

2023 Research Report

Contributing to the growth of medical research

Research at a glance

July 2022 - June 2023

Research projects managed



Active interventional trials*



Undertaken at St Vincent's Hospital Melbourne

Number of

PhD students 142

Other higher degree research 24



Research grants received*

\$203,006,400.66

Active research income \$82,602,637.83

*Providers include National Health and Medical Research Council, Australian Research Council, St Vincent's Hospital Melbourne, St Vincent's Research Endowment Fund, universities, and other sources.

Publications 23 **Book chapters** 955 Number of journal articles

Message from the **Chief Executive**

I am proud to present the 2023 St Vincent's Hospital Melbourne Research Report, celebrating the pioneering work of our exceptional research teams.

St Vincent's is widely recognised as a leader in research excellence, and as a tertiary academic health service we support and encourage the development of our clinician researchers as future innovators in healthcare

We have a strong research pedigree and an active program of work, including multiple world-first studies and clinical trials being led from our Fitzroy precinct. As a result,

St Vincent's plays a significant role in contributing to Victoria's medical research capability.

At St Vincent's, we foster deep connections between our hospital and its clinicians, scientists, engineers, academia, research institutes and industry to develop projects that will transform the healthcare of tomorrow. Our commitment to medical innovation is reinforced as a founding partner in the Aikenhead Centre for Medical Discovery (ACMD). We are proud to have this world-leading biomedical

engineering research facility form part of our hospital's footprint.

Message from the **Director of Research**

Welcome to the 2023 Research Report from St Vincent's Hospital Melbourne. This report shares individual research stories and highlights the motivation of our dedicated clinician researchers. It also demonstrates the research-rich environment across our St Vincent's precinct, with over 950 publications across all disciplines and clinical areas. St Vincent's is renowned for its excellent care, and behind every

treatment advance and innovation sits a dedicated research team that has taken an idea from bench to bedside and translated it into clinical care. As our health system is further stretched, it has never been more critical that we grow and accelerate our research in clinical domains including drugs, devices, digital solutions, diagnostics and health service delivery models. At St Vincent's, we are committed to advancing healthcare for our

Its unique position will see the ACMD and St Vincent's play a key part in the Victorian Government's 10-year plan for Melbourne's new biomedical precinct.

My heartfelt thanks and congratulations to our researchers for their countless hours of work over the past year. Your dedication to investigating some of our most complex health challenges will ultimately improve the lives of our patients and the wider community. I hope you enjoy this collection of inspiring work in our 2023

Research Report.

Nicole Tweddle

community. By investing in the health of our community and the careers of our dedicated clinician researchers and research staff, we will continue to make significant life-changing advances in healthcare and healthcare delivery.

I am proud to present to you the 2023 St Vincent's Hospital Melbourne Research Report.

Dr Megan Robertson

Faecal transplant to treat Crohn's Disease

The MIcrobial Restoration in Inflammatory Bowel Diseases (MIRO) study is investigating a potential treatment for Crohn's disease.

The MIRO study examines whether Faecal Microbiome Transplant (FMT) can ease gut inflammation by replacing unhealthy bacteria with healthy ones.

"The faeces from a healthy person is transplanted into a patient with Crohn's disease to re-establish a healthy, well-balanced community of gut bacteria. If proven effective, this would allow patients to live free of pain, altered bowel function and other debilitating Crohn's disease symptoms. It would be an alternative to immune-suppressive therapies that are not always effective, and bring with them their own side effects," said Project Lead, Dr Sasha Fehily, a Gastroenterologist at St Vincent's Hospital Melbourne (SVHM).

Patients participating in the MIRO study receive gold-star exceptional care from a multidisciplinary team led by the Kamm Research Group, based at St Vincent's Fitzroy campus.

This research group conducts studies that focus on gut disorders, and includes a multidisciplinary team of gastroenterologists, dieticians, clinical scientists and microbiologists.

"Crohn's disease is normally treated using immune-suppressing therapies. These bring less than half of all patients into remission and carry their own risks. The MIRO use of FMT is a paradigm shift that targets the gut bugs that cause Crohn's disease.

We love using a natural therapy. Early results are very promising," said Professor Michael Kamm, SVHM Gastroenterologist and Group Leader of the Kamm Research Group.

The study is led by SVHM, in partnership with the University of Melbourne and Adelaide's Queen Elizabeth Hospital.

Current gastroenterology projects

- 18 sponsored hepatitis studies
- 25 investigator-initiated hepatitis studies
- 14 sponsored IBD studies
- 18 investigator-initiated **IBD** studies
- 12 endoscopy studies

At the forefront of psychedelic-assisted psychotherapy

St Vincent's Hospital Melbourne (SVHM) researchers, led by psychologist, Dr Margaret Ross, and psychiatrist, Dr Justin Dwyer, are pioneering a clinical trial into psychedelic-assisted psychotherapy.

The trial aims to examine the use of psilocybin in combination with psychotherapy, as a potential treatment for depression and death-related anxiety often afflicting terminally ill patients.

The trial was an Australian first, and, more notably, a global first, as it includes patients with various terminal illnesses diverging from previous studies that predominantly focused on cancer patients.

Dr Ross, Lead Therapist and Chief Principal Investigator, described the trial as one of the most exciting

developments in psychiatric research in recent decades.

"There are very few treatments available for people experiencing distress around dying, so it is a privilege to lead research that could help some of our most vulnerable patients," said Dr Ross.

"We hope it can alleviate fear and distress for people approaching endof-life, with the psilocybin amplifying the psychotherapy experience and helping therapy work better." Dr Ross said findings from overseas

Above, front: Dr Chamara Basnayake, Dr Sasha Fehily, Prof Michael Kamm, Dr Gina Trakman, Erin Russell; (back): Annalise Stanley, A/Prof Emily Wright, Dr Amy Wilson-O'Brien, Dr Amy Hamilton







trials and the experiences of trial participants suggest the benefits of psychedelic-assisted therapy can be significant when delivered correctly in clinical settings.

"From the outset, we knew we were doing something different and pretty special, but what we've seen has surpassed all of our expectations.

"It's too early to give details about the trial's results, which we expect to be published in 2024, but from a clinical perspective, we've seen really meaningful change happen," said Dr Ross.

First Nations diabetes research

St Vincent's Hospital Melbourne (SVHM) is part of a pivotal national research project involving 17 sites aiming to improve health outcomes for Indigenous Australians living with Type 2 diabetes.

This population is highly dependent on injectable treatments such as insulin and are five times more likley to be admitted to hospital with diabetes complications, including cardiovascular and renal disease.

The Flash Glucose Monitor (GM) randomised-controlled trial explores the use of a simple button-shaped

monitoring device in making glucose testing easier and more accessible for this high-risk group.

Professor David O'Neal, a Senior Endocrinologist at SVHM, and one of the study's Chief Investigators, emphasised the need for more comprehensive blood glucose information to improve health

outcomes. Additionally, both patients and their healthcare professionals, need insights into behavioural patterns that could negatively affect glucose levels. "By doing this, interventions can be implemented in a timelier manner," said Prof O'Neal.

"What we hope to gain from this research is to demonstrate that those using the devices will be more proactive in addressing those aspects of their day-to-day lives that may be having adverse effects on their glucose levels. Hopefully the information provided by these devices will enable them to bring their glucose levels into a healthy range," said Prof O'Neal

SVHM is a key contributor in shaping the study protocols, actively engaging members of the Indigenous community in the project's design and implementation, as well as reviewing the study conduct.

The study is led by Professor Elif Ekinci, Director of the Australian Centre for Accelerating Diabetes Innovations at the University of Melbourne.

Left: Prof David O'Neal



Exploring a novel way to pinpoint tumours

St Vincent's Hospital Melbourne (SVHM) is involved in a world-first study exploring the use of a fluorescent imaging agent aiming to provide surgeons with better visibility of tumours.

As part of the Vergent Bioscience study, the novel agent being assessed is injected intravenously into a patient with lung cancer at least four hours before undergoing minimally invasive or robotic-assisted surgery.

The aim is for the agent to bind to a protein found in high levels in and around cancer cells and fluoresce

under near-infrared light projected from a robotic or laparoscopic endocope. It is hoped to help surgeons detect hard-to-see tumours in real time and ultimately improve patients' health outcomes.

SVHM was the lead site for the study's Phase 2 trials that have explored the safety, dosing and efficacy of VGT-309 in patients undergoing lung cancer surgery. "The system aims to highlight areas for removal in fluorescent green and will potentially help to increase the surgeon's accuracy," said Associate Professor Gavin Wright, a thoracic surgeon and Director of Surgical Oncology at SVHM, and the study's Principal Investigator.

"In addition, it may help reduce the time required to find a tumour, and, potentially, reduce the need for



subsequent operations. This really is a trial of personalised precision surgery." The results from the Phase 2 trials

were presented by A/Prof Wright at the World Conference of Lung Cancer, in Singapore, in September 2023.

"The research was acknowledged as practice-changing, which is what every research team hopes their work will be," said A/Prof Wright,

"Unexpectedly, we found the agent highlight cancers from other organs during some surgeries, including bowel and breast cancers, in addition to the lung cancer we were seeking to identify. We hope to explore this further."

With the National Lung Cancer Screening program to commence in Australia in 2025, A/Prof Wright highlighted the project as very timely research.

Diet therapy program targets IBD

The study results of this collaborative research project between St Vincent's Hospital Melbourne's Nutrition and Dietetics Department, the University of Melbourne, and the Kamm Research Group, were presented at national and international conferences.

"Currently, there are only two diet therapies that have proven effect for disease control in patients with IBD. Both are liquid-based, strict and designed for 8-12 weeks' treatment. They give no long-term guidance," said Erin Russell, Research Dietician Project Lead at St Vincent's Hospital Melbourne (SVHM) and University of Melbourne.

During the study, the trial participants received regular dietetic review and education resources including recipes, food lists, and snack ideas. Diet satisfaction and compliance were key study targets. A novel, long-term dietary therapy program, known as DELECTABLE, has been proven to enhance diet satisfaction for patients with Inflammatory Bowel Disease (IBD).

As a result of the study's success, the DELECTABLE 1.0 program resources are now applied in routine clinical care at SVHM's IBD Clinic. It offers appealing and varied meal options to tailor to each patient's needs.

"The program gives patients more options through personalisation – it looks at what is important to them and what diet therapy will best support their symptoms," said Erin.

Foods that cause inflammation, including chemical-containing ultra-processed foods, have recently been shown to contribute to active disease in IBD. Three dietary therapies were developed as part of the DELECTABLE program study to support patients in reducing the amount of ultra-processed foods and to encourage cooking from fresh ingredients. "We hope the program will empower patients to have more control over how food interacts with their disease and how they can best control any future flare-ups or inflammation." - Erin Russell



Study leads to drug subsidy

St Vincent's Hospital Melbourne (SVHM) played a key role as the lead centre for the Australian clinical trial sites involved in an international study that is now supporting more patients with diabetic kidney disease through life-altering treatment.

The FIDELIO trial, involving over 5000 participants worldwide, found that finerenone (marketed as Kerendia) significantly reduced the risk of disease progression in adults with Type 2 diabetes and chronic kidney disease.

Consequently, the Australian Government has announced finerenone treatment will be funded through the Public Benefits Scheme (PBS) to complement standard treatments for diabetes-related kidney disease.

The national announcement of finerenone PBS funding took place at SVHM in June and the drug was officially listed on the PBS from July 1. This decision has made the medication more affordable and accessible for patients in need.

"The only way new medications get on to the market is by these big clinical trials being performed, and being performed to the most rigorous standards," said Professor Richard MacIsaac, Director of Endocrinology at SVHM and the Australian Trial Lead for the FIDELIO study.

"We also shouldn't forget the importance of trial participants and their willingness to be part of helping support solutions, promote new knowledge, the development of new medications and treatments and shaping the pathway forward."

An estimated 330,000 people are living with diabetic kidney disease in Australia, which represents about a quarter of all people living with diabetes.

"Keeping as many people off dialysis as possible is what we should be aiming for. Dialysis takes a huge toll on the quality of life. A person receiving dialysis would visit hospital more than 150 times a year to receive about 780 hours of care and that is draining on them both physically and mentally," said Prof MacIsaac, who is facilitating the implementation of the study findings into clinical practice in other regions, including Asia.

The availability of Kerendia through the PBS is very welcome news, said Prof MacIsaac, highlighting SVHM's significant capability and contributions in clinical trials for diabetes complications.

Above: Prof Richard MacIsaac

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Early integration key to palliative care

A new support model for cancer patients is available following a study that investigated how early integration of palliative care for cancer patients can improve quality of life.

St Vincent's Hospital Melbourne (SVHM) was one of four hospitals that collaborated in the University of Melbourne-led research

The project examined how palliative care introduced earlier in patient care may provide longer-term benefits, including improved symptom management and support to prepare for the future, as well as better support for families.

"The Care Plus model offers an extra layer of support. Developed based on a body of mature research, it helps overcome barriers including the perception of palliative care being attached to end-of-life - it is so much more than this," said Professor Jennifer Philip, Chair of Palliative Medicine

at University of Melbourne and a Palliative Care Physician at SVHM. As part of this study, the research team has engaged with cancer specialists to ensure the model implementation was tailored to specific cancer types.

"We defined the trigger points for different types of cancer - the time when all patients should be getting palliative care. Then, when a patient reaches that trigger point in their illness, the palliative care can be activated through the Care Plus model. For some cancer groups, the trigger point was at time of diagnosis," said Prof Philip.

Currently around two-thirds of people who die from cancer in Victoria

access hospital-delivered palliative care around 20 days before death.

"That is not long enough to build confidence and trust to establish best systems of support," said Prof Philip. The Care Plus model, delivered at SVHM through SVHM's Cancer Centre Outpatients Clinic during the study trial phase, is now used as standard practice at the hospital.

A series of resources were also designed to support clinicians to introduce Care Plus in other settings. These resources include a package of implementation strategies, such as suggested language to introduce palliative care, postcards and information for patients.

New research centre taking shape

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A ground-breaking ceremony was held in March 2023, to formally celebrate the start of construction on the Aikenhead Centre for Medical Discovery (ACMD).

Co-located at St Vincent's Hospital Melbourne (SVHM), the \$206 million biomedical engineering research facility's unique position on a hospital campus will see it play a key part in the Victorian Government's 10-year plan for Melbourne's new biomedical precinct.

A focus on prevention and early intervention to improve outcomes for patients suffering chronic illness, as well seeking solutions that promote health equity are part of the ACMD's vision.

"The ACMD supports navigating the research pathway efficiently through its specially developed programs, accelerated research translation capability and by harnessing the strengths of collaborative partnerships between the hospital, universities, research institutes, government and industry," said Dr Erol Harvey, CEO of the ACMD

"It provides an environment that

technologies and nurturing clinician researchers as medical entrepreneurs." The new 16,500sqm building will include 3D-printing laboratories, a human kinetics lab and insulated rooms for the development of sensitive hearing and vision technologies. There will also be engineering workshops to produce medical device prototypes and robotics that can be used to help accelerate clinical trials.

"We are proud to be developing this world-leading research facility at our Fitzroy precinct. Having a research centre of this calibre embedded within the footprint of the hospital allows our clinicians to work directly with engineers and scientists to forge change based on real-life health need," said Nicole Tweddle. Chief Executive at SVHM.

The new building is scheduled for completion in late 2024.



Above: Professor Jennifer Philip



Boost to cardiac research capability

A new Heart, Exercise and Research Trials lab at St Vincent's Institute of Medical Research, co-located at St Vincent's Hospital Melbourne (SVHM), is expanding the Institute's cardiac research capability.

The Head of the lab, Associate Professor André La Gerche, a clinician researcher and SVHM Cardiologist, has received additional support from the Victor Chang Cardiac Research Institute (VCCRI) to help accelerate the discovery of new ways to treat heart disease.

The intersection between research and the clinic makes the SVHM campus a key location for the new centre, and leverages A/Prof La Gerche's internationally recognised expertise in exercise cardiac imaging, sports cardiology and pulmonary vascular physiology

Left: Artist's render - Exterior of the new Aikenhead Centre for Medical Discoverv

Big data offers critical insight

St Vincent's Hospital Melbourne (SVHM) was a lead site in a study that used big data to track patterns in patients across the state who experienced cardiac arrest.



The data findings helped establish a registry of cardiac death in young people that aims to assist in shaping prevention and management strategies.

The study identified at-risk and vulnerable populations including the young, people living with schizophrenia and those using illicit drugs. It also highlighted that sudden cardiac arrest is under-recognised in younger people.

"Sudden cardiac arrest affects about five times as many young people as

the road toll," said Dr Elizabeth Paratz (below), a Cardiologist at SVHM and the Lead Investigator of the study.

"During the study period we identified there were about 750 cardiac arrests in Victoria each year affecting people under 50."

In collaboration with the Baker Heart and Diabetes Institute and the University of Melbourne, the project identified non-cardiac causes such as pulmonary emboli (blood clots to the lungs), metabolic causes or bleeds into the brain for cardiac

arrest account for almost half the number of sudden cardiac arrests in young people.

"Recognising that not all cardiac arrests are due to a primary heart problem was a very important finding in terms of planning our prevention and management strategies," said Dr Paratz.

It also noted that coronary disease, traditionally thought to be more prevalent in the aged, is a common trigger in people under 50 who experience sudden cardiac arrest.

A world-first time-use analysis was performed as part of the study to determine other activities sudden cardiac arrest patients engaged in as part of their everyday routine.

"I am very excited that high-quality big data has the power to allow us to see the big picture and tease out unique patterns that will allow us to take the next step in improving outcomes and reducing the burden of cardiac arrest."

Dr Paratz was a lead presenter at ACMD Research Week at St Vincent's Hospital Melbourne, where the 2023 event's theme focused on using big data to improve health outcomes.

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National registry targets risk factors

As a key research outcome, Dr Paratz has helped lead and set up a first-of-its-kind statewide registry together with Professor André La Gerche, a Cardiologist at SVHM. This registry is helping highlight valuable information that can be used to assist in identifying the risk factors of sudden cardiac arrest.

The End Unexplained Cardiac Death registry links ambulance, hospital and forensic data in all cases under 50 to provide a complete overview of patient journeys throughout their cardiac arrest admissions and investigations. Currently, it captures data from 2019 and work is progressing to turn it into the world's biggest cardiac arrest registry by expanding it to retrospectively capture 20 years of data.

International collaborations are underway with the Melbourne research team supporting colleagues in Germany to set up a similar registry model, as well as commencing collaborations with Denmark, Switzerland and Spain.

Celebrating research prowess

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campus partners.

The 2023 theme was Using Data to Improve Health Outcomes. Event highlights included:

Opening ceremony

Former Victorian Minister of Health and Medical Research, the Hon. Jaala Pulford, was a special guest at the 2023 opening ceremony that featured a welcome address from St Vincent's Hospital Melbourne (SVHM) Chief Executive Nicole Tweddle. Ms Pulford spoke on the future vision of medical research and the technology sector and its importance at both a state and national level.

Keynote plenary

Delivered by Professor John McNeil, Head of the Department of Epidemiology and Preventive Medicine at Monash University, the 2023 keynote plenary put the spotlight on this year's theme and highlighted the significance and challenges of using big data in research projects.

Public lecture

Two SVHM researchers -Dr Margaret Ross and Dr Justin



ACMD Research Week @ St Vincent's Hospital Melbourne celebrates research innovation and excellence across the hospital's Fitzroy precinct, including its

Dwyer - were joined by Professor Colleen Loo from the University of NSW, for a panel discussion on Psychedelic drugs - the Gap Between the Evidence and the Hype. One of Australia's most respected health journalists and broadcasters, Dr Norman Swan, led the discussion that aimed to debunk the myths and popular expectations of psychedelics and highlighted its potential benefits and the associated risks as a treatment option.

Research presentations

High-quality presentations were delivered by a multidisciplinary group of researchers from allied health, basic science, clinical and nursing research disciplines across SVHM's precinct, including contributions from several junior and early-career researchers.

Scan the QR code for the program recap, session recordings and the list of presentation winners.



Order of Australia honours

An Order of Australia was presented to two clinician researchers at St Vincent's Hospital Melbourne (SVHM) in 2023.

Professor Mark Cook (top right) and Professor Steven Collins (top left) were both awarded an Officer (AO) in the General Division of the Order of Australia for their dedication and work in the field of neurology.

Prof Cook, Director of Neurology at SVHM gained recognition for his distinguished service to neurological medicine and research through contributions to the treatment of epilepsy, and Prof Collins, for distinguished service to medical and health science research, particularly in the field of prion disease.

Consultant neurologists at SVHM since 1993, Prof Cook is Chair of Medicine and has been the Director of the Department of Neurology at SVHM for over 20 years, while Prof Collins is Head of the Mitochondrial and Autoimmune Neurological Disorders Laboratory, Department of Clinical Neurosciences

and Neurological Research at SVHM and Director of the Australian National Creutzfeldt-Jakob Disease Registry.

Prof Cook is currently leading two international epilepsy studies. Both world-first research projects are investigating ways to better treat and manage epilepsy using innovative technologies.

One is assessing a targeted delivery of anti-seizure medication straight to the brain via a long-term abdominal pump implant to eliminate previous issues experienced with drug absorption and uptake barriers. The treatment being investigated hopes to offer improved management of seizures, decrease seizure frequency and improve the quality of life and sense of wellbeing for people with epilepsy who are prone to drugresistant focal seizures. The other project is investigating the use of an implant (above right) designed to



monitor brain seizure activity and patterns using a long-term EEG monitoring system and unique cloud-based technology

Since 1997, Prof Collins has led and/or participated in numerous pivotal epidemiological and biomarker validation studies, many prompting sequential revision of diagnostic criteria for sporadic Creutzfeldt-Jakob Disease.

Improving equity of access

A \$45K grant from the Victorian Medical Research Acceleration Fund was awarded to St Vincent's Hospital Melbourne (SVHM) towards a collaborative study investigating access to the Victorian Virtual Emergency Department (VVED) for people experiencing homelessness.

The first-of-its-kind, early-stage study aims to provide easier access to the VVED through a range of SVHM's outreach programs and services. SVHM is the lead trial site in the research project that is being developed in partnership with Northern Health, where the VVED is based, and LaTrobe, Queensland and Notre Dame universities.

The research will be assessing methods to tailor access to the VVED to improve equity for an extremely disadvantaged and vulnerable group. It will explore how they can be better supported to access a virtual ED from a place and at a time they feel most comfortable to enable improved

healthcare engagement opportunities. A Lived Experience Working Group will be formed and will include members experiencing homelessness to support various aspects of the research, including workshopping proposed solutions and developing survey questions.

"We are taking a co-design approach - we want to understand from people using the service how it can be improved," said Claire Doherty, a Senior Research Officer with SVHM's Healthcare for Homeless Unit and the study's Principal Investigator.

"As health professionals we have our own ideas but until you actually walk in the shoes of

EMERGENCY ↓

someone experiencing homelessness you probably don't have the appropriate depth or insight into the issues faced and what could potentially improve someone's access to support and clinical care."

The study will also explore new forms of digital technology to enhance the patient experience. This includes the use of smart goggles to enable consultant physicians offsite to examine a patient remotely for an assessment

Above: Research team members Emma Haygen, Andrew Chan, Claire Doherty and Hayley Pepper

2023 **TJ Martin** Award

Dr Laura Ross, a Rheumatologist at St Vincent's Hospital Melbourne (SVHM) has won the 2023 TJ Martin Medal for her doctoral study on the development of a multi-system disease activity index for scleroderma.

Under Dr Ross's leadership, this research had an overarching aim creating a method to measure patient improvement in response to any novel treatment administered during a clinical trial, particularly by evaluating the impact on their organ function.

The activity index was presented at the EULAR Congress, in Milan, where Dr Ross (above) received an award as one of the most notable research abstracts at the event.

During her PhD under SVHM, Dr Ross collaborated with researchers from the University of Melbourne and the Baker Heart and Diabetes Institute to study the disease burden

of scleroderma on the heart and the benefits of assessing patients under conditions of exercise stress. Study results revealed previously undocumented heart muscle scarring was frequent among scleroderma patients and marked physiological impairment they experience from disease onset.

Dr Ross's expertise in rheumatology also led to a well-deserved SVHM Research Endowment Fund grant of \$20,000 in 2021 for her project proposal, Understanding Exercise Limitation in Systemic Sclerosis - a complementary study to her TJ Martin award-winning research.

Supporting research growth

The Research Endowment Fund (REF) is an annual financial grant program to support high-quality research activity across the St Vincent's Hospital Melbourne (SVHM) precinct. Established in the early 2000s, the REF aims to support research projects that have clinical application, potential clinical significance and demonstrate research collaboration.

The REF grants provide initial seed funding to kickstart projects that can subsequently gain competitive national funding, with REF awardees having major success in many state, national and international grant rounds.

The program encourages new and early-career researchers to develop their research skills in the hospital and includes grants for clinical research, basic research and nursing and allied health-related research. Over \$690,000 was allocated across 34 research projects under the 2022-23 REF program.

Funding boost supports trial for glaucoma implant

A \$1 million grant was awarded to Associate Professor Michael Coote and the VividWhite team under MTPConnect's Clinical Translation and Commercialisation Medtech (CTCM) program.

The grant was announced by the Federal Minister for Health, the Hon. Mark Butler, and will support research investigating a micro-fluidics ocular surgical implant for people suffering from glaucoma.

More than 300,000 Australians suffer with glaucoma. It is the leading cause of irreversible blindness worldwide, and the second most common cause in Australia

The aim of the micro-sized implant developed by the team is to reduce intraocular pressure (IOP) in the eyes and to prevent blindness in glaucoma patients.

"The microfluidic properties of the implant being assessed are optimised to work with the eye's tissue response mechanisms to create lasting and

reliable surgical outcomes," said Project Lead A/Prof Michael Coote. The grant will support a Phase 2 multi-centre clinical study, as well as facilitating the next stage of device

manufacturing.

Ethics and governance for this ground-breaking study was facilitated by SVHM's Human Research Ethics Committee (HREC) and Research Governance Unit. The research led by A/Prof Coote and Vivid White is being developed with the Aikenhead Centre for Medical Discovery, SVHM, University of Melbourne, the Centre for Eye Research Australia (CERA) and Lincoln Consulting Group.





Celebrating past and present clinician excellence

Two new clinical research fellowships, named in honour of St Vincent's Hospital Melbourne (SVHM) clinicians, were awarded in March 2023.

The Wilma Beswick Clinical Research Fellowship was awarded to Dr Elizabeth Paratz and the Paul Desmond Clinical Research Fellowship was awarded to Associate Professor Sybil McAuley.

These positions provide an opportunity for clinicians to make significant and innovative contributions in the areas of academic leadership, research and innovation. They recognise the role of clinicians and researchers in delivering evidence-based clinical care to tackle complex health challenges, as well as their contributions to the training and education of junior doctors in clinical research.

The creation of the new fellowships further promotes collaboration between the Department of Medicine at University of Melbourne and SVHM, who have worked together for more than a century to attain excellence in clinical research and translating these advances into clinical practice.

Both Associate Professor Wilma Beswick and Associate Professor Paul Desmond have had long and distinguished careers in medicine and at SVHM, each receiving a Member of the Order of Australia for their outstanding service.

Ethically sound practice

St Vincent's Hospital Melbourne Human Research Ethics Committee (HREC) plays a critical role in upholding the integrity and safety of clinical research involving human participants.

It convenes fortnightly to review research proposals, ensuring they meet strict national ethical standards and guidelines. Frequent meetings are essential to support timely approval and rapid study start-up.

"Having an efficient ethics committee like ours that meets regularly is really important to research growth and activity. Otherwise, it can take a long time to get a project approved and that can be make or break for companies who have new drugs or new devices to trial," said Professor Mark Cook, Chair of St Vincent's HRFC

"For an ethics committee to work well, it needs to have a broad range of people involved who have experience and good oversight across various types of research, from observational trials involving patients, to drug trials and device trials. This is a key strength for St Vincent's HREC.'

The Research Governance Unit (RGU) is another integral component of St Vincent's research ecosystem. The RGU (below) provides secretariat support to the HREC, the Animal Ethics Committee (AEC) and the Institutional Biosafety Committee (IBC).

In addition, the RGU collaborates closely with a diverse range of internal and external stakeholders, including researchers, contract research organisations, sponsors and pharmaceutical companies to facilitate high-quality research practices.

Over the past year, our RGU processed 1622 research submissions by local and external researchers including new ethics applications, governance applications, and amendment requests to existing studies.



Above: SVHM Reserach Governance Unit

A Mature Research **Governance Culture**

In August 2023, St Vincent's Hospital Melbourne (SVHM) underwent the Short Notice Assessment Program (SNAP) accreditation assessment, aligning with the National Clinical Trials Governance Framework (NCTGF). Of the 523 active interventional trials at SVHM. 30 were selected for assessment. SVHM received a perfect grade, affirming its mature research governance culture and unwavering commitment to undertaking high-quality research.

The assessor commended our research teams for their dedication to improving patient options and their world-leading approach to enhancing healthcare, especially for vulnerable populations. This outstanding result confirms SVHM's position as a major teaching, research, and tertiary public health centre.



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For more information, scan the **QR** code



Contact us Office hours: Monday to Friday, 8:30am-4:30pm

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Acknowledgment of country

St Vincent's Health Australia acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the lands and waters where we live and work. We respect their historical and continuing spiritual connections to country and community and pay our respects to their Elders past, present and emerging. As a health and aged care ministry, we commit ourselves to the ongoing journey of Reconciliation.