicted survival after IHCA. This research will inform policy for IHCA resuscitation. It is expected that this research will result in a co-authored publication. You will also observe and participate in clinical care, and receive active support in career planning. Bendigo Health's ICU is an active member of the Australia and New Zealand Clinical Trials Group and as such there are usually between four and six multi-centre research projects undertaken on the unit at any one time.

Supervisors: Associate Professor Rebecca Kippen
rebecca.kippen@monash.edu
Dr Bernadette Ward
bernadette.ward@monash.edu
Dr Jason Fletcher
(Director, Intensive Care, Bendigo Health)

Project location: Bendigo

Your location: Bendigo

The new Bendigo Hospital

The new Bendigo Hospital opened in January 2017, the largest regional hospital development in Victoria. Bendigo Health services the Loddon Mallee region, an area of 56,965 km², with a population of around 307,405. Its catchment area reaches from Gisborne in the south to Echuca in the north, Kyabram in the north-east and Mildura in the far north-west.

With a 150-year history, Bendigo Health provides health care across the entire lifespan from pre-natal and newborn babies to the aged, their families and carers. Services are provided through more than 40 locations across an area a quarter the size of Victoria.

See: bendigohealth.org.au

The new facility features:

- 372 inpatient unit beds
- 72 same-day acute beds
- An 80-bed integrated psychiatric inpatient unit, including a parent-infant unit
- 11 operating theatres
- A regional integrated cancer centre

Optimal Care Pathways for cancer treatment in a regional setting

Victoria has adopted Optimal Care Pathways (OCPs) for diagnosis and treatment of 15 tumour types. OCPs are designed to “improve patient outcomes by facilitating consistent cancer care based on a standardised pathway of care”. They prescribe referral to a Multidisciplinary Meeting (MDM) where medical and allied health professionals develop a treatment plan. Despite this, not all cancer cases are referred to an MDM. This project provides an opportunity to work with a leading oncologist in the new Bendigo Hospital, contributing to a larger study through the Loddon Mallee Integrated Cancer Service which will:

1. investigate the characteristics (patient, cancer type, clinician, health service etc) associated with referral, or not, to an MDM, pre-intervention
2. implement a behavioural “nudge” intervention to increase referral rates to MDMs. This will involve notifying clinicians of their referral rates compared to those of their peers, and the OCP recommendations, and
3. assess the effectiveness of the intervention, and its suitability to implement state-wide.

It is expected that this research will result in a co-authored publication. You will also observe and participate in clinical care, and receive active support in career planning.

Supervisors: Associate Professor Rebecca Kippen
rebecca.kippen@monash.edu
Dr Bernadette Ward
bernadette.ward@monash.edu
Dr Sam Harris
(Medical Oncologist, Bendigo Health)

Project location: Bendigo
Your location: Bendigo

The effect of shift change on serial examination in assessment of the surgical abdomen

Abdominal pain is a common presentation but challenging to diagnose. While most presentations are benign, some are severe or life-threatening and require surgery. Therefore thorough assessment is essential. We hypothesise that serial clinical assessment of a patient is more informative, and more likely to be performed, when performed by the same clinician. Following ethics approval this project will include tracking of acute surgical patients within their first 24 hours of admission and counting the number (and outcome) of clinical assessments by surgical registrar/s and/or consultant/s. It is expected that this research will result in a co-authored publication in a refereed journal. The project is offered in Bendigo (based at Bendigo Health surgical unit). Students can be based in Melbourne but will need to be in Bendigo for data collection. The number of contact hours and attendance in Bendigo will be negotiated. The student will work with clinical staff and will be provided with career mentoring by a surgeon. For students who are interested in surgery, this is an excellent opportunity to gain ‘hands on’ surgical research experience and build networks in the surgical community.

Supervisors: Dr Cris Cuthbertson
(General surgeon, Bendigo Health)
Associate Professor Rebecca Kippen
Dr Bernadette Ward
bernadette.ward@monash.edu

Project location: Bendigo
Your location: Flexible, but you will need to be in Bendigo for data collection

Additional surgical projects are available at Bendigo and can be negotiated individually.

Introducing your supervisors

Dr Cris Cuthbertson

Dr Cuthbertson is a general surgeon at Bendigo Health with training in endocrine and advanced laparoscopic surgery. She has a PhD in surgery – Hyperbaric oxygen affects survival in severe acute pancreatitis – and is passionate about surgical education, evidence based surgery and the need for surgeons to have broad surgical skills. Dr Cuthbertson spent over two years as a volunteer general surgeon at a Nepali hospital treating those with extreme poverty. Here, she also ran the surgical education program catering to surgical trainees and GP registrars.



Dr Jason Fletcher

Dr Fletcher graduated from Monash in 1995. He worked as ICU registrar at The Alfred Hospital for three years before joining Bendigo Health in 2006. Dr Fletcher is an intensivist in Bendigo Health's Intensive Care Unit, supervisor of advanced intensive care unit training and head of ICU research. He is also a medical representative on Bendigo Health's Medical Advisory Committee, Quality Council and board meetings.



Dr Sam Harris

Dr Harris is a graduate of the University of Adelaide and has wide-ranging general medical, oncological and palliative care experience. He has advanced training in Medical Oncology, and recently undertook a fellowship at the Royal Marsden Hospital in London working in the Sarcoma Unit and the Drug Development Unit. He is consultant Medical Oncologist and Medical Oncology Research Lead at the Bendigo Cancer Centre (a partnership between Bendigo Health and the Peter MacCallum Cancer Institute).



Pam Harvey

Ms Pam Harvey graduated as a physiotherapist in 1987, and has a Master of Education (Research). She is currently a part-time creative PhD candidate at the University of Canberra investigating how ill adolescents' voices are represented in young adult fiction. Ms Harvey works at Monash Rural Health Bendigo as a lecturer, medical educational researcher and program developer; and produces resources for clinical educators that are available through the Monash website. She is the simulated patient program coordinator for the Monash Rural Health Bendigo, recruiting and training simulated patients for other local health services as well.



Associate Professor Rebecca Kippen

Dr Kippen is Associate Professor of Demography at Monash Rural Health based in Bendigo. She completed a PhD in Demography at the Australian National University and has held research and teaching positions at the Australian National University. Dr Kippen was also an Australian Research Council Future Fellow at the School of Population Health, University of Melbourne, 2010-2014. Dr Kippen lectures in community healthcare planning and evidence-based clinical practice, and her research interests include health and mortality in regional Australia.



Dr Eleanor Mitchell

Dr Mitchell is a lecturer based at Monash Rural Health Bairnsdale, involved in several education and community-based research programs, working with academics and health professionals in East Gippsland. Dr Mitchell completed a PhD in developmental urogenital research with and has a Graduate Certificate in Health Promotion and a Bachelor of Biomedical Science (Honours) focussing on the effects of twin births on kidney development. She worked at the Royal Victorian Eye and Ear hospital with the University of Melbourne Department of Ophthalmology and the Centre for Eye Research Australia on grant writing, internal benchmarking and reviews and facilitating clinicians to undertake research.



Dr Dennis O'Connor

Dr O'Connor graduated from the University of Melbourne in 1982. He joined a local Bendigo general practice clinic in 1986 and practised there for 25 years. He now practises at the Bendigo Primary Care Centre. As well as pursuing interests in obstetrics and musculoskeletal medicine, Dr O'Connor has been active in teaching. He is the Year 4C Academic Lead at Monash Rural Health Bendigo and lectures to pharmacy and dentistry students at La Trobe University.



Dr Bernadette Ward

Dr Ward is a Senior Research Fellow with Monash Rural Health. She has extensive experience in quantitative and qualitative research in relation to health systems, service access in rural and remote areas, medical education, and alcohol and young people. Dr Ward was awarded an NHMRC scholarship to undertake her PhD. She has extensive teaching experience and is a Fellow of the Victorian Public Health Training Scheme. Her recent funded consultancies are from the Australian Primary Health Care Research Institute Partners in Recovery Program, VicHealth and the Foundation for Alcohol Research and Education. Her community service includes a role as a Director on a local health service board. Dr Ward's interest in rural and remote health stems from many years of primary health practice in remote Australia.



Training doctors

Impact of medical school community engagement on the career aspirations of rural children

It's widely recognised that health professionals with a rural or regional background are more likely to choose to practise in rural or regional areas. Encouraging children to consider a health professions career from a young age is an important factor in addressing health workforce shortages outside major metropolitan cities. This study aims to understand what impact community engagement by staff and students from rural medical schools has on the career aspirations of rural children. It will look at a range of community engagement activities across a range of children's ages (primary and secondary) to examine what influences these engagement activities have had on the career aspirations of rural children. You will have the opportunity to lead a peer-reviewed publication.

Supervisors: Dr Eleanor Mitchell
eleanor.mitchell@monash.edu
Ms Laurea Atkinson
laurea.atkinson@monash.edu
Ms Jennie Casey
jennie.casey@monash.edu

Project location: Bairnsdale

Your location: Flexible, but you will need to be in Bairnsdale for critical components of the study

Medicine and the arts: Ways of envisioning a new perspective on health

How can we enable medical students to envision differently? This project will explore, through pre- and post-qualitative survey questions, an art immersion experience where various important art works are surveyed with the view to assessing if students 'see' differently after studying works of art. Research from Yale University demonstrates that medical students enhanced their observational skills when art was used in their teaching (Dolev, 2001). Indeed, several parallels between art and medicine emerged from a study by Shapiro, Rucker and Beck (2006: 268) of medical students, "including the importance of learning how to read gesture and expression, how to interpret context, how to determine what is symbolically as well as literally important, how to be sceptical about initial assumptions, and finally, how to empathically perceive emotional dimensions and narrative". This project will look at how art might be used to enhance student learning, perception and understanding. The art immersion and evaluation experience will be voluntary, with students viewing various paintings either on line or in an art gallery.

Supervisors: Dr Margaret Simmons
margaret.simmons@monash.edu
Ms Pam Harvey
pam.harvey@monash.edu

Project location: Churchill

Your location: Flexible, but you will need to attend at Churchill on an ad hoc basis

Triple Zero Heroes: Training children to deal with medical emergencies - stakeholder perspectives

What happens in a medical emergency when only a child is present to respond? This project is a collaboration with Ambulance Victoria and involves Year 4C medical students training primary school children to initiate appropriate action as first responders in a medical emergency. Developed by Ambulance Victoria, the program involves school students recognising an emergency as such and initiating standard first steps such as calling and providing information to emergency services. It's the first in a suite of projects intended to support medical students to deliver programs aimed at supporting school children to provide appropriate first response management in the case that they encounter a medical emergency. The programs extend from early primary through to secondary school and are designed to develop children's knowledge and repertoire of skills in a framework that acknowledges and uses and extends their cognitive and social-affective skills. Ambulance Victoria is partnering with Monash Rural Health to deliver the program to children in regional, rural and remote areas in a recognised health promotion initiative. The research project looks at the program from two perspectives:

- measures of knowledge and skill acquisition and retention by the primary school children, and
- perspectives on developing communication skills with young children on the part of the medical students.

You will have the opportunity to develop research skills, engage with rural communities, and help to evaluate educational resources that should, in part, help medical students to refine their communication skills.

Supervisors: Dr Cathy Haigh
cathy.haigh@monash.edu
Dr Matthew Carroll
matthew.carroll@monash.edu

Project location: Traralgon or Warragul

Your location: Flexible, but you will need to visit some regional and rural schools in Gippsland for data collection

Heart in Your Hands: simulation development and evaluation

The gap between the basic biomedical science of heart function and dysfunction and its clinical application can be experienced by medical, nursing and allied health students. This project will develop and evaluate a web-based simulation to help students bridge that gap.

Supervisors: Dr Marianne Tare
marianne.tare@monash.edu
Associate Professor Shane Bullock
shane.bullock@monash.edu

Project location: Churchill

Your location: Flexible



Latrobe Regional Hospital redevelopment

Latrobe Regional Hospital is purpose-built, 289-bed teaching hospital caring for a population of more than 260,000 people. Based in Traralgon, it is Gippsland's specialist referral and trauma centre and with more than 1,900 staff, one of the region's largest employers. The hospital is currently undergoing a \$73 million redevelopment to be completed in later 2017, which will double the capacity of the emergency department and add a new 30-bed ward, day rooms for endoscopy procedures, a cardiac catheterisation laboratory and a new 12-bed short stay unit. See: lrh.com.au

Photo courtesy Latrobe Regional Hospital

Medical students' exposures in General Practice Education and Training (MEGPET)

The eLogbook will be familiar to students who have done Year 4C in Gippsland. Completing an eLogbook record of 50 consecutive patient encounters is a hurdle task for the general practice component of that year, while a presentation on experiences in general practice, reflecting on patient demographics, and the link between this and the national burden of disease is a summative assignment. MEGPET has already collected a dataset of over 25,000 consultations and the process of applying for ethics approval to use it for research purposes has already begun. You would be part of a group already working on this project and your project could be based around one of a number of potential areas:

- analysing the dataset already collected
- improving the eLogbook interface (you would need IT/programming skills)
- an adjunct research project (qualitative or quantitative) to the MEGPET project

Supervisors: Dr Cathy Haigh
 cathy.haigh@monash.edu
 Dr Bradley Frew
 bradley.frew@monash.edu

Project location: Traralgon or Warragul
 Your location: Traralgon or Warragul

Stories of Illness: Through a Poetic Lens

Our lives are constructed in narrative and the illness narrative in particular, forms an important part of that story. This project will, through qualitative interviews and online survey questions explore how people with an illness story construct their narrative. It will explore whether these narrators adopt or resist the various narratives that are available to them or whether they create new counter-narratives. The stories will then be transformed into poems to help us better understand the illness experience.

This project will allow you to think about health and illness through a different lens; a lens that may be more symbolic and less clinical; and a lens that highlights the humanity of medicine. You will gain experience in qualitative research and online survey methods to gather data; begin to understand the usefulness of alternative methodologies; engage with the pragmatic side of research including obtaining ethics approval, analysing data, writing up and presenting findings.

Supervisors: Dr Margaret Simmons
 margaret.simmons@monash.edu
 Ms Pam Harvey
 pam.harvey@monash.edu

Project location: Churchill
 Your location: Flexible, but you will need to attend at Churchill on an ad hoc basis

Introducing your supervisors

Dr Matthew Carroll

Dr Matthew Carroll is a Senior Research Fellow with Monash Rural Health, based at Monash Rural Health Churchill. He is also involved with the Hazelwood Health Study as co-leader of the Older People and Psychology streams. The Hazelwood Health Study is about identifying potential health outcomes for people who were exposed to smoke from the mine fire in 2014. His main research interests are in health ageing, lifelong learning, social isolation and older people, aged and community care, sleep and ageing, and older people and climate change.



Dr Cathy Haigh

Dr Haigh is Acting Director and Year 4C Academic Coordinator at Monash Rural Health Latrobe Valley & West Gippsland. Educated at Dublin University, Trinity College and the University of Strathclyde, Glasgow, Dr Haigh worked at Strathclyde University and in King's College London, before coming to Monash University. She joined the School of Rural Health in July 2008. Dr Haigh teaches into the Health Enhancement unit in Year 3B and Medicine of the Mind in Year 4C. She coordinates Patient Safety teaching (MED5102) for Year 5D at Traralgon. She is a member of Latrobe Regional Hospital's Human Research Ethics Committee, and an Australian Research Council (ARC) Grant Assessor.



Dr Margaret Simmons

Dr Simmons is the Deputy Director at Monash Rural Health Churchill. She teaches first year graduate entry medical students a social perspective on health, and coordinates the Community Based Practice Program which aims to equip students with an interprofessional understanding of the social and community aspects of health. Her PhD used poetic representation to tell the stories of Gippsland women evacuated as children in WWII Britain who later emigrated to Australia. Dr Simmons's qualitative research interests focus on narrative analysis, gender issues, stories of illness, ageing and notions of home and migration, and pedagogies of practice in medical education. She has also taught qualitative social research methods, gender, sexuality and identity and other sociological concepts. She has also been a Language and Learning Skills adviser.



Dr Marianne Tare

Dr Tare lectures in physiology and is the assessment coordinator for the graduate entry medical program based at Churchill. Her research focusses on the mechanisms that regulate the function of resistance arteries in health and disease. She also has a keen interest in the developmental origins of health and disease. In collaboration with colleagues in Australia and overseas, she is investigating the mechanisms responsible for vascular dysfunction in models of early life insult ranging from nutritional deficiencies through to substance abuse. She supervises honours and PhD students. Dr Tare is the president of the Australian and New Zealand Microcirculation Society and member of the International Liaison Committee for Microcirculation.



Enhancing therapeutics

Applied pharmacology in the first clinical medicine year: Gaps, gains and goals

Australian medical students and graduates have indicated that the preparation for their prescribing roles based on their pharmacology and therapeutics education during their medical course is inadequate. Their experience in their preclinical years is well structured and satisfactory, but does not articulate well with their experiences, or is forgotten, during the clinical years. Learning in pharmacology and therapeutics in the clinical years is perceived to be happenstance and unstructured. This project will explore the teaching of pharmacology and the opportunities for application during their first clinical year, Year 3B, in the Monash medical course. The research question is what are the strengths and gaps in pharmacology teaching and learning in this year of the course? The student will analyse student and staff perceptions of the pharmacology curriculum and student experiences using both quantitative and qualitative research methodologies. The results will inform how pharmacology learning in this year of the course could be enhanced.

Supervisors: Ms Anne Leversha
anne.leversha@monash.edu
Associate Professor Shane Bullock
shane.bullock@monash.edu

Project location: Churchill
Your location: Flexible, but you will need to be in Gippsland for some data collection

Deprescribing in the elderly

What is the impact of deprescribing on elderly patients' health related outcomes? This retrospective audit will examine the impact of drug withdrawals or deprescribing of certain medications on patients' health outcomes in aged care facilities. The project will involve an audit of five aged care facilities in the Gippsland region.

Supervisors: Dr Hanan Khalil
hanan.khalil@monash.edu
Associate Professor Shane Bullock
shane.bullock@monash.edu

Project location: Moe
Your location: Flexible, but you will need to be in Moe for up to six weeks for data collection

Introducing your supervisors

Associate Professor Shane Bullock

Associate Professor Bullock is the director of Monash Rural Health Churchill, which delivers the first year of the Monash graduate entry medical course. He completed a PhD in pharmacology at Monash University in 1988 looking at brain lateralisation. He has a track record of published journal articles in the area of pharmacology education of health professionals. He has co-authored textbooks in pharmacology and pathophysiology for health professionals. Other current research interests focus on medical education, in the areas of evaluation, assessment and student selection.



Dr Hanan Khalil

Dr Khalil is the lead pharmacist, in collaboration with the University of Melbourne, in the design and delivery of a rural pharmacy program in the Gippsland region. She provides advisory, mentoring and developmental support to pharmacy students and pharmacists practising in rural areas. An experienced pharmacy practitioner, researcher and educator she has worked in hospital and community pharmacy in metropolitan and rural areas of Victoria and South Australia. Her focus is on improving the quality use of medicines in the wider community, across the health care continuum. Dr Khalil is also the Editor in Chief of the International Journal of Evidence-based Health Care.



Anne Leversha

Ms Leversha is a Senior Lecturer in the Faculties of Medicine, Nursing and Health Sciences, and Pharmacy and Pharmaceutical Sciences (FPPS), and a practising clinical pharmacist. She developed a curriculum for medical students focussing on applied pharmacology and therapeutics, and safe prescribing. At the FPPS, Ms Leversha teaches therapeutics and is a clinical educator in the Professional Experience Program. A former Director of Pharmacy, she is a Fellow of the Society of Hospital Pharmacists of Australia (SHPA) where she was the Rural Advisor for 18 years. She was a member of the Victorian Medicines Advisory Committee, has been on a number of committees and reference groups associated with health, medication safety, rural practice, clinical placements and pharmacy and medical education. She has been a member of the consortium which developed a clinical educator preparation program, and was on the committee which produced the latest SHPA Standards of Practice for Clinical Pharmacy Services.



Attracting doctors to rural communities

The Community Apgar Questionnaire: Adapting, validating and testing its use for recruitment and retention of GPs in Australian rural communities

Australia is in a critical period of rural workforce policy reform aimed at fostering improved GP workforce distribution and accessibility, and more equitable health outcomes for rural Australians. A key evidence gap is how to support smaller rural communities seeking either an increased or more stable GP workforce. There has been limited research identifying, quantifying and modifying community and professional attributes that impact on GP recruitment and retention.

This project, with ethics approved, will adapt the Community Apgar Questionnaire, an existing tool from Boise University, USA, to identify community strengths and challenges for GP recruitment in Australia, across 5 domains. You will work with a leading team of rural health workforce researchers, undertaking a literature review, structured interviews with general practice managers, CEOs of rural hospitals in small and medium sized communities, and with GPs working in both private practice and in hospital settings, quantitative analysis and submission of a peer-review presentation and publication. The results, presented to hospital executives, GPs and practice managers, will inform targeted GP recruitment and retention strategies.

This project can be conducted from a flexible location, with some time spent in Bendigo and Gippsland for data collection. The project will link you with international researcher and physician, Dr Dave Schmitz (Chair of Family and Community Medicine at University of North Dakota USA) and Prof Ed Baker (Director of Centre for Health Policy, Boise State University, USA) and involve collaborating with Dr Terry, Research Fellow at the University of Melbourne.

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Project location: Bendigo, Churchill, Shepparton
Your location: Flexible, but you will need to spend time in Bendigo and Gippsland for data collection

The Community Apgar Questionnaire: Adapting, validating and testing its use for recruitment and retention of medical specialists in Australian rural communities

Sufficient physicians, surgeons and other relevant specialists are needed to support healthcare in regional centres. However there has been limited research identifying, quantifying and modifying community and professional attributes that impact on their recruitment and retention in public and private sectors.

This project, with ethics approved, will adapt the Community Apgar Questionnaire, an existing tool from Boise University, USA, to identify community strengths and challenges for specialist recruitment in Australia across 5 domains. You will work with a leading team of rural health workforce researchers, undertaking a literature review, structured interviews with hospital CEOs, directors of clinical services, specialist practice managers and public and private specialists, quantitative analysis and submission of a peer-review presentation and publication. The results, presented to hospital executives, will inform specialist medical workforce recruitment and retention strategies. This project can be conducted from a flexible location, with some time spent in Bendigo and Gippsland for data collection. The project will link you with international researcher and physician, Dr Dave Schmitz (Chair of Family and Community Medicine at University of North Dakota USA) and Prof Ed Baker (Director of Centre for Health Policy, Boise State University, USA) and involve collaborating with Dr Terry, Research Fellow at the University of Melbourne.

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Project location: Bendigo, Churchill, Shepparton
Your location: Flexible, but you will need to spend time in Bendigo and Gippsland for data collection

Foreign graduates of Australian medical schools: Their characteristics and career pathways

Foreign Graduates of Accredited Medical Schools (FGAMS) constitute around 15% of graduates from local medical schools, around 70% of whom enter the Australian medical workforce. Despite their number, they are a relatively under-researched group. Little is known about their career pathways within the Australian health system, including, for example, the extent to which they specialise and where they practice (rural or metropolitan).

This project, with ethics approved, will employ quantitative analysis of data already collected in the MABEL survey (mabel.org.au) to compare FGAMS (practising in Australia) and local graduates as to their choice of specialty, location of work, the nature of their work and their satisfaction levels.

You will work with a leading team of rural health workforce researchers, undertaking a literature review and extensively coding and analysing data from a large dataset. The project will result in the submission of a peer-review presentation and publication.

The results – presented at the MABEL Research Forum to the AMA, Rural Doctors Association of Australia and the Commonwealth's Health Workforce Division – will inform current policy decisions about reducing reliance on medical workforce migration.

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Project location: Bendigo, Churchill
Your location: Flexible, but you will need to spend time in Bendigo and Gippsland data collection

Medical specialists: The professional challenges and advantages of working in regional locations

The availability of (non-GP) specialists in regional centres is critical to support rural population health and provide professional support for regional and rural GPs. Regionally-located specialists reduce the need for long distance travel by patients to metropolitan centres, which can be a significant burden to low mobility patients and when regular follow-up care is required. Specialists, however, are under-represented in rural Australia, with 15% of specialists working rurally where over 30% of Australians live. This study aims to explore the perceptions of regionally-based specialists of the professional advantages and challenges of working in regional centres, compared with metropolitan practice. Despite existing research showing regional specialists are very satisfied overall and have equivalent satisfaction of variety of work compared to metropolitan specialists, recruiting a sufficient regional specialist workforce remains problematic. Notably, the relative importance of professional factors, both positive and negative, associated with work in regional areas compared with work in metropolitan areas is poorly understood.

This qualitative research project comprises recruitment of regional specialists through regional health service networks, face-to-face individual semi-structured interviews which will be recorded and transcribed, thematically coded, analysed and written up in a narrative format. You will receive support from researchers with strong expertise in regional specialist workforce and qualitative methods. Ethics will be obtained in 2017, ready for the project to commence in January 2018.

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Your location: Flexible, but you will need to spend time in Bendigo and Gippsland for data collection

What is the MABEL study?

Medicine in Australia: Balance Employment and Life



Members of the MABEL research team

The decisions made by doctors on how many hours to work, where to work in terms of sector, location and specialty, and when to stop work temporarily or permanently, all have profound effects on the health system. This includes effects on access to health care, the capacity of the health care system to reduce burden of disease and to meet demand, and the quality of care provided to patients.

Doctors' labour supply decisions are influenced by a complex mix of doctors' own preferences over work, leisure, family and lifestyle, the economic and non-economic incentives embedded in the way the health system is financed and organised, the culture of medical practice, and longer term trends in demand, demographic change, and the composition of the medical workforce.

Australia's national longitudinal survey of doctors, MABEL, aims to better understand the role and interplay of these factors through the analysis of the dynamics of the medical labour market in Australia. An integral part of the Centre for Research Excellence in Medical Workforce Dynamics, it is funded from 2012 to 2017 by the National Health and Medical Research Council (NHMRC). See: mabel.org.au

Introducing your supervisors

Dr Matthew McGrail

Dr McGrail leads workforce research at Monash Rural Health. He is a nationally recognised research leader in the field of rural health, particularly in rural medical workforce supply and distribution and health services policy, and development of methodologies relating measures of access to health care (for which he completed his PhD in 2008). As Chief Investigator of the Centre for Research Excellence in Medical Workforce Dynamics, which conducts the MABEL study, he leads the rural workforce supply, distribution and mobility research theme. He was also Chief Investigator of the recently completed Centre of Research Excellence in Rural and Remote Primary Health Care program, where he led research of improved measures of healthcare access, notably producing the national Index of Access. Dr McGrail was a co-developer, with Emeritus Professor John Humphreys, of the Modified Monash Model which was adopted in 2015 by the federal Department of Health to underpin many of their rural health workforce incentives and policies.



Dr Deborah Russell

Dr Russell has been a Research Fellow at the Monash Rural Health since December 2008. With a background of 10 years as a general practitioner, predominantly in the private sector in Bendigo, she is well placed to understand the dynamics of the rural health workforce. She completed a Master's of Clinical Epidemiology in 2011 and a PhD in 2014. Deborah's thesis – The patterns, determinants and measurement of rural and remote primary health care workforce turnover and retention – has provided important new empirical evidence to guide rural health workforce retention policies. She is a member of the MABEL research team and has worked at developing and enhancing practical research skills at the Monash Rural Health.



Dr Belinda O'Sullivan

Originally trained as a physiotherapist, Dr O'Sullivan has over ten years' experience in health workforce training and development, program development and evaluation. She is a graduate of the NSW Public Health Officer Training Program at NSW Health. Dr O'Sullivan undertook her PhD with the MABEL survey, systematically describing rural outreach by specialist doctors in Australia to inform the use of rural outreach as a health system strategy. She remains an active member of the MABEL research team and is located at Monash Rural Health Bendigo. Her main research interest is improving population health in rural and remote areas, particularly through developing the rural health workforce.



Further information

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