



**menzies**  
school of health research



# 2023 ANNUAL REPORT

In the spirit of respect,  
 Menzies School of Health  
 Research acknowledges the  
 people and Elders of the  
 Aboriginal and Torres Strait  
 Islander Nations who are  
 the Traditional Owners of  
 the land and seas of Australia.



**Our vision** To find enduring solutions to health problems that matter.

**Our purpose** To improve the health and wellbeing of people in our region through genuine partnerships, and excellence in research, translation and education.

**Our values** **Quality** We strive for excellence and rigour in everything we do.

**Integrity** We are open, honest and transparent, and maintain the highest standards of governance, accountability and ethics.

**Relevance** We concentrate on solving problems that matter. Our work is informed by the health needs and shared priorities of the people and communities with whom we work.

**Partnerships** We seek to partner with communities, health and other service providers, policy-makers and other researchers.

**Innovation** We embrace new approaches and technologies.

**Communication** We maintain an ongoing dialogue with partners, stakeholders and the local and national community during the research process, from conception through to completion and translation of results.

**Accountability** We take responsibility for our actions and results.

*Aboriginal and Torres Strait Islander people are advised that this document may contain the names and images of people who have passed away.*

# CONTENTS

Who we are	6	Our people	38
Where we work	7	Organisational structure	39
2023 Highlights	8	Research excellence	43
Reconciliation Action at Menzies	12	Education and Training	46
Director and Chair's Message	14	In our community	50
Our Board	16	Our donors and supporters	60
Statement on Behalf of the Board of Governors	20	Our financials	64
Our Research Impact	22		



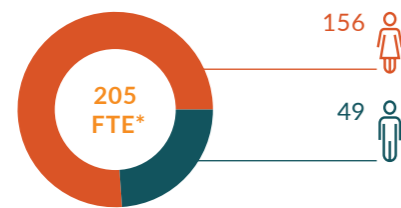
# WHO WE ARE

We are one of Australia's leading medical research institutes.

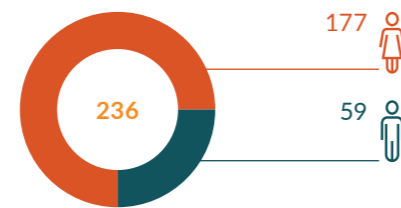
We are dedicated to improving the health and wellbeing of Aboriginal and Torres Strait Islander peoples, and we are a global leader in tropical health research. For almost 40 years, supported through our partnership with Charles Darwin University, we have delivered research, generated and translated knowledge, and provided education and training that make a difference to the lives of people throughout Australia and across the Asia-Pacific region.

We deliver this impact by working in close collaboration with our government, health service and community partners. These two-way partnerships ensure that our research is focused on the problems that matter and the solutions that work.

Total number of staff



Number of students



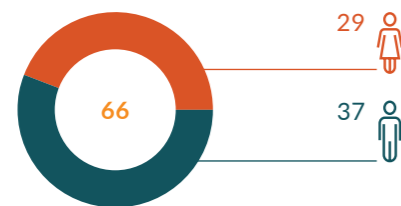
Number of Aboriginal and/or Torres Strait Islander staff



Number of Aboriginal and/or Torres Strait Islander trainees



Number of Timor-Leste staff



Number of trainees



\*Full-time equivalent (FTE)

# WHERE WE WORK

Our headquarters are in Darwin, with offices in Alice Springs, and Dili, Timor-Leste. Our work spans central and northern Australia and countries within our global neighbourhood.



- Key**
- Orange square: Countries where we work
  - Yellow square: Countries with research collaborations
  - White circle: Headquarters
  - Orange circle: Offices
  - Red dot: 2023 Field sites

# 2023 HIGHLIGHTS

## February

We were delighted to welcome the Prime Minister of the Democratic Republic of Timor-Leste, His Excellency General Taur Matan Ruak and the Foreign Minister Adaljiza Albertina Xavier Reis Magno to Menzies Darwin Office in February. This was a great chance for the Prime Minister and Foreign Minister to meet with our Executive and the Menzies Timor-Leste team to discuss current and future projects including work to address dengue, coronavirus and tuberculosis.

## April

On 20 April, Associate Professor Gillian Gorham facilitated a workshop to finalise the Value for Money (VFM) Framework co-designed during the Dialysis Models of Care project. This translational workshop allowed First Nations co-researchers from across the Territory to interpret the project's findings and discuss how they conceptualised VFM of dialysis services in the NT. Patients, key clinical and policy stakeholders, members of the NT Health Executive, and representatives from Aboriginal Community Controlled Health Services attended the workshop.

[Read more on page 29](#)

## May

As part of National Reconciliation Week, Menzies was proud to unveil a collection of more than 20 artworks by Aboriginal and Torres Strait Islander people. This art collection, displayed in the foyer of our John Mathews Building, represents the translation of Menzies' research projects from an Aboriginal and Torres Strait Islander perspective. Menzies staff were proud to be joined by some of the artists and their families at this launch event.

[Read more on page 54](#)

## June

In June, Menzies launched the BRUCE TL (Brucellosis Reduction Using Codesign Elements in Timor-Leste), with strong engagement from the Maliana community of Timor-Leste to establish co-designed control measures to reduce the spread of Brucellosis. Led by Menzies, together with local partners from animal and human health agencies, this project aims to address how this zoonotic disease impacts cattle and human health, as well as livelihoods. The implementation of the project, which received funding from the Australian Centre for International Agriculture Research (ACIAR) and Canada's International Development Research Centre (IDRC), builds on Menzies Timor-Leste's ongoing work in One Health to tackle antimicrobial resistance and malnutrition in children.

[Read more on page 58](#)

## August

Our Health Research Life Course Program collaborated with the Hudson Institute of Medical Research on a first-of-its-kind research on specific causes of hypertension risk in Australian First Nations communities. The research used biospecimens collected from the Aboriginal Birth Cohort study established by Associate Professor Susan Sayers AM in 1987. The study is the longest running birth cohort study of First Nations people in Australasia.

[Read more on page 33](#)

The Menzies' Paediatric Respiratory Microbiome Program found that extracellular traps can be detected from airway specimens using a technique that is already available in pathology laboratories. This important work has helped advance respiratory endotyping methods to effectively treat children with chronic wet cough.

[Read more on page 36](#)

On 22 August, Menzies researchers delivered a series of short presentations to The Hon Ged Kearney MP, Assistant Minister for Health at the Alice Springs Hospital. The minister was highly engaged with the team's workforce, climate change and diabetes research. The meeting also coincided with the publication of a journal article – led by Associate Professor Deborah Russell – presenting solutions to the recent 81% decline in GP training uptake in the Territory. The NT Primary Health Care Workforce Summit also took place on 23 August. Professor John Wakerman and Associate Professor Russell participated in the summit, discussing the attraction and retention of remote health workforces.

[Read more on page 32](#)



↑ Representatives from Timor-Leste and Menzies discuss research projects.



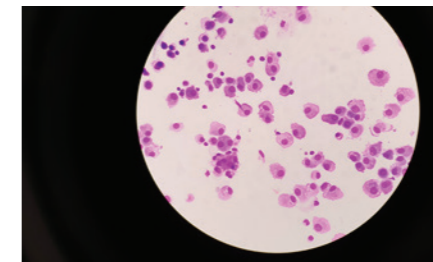
↑ Stakeholders meet at the Value for Money of Dialysis Services workshop



↑ Diane Walker, Professor Alan Cass, artist Norma Benger and Dr Sean Taylor.



↑ BRUCE TL team undertake community engagement



↑ Identifying variations of respiratory conditions in the laboratory.



↑ Menzies Alice Springs researchers with Hon. Ged Kearney MP

## August

The inaugural Menzies Central Australian Health Research Seminar was held on 29 August. The seminar showcased various projects led by local Menzies researchers, in collaboration with key partners such as the Central Australian Aboriginal Congress and Alice Springs Hospital. Convened by the newly established Centre for Health and Other Complex Systems Research, the event featured presentations on health workforce, climate change, digital health, mental health and clinical research projects. A panel discussion and networking allowed attendees to share research ideas and discuss approaches to strengthen health services and outcomes in Central Australia. Traditional Owner Benedict Stevens conducted a Welcome to Country at the event.

[Read more on page 32](#)



↑ The inaugural Menzies Central Australian Health Research Seminar.



↑ CRESTRA team engage with Torres Health

## September

The Stay Strong team collaborated with First Nations young people in a co-design process focused on yarnning, bush medicine, jewellery making and weaving. Led by Dr. Michelle Sweet, Katherine Moore, and local Kurna consultants, young people explored their support networks, strengths, worries and goals throughout eight workshops. Insights were reviewed by a Youth Reference Group and Kurna Elders. The findings will enrich the AIMhi for Youth app with a local Kurna story, containing imagery, characters, and language.

[Read more on page 30](#)



↑ Young people participate in activities to support wellbeing

Dr Sean Taylor, Professor John Wakerman and Dr Deborah Russell travelled to Mer (Murray) Island and Thursday Island in the Torres Strait as part of their initial engagement with Torres Health for the workforce theme of the NHMRC Centre of Research Excellence for Strengthening Health Systems in Remote Australia (CRESTRA) program. The collaboration also enables workforce projects supported by the Cooperative Research Centre for Developing Northern Australia and the Central Australian Academic Health Science Network.

[Read more on page 30](#)

## October

The Prevention of Early-Onset Acute Respiratory Infections Program was awarded funding from the Medical Research Future Fund International Clinical Trial Collaborations to conduct the Pro-Kids study: a randomised controlled trial (RCT) to determine whether neonatal probiotics can prevent early-onset acute respiratory infections (ARIs) in high-risk children. The trial is a collaboration between researchers in Australia and Papua New Guinea. The research plan was presented at the Lighting the Spark conference in October 2023.

[Read more on page 39](#)

The Communicate Study Partnership hosted the third First Nations Health Communication Symposium in October, bringing together 140 participants from across Australia. The biennial symposium served as a platform for inspiration, learning, and collaboration in the pursuit of culturally safe care in the Northern Territory and beyond, against the theme of 'Preparing for our Futures'. The event showcased a steadfast dedication to improving communication in health, with equal representation of First Nations individuals as speakers and chairs. Preceding the symposium, a day of workshops concentrated on enhancing intercultural communication between non-Indigenous health professionals and First Nations peoples in the NT.

[Read more on page 57](#)

## November

The ZOOMAL project - consisting of a large consortium of partners from Australia and Indonesia - had the opportunity to bring all partners together along with external stakeholders to disseminate the results of the project from the last three years. The 78 attendees also gathered to discuss changes to policy to further understand and control zoonotic malaria in Indonesia. This national-level meeting followed on from community-level engagement events held earlier in the year to disseminate study results across 5 rural research sites.

[Read more on page 59](#)



↑ The ZOOMAL project team leaders with the external stakeholders.

On 3 November, the DIABETES across the LIFECOURSE: Northern Australia Partnership held its annual educational symposium on 'Mental Health and Diabetes: Strong Minds, Healthy Futures'. Canadian keynote speakers Associate Professor Alison Dart and Jackie McKee headlined the event, alongside three inspiring lived experience speakers. Neil Wilkshire shared his journey from diabetes to dialysis to transplant and now living well. Norlisha Bartlett discussed her lived experience with mental health and suicide. Ben Mack spoke about his journey to recovery. The symposium drew 82 attendees in Darwin, 19 in Alice Springs, 5 in Cairns and 102 online via Zoom.

[Read more on page 27](#)

## December

The Hearing for Learning Initiative (HfLI) is an innovative community-based service enhancement project led by our Ear Health Research Program. The aim of the initiative is to reduce the prevalence of ear disease and hearing loss among First Nations children in the Territory. Thereby enhancing early language development, school readiness, school attendance and performance. The initiative is a stepped-wedge cluster randomised controlled trial. The trial objectives are to develop, implement and evaluate the initiative's model of enhanced ear health care and hearing support. This support is delivered by newly funded positions for local community members (up to 40 Ear Health Facilitators) across 20 communities. In 2023, 25 Ear Health Facilitator Trainees completed their HfLI training. Additionally, 5 new Ear Health Facilitators were employed across 6 remote communities. The HfLI has now completed all training phases of the project in the participating communities.

[Read more on page 61](#)



↑ Celebrating the achievement of completing the six-week Hearing for Learning Initiative training course in Galiwin'ku.



↑ STRONG-TL team in Timor-Leste

The STRONG-TL (Surveillance Training, Research Opportunities and National Guidelines for communicable disease control in Timor-Leste) project finished in 2023, after 5 years of partnership with the Timor-Leste Ministry of Health. This project has helped lay a platform for an expansion of health system strengthening and research in Timor-Leste. Using side-by-side mentoring, this project expanded the capacity of the health system responding to infectious diseases challenges. This work supported the country to have one of the most effective responses to the COVID-19 pandemic, globally.

[Read more on page 35](#)

# RECONCILIATION ACTION AT MENZIES

As Menzies develops the next iteration of its Reconciliation Action Plan (RAP), the 2020-2022 RAP was continued throughout 2023, to solidify key deliverables. In 2023:

## 51 STAFF

participated in structured cultural learning programs (delivered both in-person and online).

## \$342K

was spent with Aboriginal and Torres Strait Islander supplier businesses in the 2023 financial year.

Menzies is committed to reconciliation through respect, relationships, opportunities and partnerships.

→ Reconciliation Action Plan (RAP) Art by local Darwin Aboriginal woman, Ms Norma Chidanpee Benger.



# DIRECTOR AND CHAIR'S MESSAGE

The key projects highlighted in this report demonstrate that Menzies is deeply committed to the places in which we work. This includes the Northern Territory, northern and central Australia, and the Asia-Pacific region. Our growing programs of work, and presence in Alice Springs and Timor Leste, with established offices in both locations, indicate that we focus on issues that matter to the local communities. This has always been one of our strengths – a genuine connection to place that enables real impact.

In February, we were honoured to host the Prime Minister of the Democratic Republic of Timor-Leste, His Excellency General Taur Matan Ruak and the Foreign Minister Adaljiza Albertina Xavier Reis Magno. This was a great opportunity for the Prime Minister and Foreign Minister to meet with our Executive and the Menzies Timor-Leste team to discuss current and future projects including work to address dengue fever and tuberculosis. 2023 also saw the launch of our latest 5-year Strategic Plan. This plan builds on the work we have been doing for almost 40 years to improve the health and wellbeing of people in our region. We know that through genuine partnerships, and excellence in research, translation and education, we will find practical solutions to priorities that need to be addressed.

Our new Strategic Plan focuses on our people. We are constantly reminded of the quality and dedication of our staff – from internationally recognised research leaders to emerging stars, enthusiastic trainees and skilled professional staff. Without our staff, Menzies would not have the impact we do.

We will continue to invest in our people and strive to ensure that Menzies is a great place to work. This year we appointed Professors Anna Ralph and Louise Maple-Brown as Deputy Directors Research. The Deputy Directors Research are important members of our Senior Executive Team and will make key contributions to the research agenda and culture across Menzies, by leading the development and implementation of our overarching research strategy. Under their joint leadership, Anna and Louise will play a key role in our efforts to attract high quality researchers to the Northern Territory, and to develop and maintain strong productive relations with regional, national and international collaborators and partners.

As always, we are grateful for the commitment of our Board members and the members of our various committees to support good governance and strategy development at Menzies. The wisdom and guidance of our First Nations Board members – Leanne Liddle, Tricia Angus and Nigel Browne – has been critical as Menzies sought to support our staff and community partners through the period leading up to and following the Voice referendum.

We would also like to thank everyone who supported us throughout 2023 and we look forward to working together in the years that come.



Menzies Director  
Professor  
Alan Cass AO

Menzies Board Chair  
The Honourable  
Trevor Riley AO KC



# OUR BOARD



**Board Chair**  
**The Hon Trevor**  
**Riley AO KC**

Prior to retirement in 2016, Trevor was the Chief Justice of the Supreme Court of the NT.

He served on the Supreme Court for 18 years. During his tenure as Chief Justice, he was outspoken about cuts to legal aid, high imprisonment rates and addressing alcohol abuse.

Trevor was appointed as Queen's Counsel in 1989, sworn in as a judge in 1999 and was the president of the NT Bar Association between 1993 and 1997.

His other roles include being a long-term Director of St John Ambulance (NT) and Chair of the AFLNT Appeals Board.



**Menzies Director**  
**Professor Alan**  
**Cass AO**

Professor Cass has been the Director of Menzies since 2012.

Alan is a NHMRC Leadership Fellow (2021-2025) and Chair of the NT Clinical Senate. He is a member of the Executive Committee for the Australia and New Zealand Dialysis and Transplant Registry and a Board Director for the Central Australia Academic Health Science Network.

He is a kidney specialist with a particular interest in preventing and managing chronic disease and Indigenous health.

Alan has been instrumental in leading national and international clinical trials and conducting research to improve access to health services and provision of care to address inequities in health.



**Deputy Chair**  
**Leanne Liddle**

Leanne is the Director of the Aboriginal Justice Unit, Department of the Attorney-General and Justice.

She is an Arrernte woman born and raised in Alice Springs.

She was the first Aboriginal policewoman in South Australia (SA) where she worked for 11 years as a senior constable in remote and Adelaide police stations.

Leanne has held several senior public service roles, including the manager of Food Security for Aboriginal communities in SA, and the manager of the APY and West Coast regions of SA within the Department of the Premier and Cabinet.

She has also worked on the international circuit for the United Nations with stints in Geneva, New York and Paris with UNESCO and as a director for Bush Heritage Australia.

Leanne was the 2022 NT Australian of the Year recipient.



**Board Member**  
**Professor Scott**  
**Bowman AO**

Scott is the Vice-Chancellor and President of Charles Darwin University.

He joined CDU in 2021 with considerable university leadership experience as Vice-Chancellor and President of Central Queensland University. For over a decade, his vision and leadership helped transform CQU into one of Australia's largest and most engaged regional universities.

He joined Western Sydney University following his retirement as Vice-Chancellor and President of Central Queensland University in 2019. Previous leadership positions include Senior Deputy Vice-Chancellor at Western Sydney University; Deputy Vice-Chancellor (University Services) and Registrar at James Cook University; Foundation Head of the School of Clinical Sciences at Charles Sturt University; and Foundation Dean of the Faculty of Health Science and Community at University College of St Martin (Lancaster University) Lancaster, UK.



**Board Treasurer**  
**Rowan Johnston**

Rowan is a Sydney-based corporate advisor and managing director of C42 Consulting, a private advisory firm.

He spent almost 30 years as an investment banker and corporate advisor with Greenhill & Co. Australia (formerly Caliburn) and Deutsche Bank in Australia and Hong Kong.

Rowan continues to advise a range of private and public sector clients on corporate and financial issues, including equity capital markets and has advised a range of Australian and overseas governments and their agencies on strategic, infrastructure and financial matters.



**Board Member**  
**Ken Davies**  
PSM

Ken is the CEO of Territory Families and a member of the CDU Council.

He has previously held CEO roles with departments in the NT, including Education; Lands, Planning and Environment; Housing, Local Government and Regional Services. Additionally, Ken was the Deputy Chief Executive of the Department of the Chief Minister.

Ken is a former chair of the NT Board of Studies and former NT Principals' Association President. He has also held appointments to the boards of the Australian Children's Television Foundation, Waterfront Development Corporation and the Land Development Corporation.



**Board Member**  
**Professor Louise Baur AM FAHMS**

Louise is Chair of Child and Adolescent Health at the University of Sydney, holds a conjoint appointment as Professor in the Sydney School of Public Health and is an NHMRC Leadership Fellow (2022-2026). She is also a consultant paediatrician at The Children's Hospital at Westmead (Sydney) and former Head of Weight Management Services.

Louise is President of the World Obesity Federation (2022-2024). Her previous roles include Director on the Governing Board of the Sydney Children's Hospitals Network, Director of World Vision Australia and Founding Fellow and member of the Council of the Australian Academy of Health and Medical Sciences (FAHMS). In 2010, Louise was made a Member of the Order of Australia (AM) for services to medicine and the community.



**Board Member**  
**Patricia Angus**  
PSM

Trish is a Jawoyn woman from Katherine, Northern Territory; residing in Darwin for the past 30 years.

Before retiring in 2012, Trish worked as a registered nurse at public hospitals, an Aboriginal community-controlled health service, community health clinics, and the Royal Australian Air Force.

Trish has held senior positions within the NT departments of Health; Housing, Local Government, Regional Services, Aboriginal Affairs and Community Services.

For her service to public sector policy and Aboriginal programs and services, Trish was awarded the Public Service Medal at the 2013 Australia Day Awards and has served on several committees, boards, advisory councils, and panels.



**Board Member**  
**Nigel Browne**

Nigel is a descendent of the Larrakia and Wulna peoples. He is the CEO of the Larrakia Development Corporation and has held senior roles at the corporation since 2006. Nigel is also a Director with The Healing Foundation and the Aboriginal Area Protection Authority (NT).

Previous professional roles include Crown Prosecutor (ODPPNT), Aboriginal Lands (SFNT), and Policy Adviser (Chief Minister's Office). Nigel has held board and committee positions including with the North Australian Aboriginal Justice Agency (NAAJA), Law Society (NT), the Northern Australia Indigenous Reference Group (NIAA), Darwin Harbor Advisory Committee, Aboriginal Tourism Committee (Tourism NT), Judicial Council on Cultural Diversity and the Northern Australia Advisory Council. In August 2011, Nigel was announced as the National Indigenous Legal Professional of the Year. He is also a member of the Australian Institute of Company Directors.



# STATEMENT ON BEHALF OF THE BOARD OF GOVERNORS

The following persons were members of the Menzies School of Health Research (Menzies) Board of Governors, Finance Committee and Risk and Audit Committee for the year ended 31 December 2023 and at the time of the report:

BOARD MEMBER	POSITION
The Hon Trevor Riley AO KC	Chairperson
Ms Leanne Liddle	Deputy Chair
Mr Rowan Johnston	Treasurer
Professor Alan Cass AO	Board Member
Mr Kenneth Davies PSM	Board Member
Professor Scott Bowman AO	Board Member
Ms Patricia Angus PSM	Board Member
Mr Nigel Browne	Board Member
Prof Louise Baur AM	Board Member

## 2023 Sub-committee meetings

COMMITTEE MEMBERS	FINANCE COMMITTEE	RISK & AUDIT COMMITTEE
Mr Rowan Johnston	•	
Ms Tiziana Hucent ( <i>resigned Aug 2023</i> )	•	
Prof Louise Baur AM ( <i>appointed April 2023</i> )	•	
Anne Coulter ( <i>appointed April 2023, resigned Oct 2023</i> )	•	
Professor Alan Cass AO	•	•
Mr Amin Islam AO		•
Mr Kenneth Davies PSM		•
The Hon Trevor Riley AO KC		•
Ms Catherine Weber		•
Dr Hilary Winchester ( <i>ex officio member - left position Oct 2023</i> )		•
Brendon Douglas ( <i>ex officio member - commenced Oct 2023</i> )		•
Mr Greg Shanahan		•

## Principal activities

During the year, the principal continuing activities of Menzies consisted of:

- Promoting a broad understanding of health that reflects underlying socioeconomic, cultural and biomedical causes of patterns of health and disease;
- Conducting high quality multidisciplinary research, research training, and public health education with a focus on Aboriginal and Torres Strait Islander, remote and tropical health;

- Advancing the local, national and international application of research findings to improve health;
- Advocating for research that will contribute to better health for people of the region; and
- Building strong partnerships with community groups, service providers, policymakers and other academic organisations.

There were no significant changes to the activities of Menzies during the 2023 year.

Menzies thanks Mr. Amin Islam AO, Chair of the Menzies Risk & Audit Committee, and Mr. Rowan Johnston, Chair of the Menzies Finance Committee.

We appreciate their dedication, time, and expertise, all given voluntarily. Their leadership on these committees is truly admirable, and we are very grateful for their exceptional support and guidance.

# OUR RESEARCH IMPACT



## Valuable home-visiting program delivered to more than 500 families

Menzies has been working with the Territory Government on the NT Maternal Early Childhood Sustained Home-visiting (MECSH) program for over 5 years. The program has been rolled out in the East Arnhem and Katherine regions since 2019. It forms part of the Territory Government's early childhood plan.

Implementing new programs and services in the NT can be challenging. The MECSH program has had to overcome these challenges, which include recruiting, training, and retaining new staff, updating existing services to include new models of care, and providing supervision and support in diverse remote communities.

The home-visiting program has also faced challenges caused by COVID-19. Many communities were closed, and the pandemic disrupted training, with staff having to focus on vaccinations and other urgent services. "Notwithstanding the many challenges, in the years to 2022, there have been steady increases in the numbers of clients enrolled in the MECSH program and successful consolidation of delivery of the program in many communities," said Professor Gary Robinson.

In 2023, natural disasters such as floods, evacuated whole communities. Staff stayed in touch with parents by phone and, in some cases, visited their clients evacuated from communities in the relocation centres.

In 2023, Menzies researchers released further findings on program implementation. Menzies staff work closely with NT Health and three health services: Katherine West Health Board, Sunrise Health Service, and Miwatj Health Aboriginal Corporation, as well as other partners through the MECSH Governance Council.

Despite these challenges, the program has been delivered to more than 500 families to date. Changes to health and travel restrictions helped increase the program's delivery in the NT. Menzies research helped support consistency of implementation across communities through feedback of findings to

community of practice workshops and delivery of training in the NT.

As part of the evaluation, researchers have asked families about their experience with MECSH. Analysis of parent feedback showed that the program is highly valued by mothers with small children and their families.

"Parents had developed a high level of trust in MECSH staff. They identified important supports provided by MECSH: the opportunity to learn about their children's development, help with accessing health and social services and emotional support for parents under stress," Professor Robinson said.



↑ Mother and child involved in the Maternal Early Childhood Sustained Home-visiting (MECSH) program

## DIABETES across the LIFECOURSE – Northern Australia Partnership: Submission to the Parliamentary Inquiry into Diabetes

DIABETES across the LIFECOURSE: Northern Australia Partnership (Partnership) responded to a call for submissions to the Federal House of Representatives Standing Committee on Health, Aged Care and Sport Inquiry into diabetes. The Partnership's submission presented findings from our research highlighting the reality of diabetes in the NT and Australia. Our findings included:

- diabetes is the leading cause of death for Aboriginal and Torres Strait Islander females nationally and for all Aboriginal people in the NT
- Aboriginal and Torres Strait Islander people are three times more likely than the general population to have type 2 diabetes

- 40% of remote Aboriginal adults in Central Australia have diabetes – the world's highest rate of diabetes ever recorded
- Aboriginal and Torres Strait Islander people also have the highest rates of youth onset type 2 diabetes worldwide.

A new series on diabetes research published in *The Lancet* and *The Lancet Diabetes & Endocrinology* journals highlighted structural racism and social inequity are contributing to these higher rates of diabetes and poorer health outcomes amongst marginalised populations around the world.

Using these findings and prioritising the voices of those with lived experience of diabetes, the Partnership's submission urged the Australian Government to consider our recommendations and prioritise initiatives that align with three priority areas:

1. Raising public and community awareness of diabetes
2. Addressing the social determinants of health and strengthening cross-sectoral collaboration
3. Improving access to high-quality care.

In addition to the main submission document, the Partnership attached two recent *Lancet* and *The Lancet Diabetes & Endocrinology* publications and an audiovisual submission – an overview of the main submission.



↑ Menzies works across the lifespan to support those with diabetes.

## Family movements do not align to NT school administrative boundaries

Families in the NT frequently move between communities, posing challenges for children's school attendance. The primary school education system is structured around learning during fixed times at fixed locations. This presents challenges for highly mobile families, especially Aboriginal families, potentially leading to lower student attendance. It can also create difficulties for the schools, including classroom management issues and decreased learning outcomes.

In 2023, Menzies conducted a study titled, 'Patterns of mobility among primary school children in the Northern Territory'.

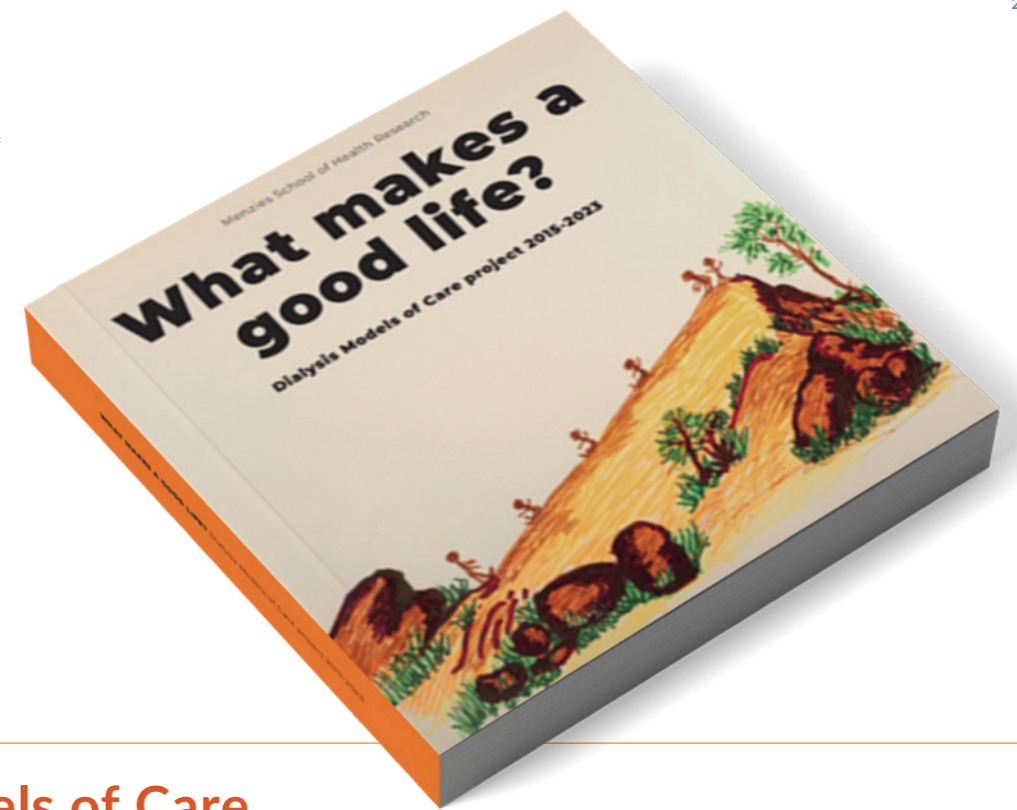
The study was funded by the Northern Territory Government's Department of Education. Our researchers used school administration data from 2005 to 2018 to map student movements according to school enrolments. They compared date and location information for the same child across multiple linked systems. The study was able to show the mobility of groups of students between communities. It was able to describe the frequency of movement, seasonal patterns, and characteristics of mobile students.

Menzies researchers were able to show predictable patterns of

movement for groups of Aboriginal children. It revealed movement within networks of remote communities, as well as to and from the major centres. These movements don't align with the 2023 school administrative boundaries.

The results showed the importance of understanding these networks to support continuity of students' education between schools, including sharing resources and coordinating curricula and strategies for inclusion of students. This study has implications for education policy and service design in the NT to improve strategies for engagement of mobile families.

→ What makes a Good Life publication shares First Nations perspectives on quality of life



## Dialysis Models of Care

The Dialysis Models of Care (DxMoC) project was the first research project in Australia to consider the broader health and financial impact of dialysis services in different settings. Findings from the quantitative and economic data have been published, with the first qualitative data published in 2023.

This publication, 'What makes a good life? Dialysis Models of Care project 2015-2023', is unique. It represents a First Nations perspective on collecting and sharing data to inform communities, service providers and policymakers. Through a series of workshops that engaged interpreters, First Nations co-researchers explored the quality of life from an Aboriginal perspective, producing more than 50 drawings and stories to contribute to the evidence base. They tell a strong and compelling story, with co-researchers advocating for enduring impact.

"We have to use the power of these workshops to make change, to broadcast it so we can change it. So that for children coming up, dialysis

is not their future. That's why we have to do a book, because these words and these pictures, they have to go further than these workshops" explains Nyunmiti Burton, a First Nations co-researcher (2017). The book will be disseminated to the co-researchers, their families, communities and patients.

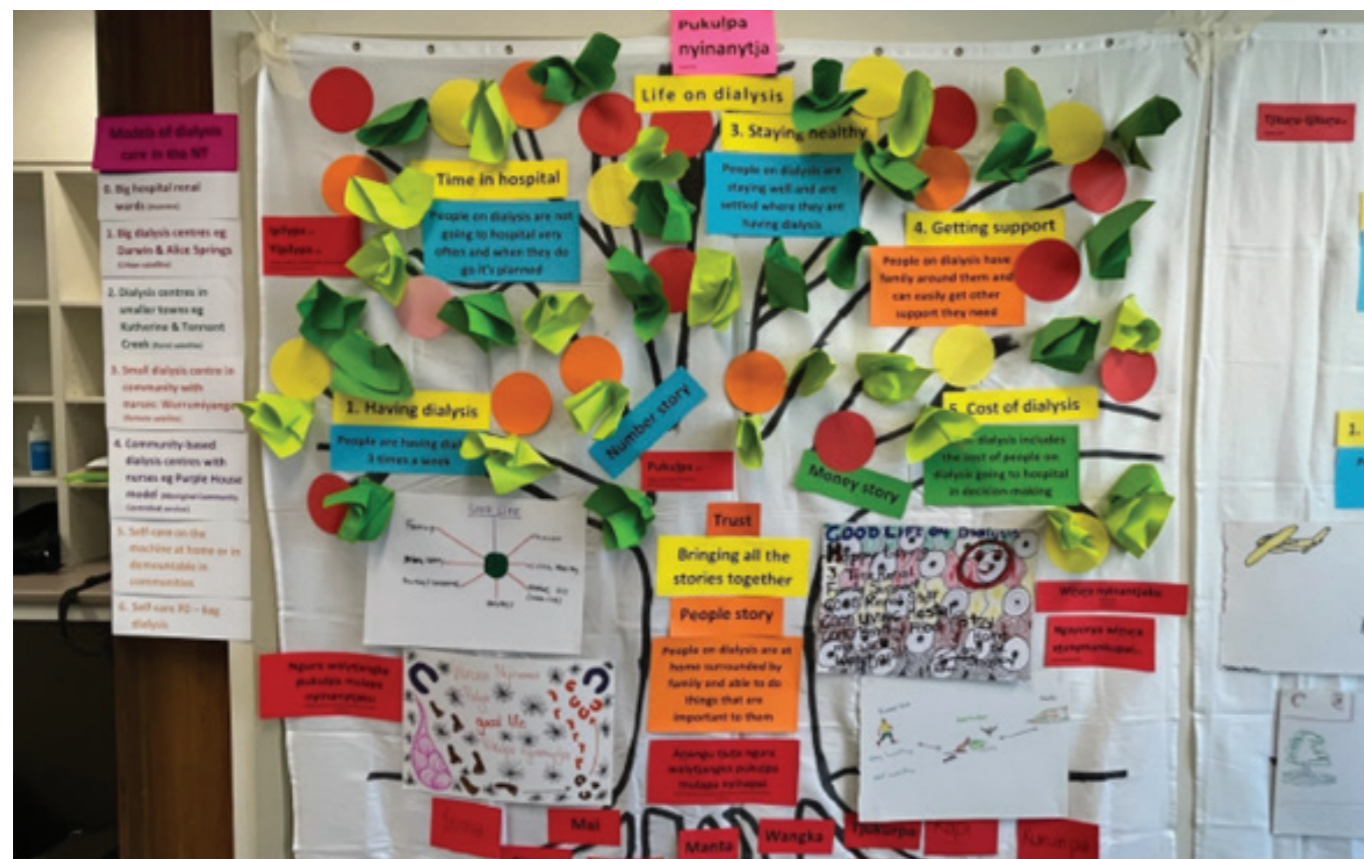
The project aimed to combine different data sources (quantitative, economic and qualitative) to inform decisions about the costs and benefits of renal services.

Costs and benefits are most often determined from the payer's perspective. However, patients need a mechanism for input into determining value for money of policy and service decisions that directly impact them. The Value for Money (VFM) Framework followed an innovative co-design process that considered the complex and culturally diverse context of renal services in the NT. Various stakeholders (patients, clinicians and policymakers) were engaged to identify and agree on criteria and standards against which

dialysis services could be assessed. The criteria considered the 4 Es of cost-effectiveness (economic, effectiveness, efficiency and equity).

Through workshops and focus groups, the 4 Es were conceptualised around three main narratives: the number story (dialysis treatments, hospital admissions, health outcomes), the people story (having a good life on dialysis, getting support when needed) and the money story (cost of dialysis services, cost of hospitalisations).

First Nations co-researchers visualised these stories through a tree that captured what dialysis care in the NT looks like when it works well for people, communities and governments. "This is the way we see it, the way Yapa (Aboriginal people) see it," said Lachlan Ross (Aboriginal co-researcher, July 2023). "We are trying to express this so that you [government/renal services] will understand. We are not just speaking from our lips, we are speaking from inside, from our spirits." (Alison Milyika Carroll, Aboriginal co-researcher, April 2023).



↑ Visualising what dialysis care looks like when it works well

## Kaurna Story for AIMhiY App

The Adelaide Stay Strong team engaged 68 young First Nations people in eight interactive workshops in August and September 2023. The yarning style sessions gathered young peoples' perspectives about wellbeing, strengths, worries and making change while also providing a chance to develop their skills in bush medicine, weaving and jewellery making.

During the sessions, the young people also described the important people in their lives. 'Mum [is important to me] because she helps me with literally everything', 'Nanna, because her presence is amazing' and 'Dad,

because he supports me and helps me and loves me and keeps me strong'. Their top strengths were cultural connection, sleep, exercise, family and friends, a safe place, music, dance, fun and laughing.

Their top goals were to focus on school, career and fitness. They planned to: 'play footy to be more sporty and active', 'get tutored, listen to my teachers and do my work', 'focus on my education and learn at my best'. The workshops were well received and proved a successful way of hearing young people's perspectives with feedback such as: 'I loved the

workshop. It was great spending time and learning how to weave with one another', 'I found it interesting learning weaving with people I can relate to'. These co-design workshops will inform the new Kaurna story for the AIMhi for Youth app – a digital mental health and wellbeing tool.



↑ Young people participate in activities and share stories about their wellbeing

## CRESTRA partners with Torres Health

Over the next five years, Menzies will partner with Torres Health - a newly established Aboriginal Community Controlled Health Service in the Torres Strait, Queensland.

Dr Sean Taylor, Professor John Wakerman and Dr Deborah Russell travelled to Mer (Murray) Island and Thursday Island as part of their initial engagement with Torres Health for the workforce theme of the NHMRC Centre of Research Excellence for Strengthening Health Systems in Remote Australia (CRESTRA) program.

The collaboration is also enabling workforce projects supported by the Cooperative Research Centre for Developing Northern Australia and the Central Australian Academic Health Science Network.

Dr Sean Taylor led the discussions with Torres Health board members, CEO and staff members. Dr Taylor

is a current Torres Health board member and descendent of the Dauareb Tribe – one of the eight tribes of Mer (Murray) Island in the Eastern Torres Strait region.

As a former Indigenous Health Worker in communities across the Torres Strait, Sean's extensive personal and professional networks

in the region enabled the team to engage with a wide range of health professionals and consumers to develop a better understanding of the region, its people, and their priorities regarding access to health services. This comprises an important foundation for Menzies' future research engagement in the Torres Strait region.



↑ CRESTRA team engage with Torres Health

## Evaluating the Healthy Homes Program

Commencing in 2021, the Northern Territory (NT) Government's Healthy Homes program sought a new approach to remote housing repairs and maintenance (R&M). The program prioritises cyclical and preventive maintenance to improve household health outcomes.

Menzies was contracted by the NT Department of Territory Families, Housing and Communities (TFHC) to monitor and evaluate Healthy Homes. Our team attended Housing for Health projects led by the not-for-profit company Healthabitat, interviewed public servants, householders, and staff of Aboriginal community-controlled organisations, participated in housing condition inspections at town camps, studied a tenancy support program called Living Strong, and examined inspections and expenditure data.

Our evaluation identified the fundamental importance of government contracts for remote service provision. Healthy Homes reconfigured the contractual model for remote housing R&M. Under

the old model, remote housing was serviced under both a trade panel and a housing maintenance coordinator contract. Under Healthy Homes, a single contract was typically awarded, with an emphasis on procuring Aboriginal business enterprises (ABEs).

A highlight of Healthy Homes was the award of 25 of the 31 remote maintenance contracts to ABEs, covering 49 remote communities. However, the prior trade panel maintenance model continued in 24 remote communities. The key component of Healthy Homes maintenance contracts that distinguished them from the prior trade panel maintenance model, was the requirement that property managers use a condition assessment tool (CAT) to undertake house inspections. This cyclical and preventive mechanism aims to generate maintenance works earlier than through tenant reporting. From July 2021 to February 2023, only 1,315 CAT inspections were undertaken across a total of 5,498 houses included in Healthy Homes—

about 23.9 percent of houses. Service providers reported that the inspection tool was confusing and difficult to use. Government data is also unable to distinguish responsive repairs from preventive maintenance works generated by CAT inspections.

The study highlighted whether or not there was a significant difference between the Healthy Homes program and the previous maintenance program.

Our final report made 32 recommendations for the Territory Government to consider addressing. We also recommended increased communication and coordination between TFHC (which manages Healthy Homes) and the Department of Infrastructure, Planning, and Logistics (DIPL) who oversees the individual maintenance contracts.

As the NT Aboriginal community-controlled housing sector develops, the government must ensure its designed programs deliver on their goal to improve household health outcomes.



↑ Broken sink and householder work-around. Image. Liam Grealy



↑ Sink water flows onto the bathroom floor. Image. Liam Grealy

## The Centre for Health and Other Complex Systems Research

The Centre for Health and Other Complex Systems Research (The Centre) is being established by Menzies to support and deliver a sustainable, contextualised health and complex systems research program to address health inequities across the NT, remote and northern Australia, and the broader Asia Pacific region.

In October, our Alice Springs Remote and Rural Health Services Research team was integrated under The Centre to strengthen Menzies' capacity to grow local partnerships and drive impactful research and evaluation in Central Australia. From a hub in Alice Springs, The Centre is:

- cultivating strategic partnerships
- establishing new health policy and systems research programs and networks

- growing Menzies' health systems research and evaluation capacity
- supporting joint efforts with partners to drive knowledge translation in policy and practice.

In 2023, under the shared leadership of Associate Professor Alexandra Edelman, Dr Deb Russell and Dr Supriya Mathew, the Centre worked with key partners and stakeholders across the NT to conduct initial mapping of health systems and multi-sectoral research and evaluation priorities. Key engagement events included the inaugural Menzies Central Australian Health Research Seminar, presenting to The Hon Ged Kearney MP, Assistant Minister for Health (Australian Government) at the Alice Springs Hospital in August and a guest seminar on the NT Social Outcomes Framework in September.

The Centre also supported Menzies' engagement with the Territory Government by investigating models for strategic and collaborative research that support policymaking.



↑ Professor John Wakerman & Dr Mary Wicks at the inaugural Menzies Central Australian Health Research Seminar

## Examining GP training enrolments in the Territory

The Rural Workforce Agency NT commissioned Menzies' Remote and Rural Health Services Research team to design and implement a study investigating the declining numbers of junior doctors enrolling in General Practitioner training in the Territory.

Menzies' researchers Professor John Wakerman and Dr Deborah Russell led research designed to:

- Examine and document trends in GP training commencements in the NT and nationally
- Determine the major factors driving these trends
- Document potential strategies that address factors driving declining trends.

Mixed research methods were used, including: a scoping review of literature; analysis of secondary data; semi-structured interviews with over fifty medical students, junior doctors, current and recent GP Registrars, GP Registrar supervisors and key informants from a range of stakeholder organisations (Northern Territory General Practice Education (NTGPE), Northern Territory Primary Health Network (NT PHN), Royal Australian College of General Practitioners (RACGP), Australian College of Rural and Remote Medicine (ACRRM), General Practitioners Registrars Australia, General Practitioners Supervisors Australia, Aboriginal Medical Services Alliance Northern Territory (AMSANT),

Remote Vocational Training Scheme (RVTS), Rural Doctors Association of Australia, NT Health, Commonwealth Department of Health and Flinders University); and a workshop with key stakeholder organisations to prioritise potential solutions.

The research found from a peak of 74 new GP training enrolments in the NT in 2016, numbers have plummeted by 81% to only 14 new enrolments in 2023. This decline is greatly eroding primary healthcare services in the Territory and there is a risk it will continue to do so into the future. Therefore, it is critically important that the issues causing this decline are addressed.

## The Rural and Remote Health Services Research Program hosts international presenters

On 18 July, the Alice Springs Health Services Research Team hosted an international seminar on Optimising Digital Solutions to Improve Access to Primary Health Care in Remote Indigenous Communities (Digital Health) project. Four experts, Kim Brooks, James Card, John Mah and John Pawlovic, from the British Columbia First Nations Health Authority and State Health Authority, who have been actively involved in health service delivery in remote First Nations communities in Canada, were invited as speakers.

The seminar:

- highlighted how the delivery of a hybrid model of telehealth was successfully implemented in remote communities of British Columbia
- discussed the role of the First Nations Health Authority in improving First Nations people's health
- included a presentation from our Menzies Digital Health team about initial ideas and technologies being explored in current remote project sites in the NT.

Professor John Wakerman also presented on health services and climate change research being led by Menzies with partners in Central Australia. The four experts from Canada visited several primary health care clinics, including the Central Australian Aboriginal Congress-auspiced Ltyentye Apurte (Santa Teresa) clinic and the community art centre. The Canadian group also visited Pirlangimpi, one of the co-design and implementation sites for the Digital Health project.



↑ Canadian health service delivery experts speak in Alice Springs



↑ Canadian health service delivery experts visit key sites in Alice Springs

## Menzies Life Course Program

The Aboriginal Birth Cohort study, established by Associate Professor Susan Sayers AM in 1987, is the longest-running birth cohort study of First Nations people in Australasia. It also forms part of the Menzies School of Health Research Life Course Program. The program follows the health of study participants across their life course through regular health checks to investigate the relationship between early life factors, later health and disease. Regular health

checks have been conducted over the last 36 years. The fifth follow-up is nearing completion for participants aged 28-36. The study team, led by Professor Gurmeet Singh and Program Manager Dr Belinda Davison, has seen participants at their place of residence in over 40 urban, rural and remote NT communities.

In October, our Life Course Program collaborated with the Hudson Institute of Medical Research on an important, first-of-its-kind research

on the specific causes of hypertension risk in Australian First Nations communities. The research project used data from two long-term cohort studies supported by Menzies: the Aboriginal Birth Cohort and Top End Cohort, funded by the National Health and Medical Research Council (NHMRC). This important study found that timely detection of primary aldosteronism is important as correct identification allows targeted treatment for this highly modifiable cardiovascular disease.



# Menzies Tuberculosis Program

Tuberculosis (TB) is the world's leading infectious cause of death. Menzies works with regional partners to strengthen health system responses to TB in Indonesia, Timor-Leste and the Northern Territory. Nearly two-thirds of the 10.6 million people who fell sick with TB globally in 2021 were in the Asia-Pacific region. Indonesia alone accounts for nearly one million of these people. Timor-Leste has the world's seventh-highest TB incidence rate and the fourth-highest rate of death from TB. While the number of people who become sick with TB in the Northern Territory is low and declining, the Territory still has the highest burden of TB among Australia's states and territories.

In Indonesia, Menzies has worked in partnership with the Mimika District Health Office and Papuan Health and Community Development Foundation to strengthen TB health systems. This partnership has been funded by the Australian Government Department

of Foreign Affairs and Trade for over six years. Implementation research to solve TB policy-practice gaps has led to hundreds of children in Papua now having access to TB preventive therapy. The program showed resilience despite the major disruptions of COVID-19. The project uses a continuous quality improvement approach to support the local TB workforce, scale up TB case finding and use of TB preventive treatment, and improve the diagnosis and management of drug-resistant TB. This work has seen Mimika become nationally recognised as one of the highest-performing districts for TB case finding in Indonesia.

In 2022, Menzies and the Timor-Leste Ministry of Health launched the first national TB prevalence survey of Timor-Leste. The TB prevalence survey is the largest health research project ever conducted in the country, with more than 15,000 people screened for TB across all 13 municipalities of the country.

The project is expected to contribute vital new information about the true extent of the TB epidemic, which will help the National TB Program and partners to plan and implement TB control strategies more effectively.

First Nations Australians continue to have rates of TB around five times higher than in non-Indigenous Australian-born people. Menzies research previously confirmed that TB continues to spread in some First Nations communities, particularly in remote regions.

In response, Menzies has secured funding from the Medical Research Future Fund to work with those communities affected by TB.

The REACT project is supporting primary health services to recognise and respond to TB and to work with TB-affected people, families, and communities to co-design more culturally safe and patient-centred models of TB care.



↑ TB program staff and clinicians from Mimika (front row) and facilitators (back row) worked on developing operational research outputs at a Structured Operational Research Training in TB (SORT-IT) course.



↑ Menzies radiographer Goncalo Pinto using CAD4TB for TB screening in Timor-Leste.

# STRONG TL – a foundation for stronger partnerships delivering on improved health systems in Timor-Leste

The STRONG TL (Surveillance Training, Research Opportunities and National Guidelines for communicable disease control in Timor-Leste) project finished in 2023 after five years of partnership with the Ministry of Health. The partnership helped lay a platform for a large expansion of health system strengthening and research work in Timor-Leste (2018-2023).

The STRONG TL project involved a side-by-side mentoring approach, to build additional capacity within the health system for responding to infectious diseases challenges through improved laboratory diagnostic capability, surveillance, and clinical recognition and management of infectious diseases, as well as support for operational research and development and implementation of evidence-based guidelines.

Between 2020-2022, COVID-19 posed new, complex challenges that were met by Timor-Leste in one of the most effective responses seen globally. Menzies, through the STRONG TL project, with additional

support from the Australian Government, was able to stand side-by-side with the Government of Timor-Leste, supporting health system strengthening efforts and public health decision-making through each critical juncture of the pandemic.

The STRONG TL project has provided a platform for further funding to support strategic investments in projects that are aligned to Timor-Leste Ministry of Health priorities. This will allow Menzies to continue partnering with the Government of Timor-Leste to work towards improved health outcomes for the Timorese people.

The Fleming Fund Country Grant to Timor-Leste, supported by the UK Aid Fleming Fund (2019-2025), is an ongoing project, tackling antimicrobial resistance and antibiotic use with a One Health approach in Timor-Leste. Further funding from the Australian Government has also been used to support projects that address other public health challenges, including malaria, tuberculosis, HIV, leprosy, dengue, childhood pneumonia,

and vaccine-preventable diseases like measles and hepatitis B. The focus on mentoring has carried through to subsequent projects. It is reflected in an ongoing commitment to support Timorese health professionals and researchers as they continue to lead a growing number of research and capacity-building projects that are having a lasting impact.



↑ The STRONG-TL team and various training delivered under the project.

## New studies change guidelines to recommend higher dose antimalarials for relapsing malaria

The Menzies Malaria team led a global collaboration to conduct meta-analyses to define the optimal dose of primaquine for preventing relapsing vivax malaria.

Using individual trial data collated through the WorldWide Antimalarial Resistance Network in Oxford, Dr Rob Commons led a group of over 60 international malaria experts to investigate the effect of primaquine dose on efficacy and safety. This is the first such analysis in primaquine's

70-year history. Data were gathered from 26 trials enrolling 6,800 patients across 16 countries. The analysis found that increasing the dose of primaquine from 3.5mg/kg to 7mg/kg halved malaria relapses with minimal safety concerns.

Following the publication of two resulting studies in *Lancet Infectious Diseases* and international presentations, Menzies researchers were invited to present the results to the World Health Organization

Malaria Guidelines Committee in Geneva, Switzerland. Based on this evidence, the committee recommended an increase in the primaquine dose across endemic countries. A recommendation that will potentially halve the risk of malaria relapses in the 5 million patients with vivax malaria each year. Additional studies are underway with partners in India, Indonesia and South America to better understand the local benefits and risks of changing the primaquine dose in these locations.

## The Paediatric Respiratory Microbiome Program

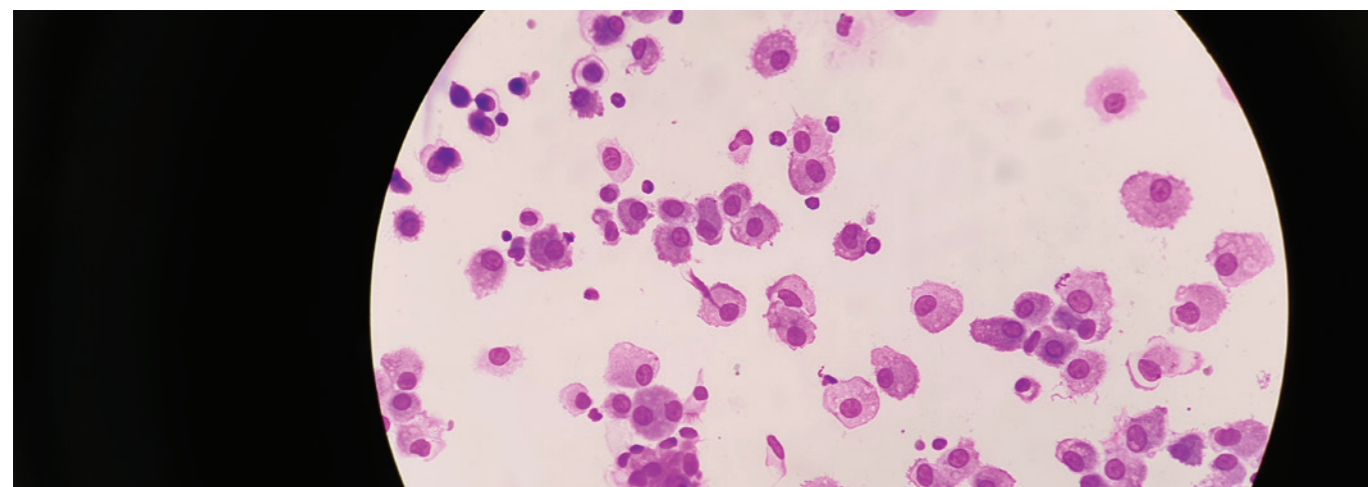
The Paediatric Respiratory Microbiome Program aims to improve understanding of the microbiome underlying chronic respiratory and middle ear infections. Current projects are using OMICs technologies to characterise the airway microbiome and determine clinically useful biomarkers.

A long-term goal of the work is to translate an understanding of

the airway microbiome into new diagnostic tests. Immune responses to infection can cause white cells to produce extracellular traps, also known as ETs. ETs help the body to fight infections by trapping bacteria but can also cause inflammation if not effectively cleared. ETs are usually detected using specialist methods that are not available in clinical laboratories. This year, in collaboration with Associate Professor

Gabriele Minigo and Dr Steven Kho from the Global and Tropical Health Division, we found that ETs can also be detected from airway specimens using a technique that is already available in pathology laboratories.

This important work, has helped advance respiratory endotyping methods – a research area that is critical to effectively treating children with chronic wet cough.



↑ Identifying variations of respiratory conditions in the laboratory

## Characterising P. vivax treatment and transmission using genetics

The malaria team developed novel genetic surveillance tools for *P. vivax* that will shed new light on the cause of recurrent infections in clinical trials. Interpreting treatment efficacy can be difficult owing to uncertainty in whether recurrent infections derive from blood-stage treatment failures (recrudescence), reactivated liver stages (relapse) or new inoculations (re-infection). Associate Professor Sarah Auburn and global partners in the vivax Genomic Epidemiology Network have established unique *P. vivax* genotyping assays that can aid distinction of recrudescence, relapse and reinfection.

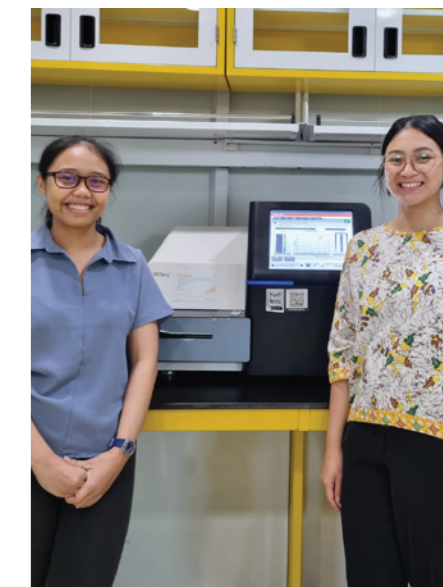
The genotyping assays only require a drop of infected patient blood and are already being applied to large clinical trials conducted in Ethiopia and the

Asia-Pacific. The results will provide new clarity on *P. vivax* treatment failure and relapse epidemiology to guide optimal policies.

The novel methods use carefully selected genomic markers to capture how related pairs of infections are to one another. In addition to recurrence classification, the data is highly informative of parasite transmission and can be used to monitor infection spread within and across borders.

The assays are being established at partner sites in Jakarta and in the GenRe-Mekong program for widespread surveillance of *P. vivax* in Cambodia, Laos, Thailand and Vietnam, where *P. vivax* now accounts for >90% of malaria cases. Amongst other applications, the malaria control

programs plan to use the data for early outbreak detection and to identify cross-border importation to enhance local containment strategies.



↑ Assays being established at partner sites



↑ Gathering for the GenRE Mekong 2023 Scientific Forum

## The Maternal Health Lighting the Spark Conference

Our Maternal Health Program hosted the Lighting the Spark conference in October, a novel event to identify priority gaps, including enablers and barriers to implementing key strategies to improve maternal health and associated morbidities in the Northern Territory.

The event captured the perspectives of health professionals, community leaders, and the general public.

Menzies funded and administered the important conference. Leading up to

the event, the Steering Committee of the Lighting the Spark conference conducted focus group discussions and semi-structured interviews with women across the Top End to listen to their experiences and perspectives of maternal health services in the region.

Over 70 participants, including clinicians, nurses, scientists, First Nations community leaders and community people, attended the event to discuss key themes stemming from the focus group discussions and interviews.

The key themes covered:

- from womb to birth
- from preconception to postpartum
- from maternal health to child
- adolescent health

Growing research evidence continues to demonstrate that what happens in utero and in early life influences long-term health. Future research will focus on finding innovative strategies to improve the health of mothers and children from preconception to postpartum.

## The Centre of Research Excellence in preventing and managing bronchiectasis, especially in Aboriginal and Torres Strait Islander children

In August, the Centre of Research Excellence (CRE) in preventing and managing bronchiectasis hosted its third conference in partnership with the Queensland University of Technology, University of Sydney, University of Western Australia, Griffith University and Melbourne University.

The CRE is led by Menzies and funded by the National Health and Medical Research Council (NHMRC). The conference highlighted novel clinical research to reduce the burden of bronchiectasis by conducting clinical research (informed by novel technologies and strategies) to both prevent and better manage bronchiectasis, supported by a synthesis of evidence and translation into practice and policy.

Over 40 members of the Bronchiectasis CRE, including

clinicians, nurses, scientists and First Nations community leaders, met to consolidate novel clinical research progress, research translation of research studies and future research directions.

One of the key outcomes and focused priorities is knowledge transfer and translation into policy and practice to improve the respiratory health of First Nations children with bronchiectasis. This includes the 2023 guidelines on the management of bronchiectasis and the development of First Nations specific education resources to aid clinicians in recognising and thus treating bronchiectasis earlier.

"I firmly believe that the participation in studies has significantly improved our understanding of bronchiectasis and helped us advocate for our daughter with non-paediatric health professionals. It has facilitated the

development of pathways that will hopefully make this journey easier for the next family. It has given us a support network we would otherwise not have had access to. It has offered hope for new interventions that will improve our daughter's quality of life and wellbeing. In short, research helped us help her to thrive".

This is a quote from a study participant of the BETTER study, funded by the Medical Research Future Fund under the CRE umbrella. The BETTER study aims to determine whether the regular use of erdosteine can reduce flare-ups.

## The Prevention of Early-Onset Acute Respiratory Infections Program

The Prevention of Early-Onset Acute Respiratory Infections Program was awarded funding from the National Health and Medical Research Council - Medical Research Future Fund International Clinical Trial Collaborations, to conduct the Pro-Kids trial. A randomised controlled trial (RCT) to determine whether neonatal probiotics can prevent early-onset acute respiratory infections (ARIs) in high-risk children. Pro-Kids is an international collaboration between researchers in Australia and Goroka, Papua New Guinea. The research team presented at the Lighting the Spark conference in October 2023 on this double-blind (allocation concealed), randomised controlled trial (RCT). Eligible infants aged less than 3 days old can participate in the trial and are randomised into two groups. One group will receive the active oral probiotic treatment and the other group will receive an oral placebo for 7 consecutive days. Participants will be monitored pre and post-treatment, then followed up at 1 month, 4 months and 7 months. The primary outcome is medically attended episodes of acute respiratory infection between birth and 12 months determined via medical file reviews. The trial will also evaluate safety, the gut microbiome and immune development. The study provides opportunities for First Nations research nurses, health practitioners, and research students to become a part of the study.

## The D-Kids Trial

The Vitamin D supplementation to prevent respiratory infections among Indigenous children in the Northern Territory: a randomised controlled trial (D-Kids) is a clinical trial that is funded by the National Health and Medical Research Council. It aims to determine whether daily vitamin D supplementation (compared to placebo) given to mothers (28-34 + 6 weeks gestation until birth) and their infants (birth until age 4 months) reduces the incidence of acute respiratory infections (hospitalisations or primary care presentations) in the infants' first 12 months of life. Still in the recruitment phase of the clinical trial, D-Kids continues to travel to participating communities

across the Top End including Gunbalanya, Jabiru, Wadeye, Palumpa and the Tiwi Islands. The research team works closely with hospitals and primary care staff, as well as Top End families, to better understand the links between vitamin D and the immune system in reducing acute respiratory infections.

Quoted from a study participant in the clinical trial on 26 August 2023: "I had the most amazing experience on the D-Kids study, the study is made easy to remember throughout the whole process and was wonderful to participate in. We would be very happy to do more studies through Menzies School of Health Research".



↑ One of the D-Kids babies at their 4-month visit.

# OUR PEOPLE



↑ 2023 Menzies Medallion recipients Patj Patj Janama Robert Mills and Professor Tricia Nagel accept their award.

## Organisational Structure

Senior Executive Team			
<b>Professor Alan Cass AO</b> Director			
<b>Dr Sean Taylor</b> Deputy Director Indigenous Leadership and Engagement	<b>Brendon Douglas</b> Deputy Director Strategy	<b>Professor Anna Ralph</b> Deputy Director Research	<b>Professor Louise Maple-Brown</b> Deputy Director Research
<b>Mark Mayo</b> Associate Deputy Director Indigenous Leadership and Engagement	<b>Esther Miller</b> Associate Deputy Director Strategy	<b>Tegan Ryan</b> Chief Operating Officer	<b>Chris Pearce</b> Chief Operating Officer

Research			
<b>Dr Tina Noutsos</b> Global and Tropical Health	<b>Professor Anne Chang AM</b> Child and Maternal Health	<b>Professor Gary Robinson</b> Centre for Child Development and Education	<b>Associate Professor Gillian Gorham</b> Wellbeing and Preventable Chronic Diseases
Malaria, TB and Other Regional Endemic Diseases	Respiratory Health	Preventing Suicide and Self-Harm	Mental Health and Wellbeing
Regional Health System Strengthening	Maternal Health	Evaluation of Child and Family Health and Social Services	Tobacco Control and Housing
Global Women's and Children's Health	Immunisation	The Child and Youth Development Research Partnership	Nutrition
Tropical and Emerging Infectious Diseases	Ear Health	Strong Parents and Children	Diabetes
Viral Hepatitis	Childhood Anaemia	Resilient Youth	Cancer Epidermology
Rheumatic Heart Disease	Life Course	Population Health and Wellbeing	Renal
Tobacco	Polymicrobial Research		Rural and Remote Health Services
Alcohol and Other Drugs	International Child Health		
	Child Health Laboratory		
	Housing and Hygiene		
	Indigenous Medicinal Plants		

Education, Training and Pathways		
<b>Associate Professor Heidi Smith-Vaughan</b> Higher Degrees by Research	<b>Dr Sharon Chirgwin</b> Postgraduate and VET studies	
Master by Research	Postgraduate Coursework Programs	The Ramaciotti Regional and Remote Health Sciences Training Centre
Doctor of Philosophy	Vocational Education and Training	HealthLAB
Honours Program		

Professional Services			
Executive Support	Development	Research Office	Data Management
Finance	Biyamarr ma	Information Technology	Research Quality
Human Resources	Work Health and Safety	Governance and Risk	Ethics Office
Legal Services	Facilities and Operations	Communications, Media and Marketing	Laboratory Science
			Biostatistics

## Biyamarr ma Traineeship Program

In 2023, three students graduated from the Biyamarr ma Traineeship Program.

Congratulations to:

- **Porsche Cahill** (Certificate III in Laboratory Skills)
- **Royce Ramsamy** (Certificate III in Laboratory Skills)
- **Shenea Tipungwuti-Edwards** (Certificate III in Laboratory Skills)

As part of their traineeship, the graduates undertook work placement in the Menzies Laboratory and the Ramaciotti Regional and Remote Health Sciences Training Centre (Menzies-Ramaciotti Centre). All trainees were nominated for the GTNT Aboriginal or Torres Strait Islander Apprentice/Trainee of the Year award. It was fantastic to see Menzies Trainee Shenea Tipungwuti-Edwards win this award.

Porsche Cahill was also nominated and named the Aboriginal and Torres Strait Islander Student of the Year at the Northern Territory Training Awards.

Current 2023 Biyamarr ma trainees include:

- **Kiriz Oliver** (Certificate III in Laboratory Skills)
- **Shiani Ah-Wong** (Certificate III in Laboratory Skills)



↑ Shenea Tipungwuti-Edwards, Lesha Couzens (Kinetic IT), Royce Ramsamy and Porsche Cahill at the GTNT awards night. Image credit: GTNT awards night, taken by North Australia Media.

## Menzies-Ramaciotti Centre

In 2023, The Menzies-Ramaciotti Centre worked with local health and education organisations, schools and communities to engage 2,236 youth and families.

This engagement was facilitated through STEM outreach, VET, higher education aspiration raising, health promotion and other activities. The centre also supported 59 youth through work placements,

64% of which were First Nations student placements, leading to further training, study and/or employment in the health sector. Since its establishment in 2020, the Menzies-Ramaciotti Centre has supported 180 youth through:

- work experience opportunities
- school-based training
- traineeships undergraduate and postgraduate degrees research and employment

Of the 180 youth, 114 (63%) were Aboriginal and/or Torres Strait Islander students. The centre has also engaged 6,848 youth and communities through regional and remote outreach activities.

## Menzies Future Leaders Fellowship

Menzies Future Leaders Fellowship Our Future Leaders Fellowship initiative was established to support the next generation of researchers at Menzies to develop and progress their careers. The Future Leaders Fellowship program includes targeted identified priority diversity and leadership areas with one Fellowship awarded to an early-career researcher, one to a female researcher and one to an Aboriginal and/or Torres Strait Islander researcher.

Following a peer review process, the following Menzies staff were awarded a fellowship for 2024:

Menzies Future Leader Fellowships – awarded to six applicants including two Maple-Brown Family Foundation Fellowships

- **Sarah Clifford – Maple-Brown Family Foundation Fellowship**  
Research vision: To contribute new evidence that helps decision makers and the public better understand the commercial determinants of alcohol use in the NT and inform policy that can lead to better outcomes for the community.
- **Dr Holger Unger – Maple-Brown Family Foundation Fellowship**  
Research vision: To strengthen pregnancy and maternal health outcomes in malaria-endemic and remote settings in Papua New Guinea and Australia through novel preventative strategies co-designed with communities.
- **Dr Anna Wood**  
Research vision: To lead a research program embedded within the Diabetes Across the Lifecourse Partnership, which is focused on improving

cardiometabolic health outcomes for Aboriginal and Torres Strait Islander people living with diabetes.

- **Beth Temple**  
Research vision: To increase the number of children globally that receive pneumococcal conjugate vaccine (PCV) and to reduce inequities in access to this life-saving intervention.
- **Dr Hannah O'Farrell**  
Research vision: To lead a program of research identifying pheno-endotypes and non-invasive biomarkers in children with bronchiectasis.
- **Dr Supriya Mathew**  
Research vision: To drive the growth of the Menzies climate change research program to mitigate current/emerging climate related health risks to our remote Australian population.

## Menzies Small Grants

Now in its seventh year, our Small Grants program is an internal, competitive, peer review program providing seed funding for new ideas and developing projects that will contribute to sustainable research programs at Menzies.

We are pleased to continue this program into 2024, with the award of five Menzies Small Grants. The successful applicants and projects are:

- **Dr Michael Binks and Amy Bleakley**  
Early immune determinants of susceptibility to ARI: a proteomics pilot study
- **Associate Professor Matt Grigg**  
Understanding the distribution and seroprevalence of rickettsioses in North Sumatra, Indonesia
- **Angela Rumaseb**  
Establishing Illumina-based amplicon sequencing in the Menzies laboratory

and optimising application to Plasmodium vivax dried blood spots

- **Dr Prabhakar Veginadu**  
Mapping the landscape of oral health service provision and promotion for remote communities in Central Australia
- **Nevio Saramento**  
Strengthening the pneumococcal research capacity and capability of the National Health Laboratory of Timor-Leste – FINDINGPNEUMO

## Long Service Awards

Our long service awards provide the opportunity to reflect on the contributions of those who have been instrumental to Menzies' development, growth and success. Recognised in 2023 for their long-standing contributions were:

### 20 years:

- Kim Piera
- Prof Gurmeet Singh

### 15 years:

- Dr Michael Binks
- Prof Phil Giffard
- Prof Tricia Nagel
- Debbie Wang
- Sharon Thompson



↑ Menzies Director, Prof Alan Cass and Chair of the Menzies Board the Hon Trevor Riley AO KC, congratulate Kim Piera on 20 years of service.



↑ Menzies staff celebrate their 15 years of service at Menzies



↑ Menzies staff congratulate their colleagues at the end of year awards.

## Research Excellence

At Menzies, we recognise that our people are our greatest asset. We strive to encourage and promote excellence in research, and endeavour to build capacity to enable our people to excel in their chosen field.



↑ Professor Anne Chang AM with her 2023 CHA Medal of Distinction



↑ Menzies Timor-Leste team representatives accept their award.



↑ Dr Gabrielle McCallum accepts her 2023 VC Award for research supervision



↑ Communicate Study Partnership team members accept their award.

### 2023 Children's Healthcare Australasia Individual Medal of Distinction

Professor Anne Chang AM received this award for her outstanding contributions to paediatric healthcare including the important finding that with optimal treatment, bronchiectasis is reversible in children and does not have to be a life-shortening chronic disease.

### 2023 Vice Chancellor's Award for Higher Degree by Research (HDR) Supervision, Charles Darwin University

Dr Gabrielle McCallum was awarded this accolade for outstanding HDR supervision and encouraging excellence across the various dimensions of supervision through the recognition of best practice and quality supervision.

### 2023 Lung Foundation Australia and David Serisier Memorial Award for Translational Research in Bronchiectasis

Kobi Schutz received this award at the Annual Scientific Meeting for The Australia & New Zealand Society of Respiratory Science and The Thoracic Society of Australia and New Zealand, for her presentation: "Baseline characteristics of an RCT using a bronchiectasis management plan".

### 2023 Vice Chancellors Award for Research Excellence in Early Career Research, Charles Darwin University

Dr Steven Kho received this accolade for his work in advancing health research and understanding in malaria.

### 2023 Vice Chancellors Award for Research and Innovation (Highly Commended), Charles Darwin University

The Communicate Study Partnership team was recognised for its work at the CDU Vice Chancellors Excellence Awards. Project Coordinator Maddison Sims and Research Assistant Tiana Alley accepted the award on behalf of the team.

### 2023 Vice Chancellors Award for Research Partnership (Winner), Charles Darwin University

Menzies Timor-Leste Team was recognised for their effective leadership and outstanding innovation, with significant impact on health in Timor-Leste at the CDU Vice Chancellors Excellence Awards. Their research has led to health system strengthening, local workforce development, laboratory strengthening, and health policy change based on their evidence-based research findings. The award was accepted on behalf of the large team, by Lucsendar Alves.

## Internal Awards

### 2023 Ryan Family Prize

The Ryan Family Prize is an annual award that recognises outstanding contributions to Menzies from individuals or groups. The prize is awarded to staff who go above and beyond in their role to help make Menzies a great place to work. Nominees demonstrate that they have:

- contributed to furthering the goals of Menzies
- shown commitment and dedication to the core values of Menzies
- fostered an environment of collaboration, teamwork, respect and communication both internally and externally
- displayed energy, motivation and enthusiasm.

The winner is awarded a \$3,000 prize (to be used for professional development purposes) and a perpetual trophy, thanks to the generosity of the Ryan family.

The 2023 Ryan Family Prize winners are Dr. Winnie Chen and Angelica Tan, student representatives from Menzies Higher Degree by Research (HDR). Both Winne and Angelica work to foster friendship, knowledge sharing

and collaboration among students. They demonstrate outstanding enthusiasm and motivation to improve the student experience for both students and supervisors at Menzies.

### 2023 Menzies Medallion

The Menzies medallion is awarded by the Menzies Board to individuals or groups that have made a considerable contribution to health relevant to the Northern Territory. In 2023, Menzies Mental Health Research Lead, Professor Tricia Nagel and Lead Cultural Advisor of the Menzies Stay Strong Mental Health Program, Patj Patj Janama Robert Mills were awarded the Menzies Medallion.

This was in recognition of their incredible leadership in and contributions to Aboriginal and Torres Strait Islander health research, services, training and mentoring.

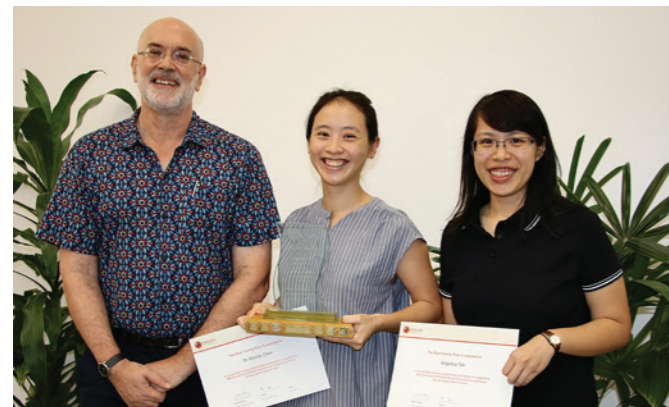
### Menzies Mentorship Award

Menzies aims to be a strong and resilient organisation. We are dedicated to nurturing skilled and dedicated staff. As part of this, Menzies recognises the importance of effective mentorship - both formal and informal for academic and professional

staff in achieving our goal. In recognition of this, in 2022, Menzies developed the Mentorship Award. This award recognises staff who provide excellence in mentorship. Recipients are acknowledged for outstanding contribution as a mentor, including by providing support, sharing knowledge and demonstrating respect for the development of colleagues.

The winner of the 2023 Menzies Mentorship Award for academic staff was Dr Chris Lowbridge. Dr Lowbridge was recognised for being generous with his time and knowledge, providing support to Menzies staff and students as well as external members moving into research. He is regarded for his helpful, patient and insightful nature, leading him to be an in-demand supervisor and mentor.

The winner of the Mentorship Award for professional staff was Amber Garden. Amber was recognised for her commitment to supporting her team's growth and professional development. She was noted for her remarkable ability to identify and nurture individual strengths, helping others reach their full potential.



↑ Menzies HDR Student Representatives Dr Winnie Chen and Angelica Tan receive the Ryan Family Prize.



↑ Patj Patj Janama Robert Mills and Prof Tricia Nagel are awarded the Menzies Medallion by Professor Alan Cass.



↑ Professor Alan Cass presents the Mentorship award to Dr Chris Lowbridge (academic staff) and Amber Garden (professional staff)



### Val Asche Memorial Prize for Academic Excellence

Menzies Education acknowledges the importance of recognising outstanding achievement by a student undertaking a coursework award.

The Val Asche Memorial Prize for Academic Excellence is awarded on an annual basis at the end of each academic year.

Dr Valerie Asche (Deceased) was the head of the microbiology research unit at Menzies School of Health Research from 1986 to 1994 under its founding director Professor John Mathews. Dr Asche supported this award for 19 years before sadly passing away in 2019. Dr Asche's family maintains an interest in education and continues to support academic excellence among Menzies students.

The 2023 winners of the annual Val Asche Memorial Prize for Academic Excellence:

- **Master of Public Health**  
Ms Erica Bleakley
- **Master of Health Research**  
Ms Nicole Evans
- **Graduate Diploma of Public Health**  
Ms Shelley Parker
- **Graduate Diploma of Health Research**  
Ms Jessica Male

### 2023 Harry Christian Giese - Research Into Action Award

The Harry Christian Giese - Research Into Action Award commenced in 2013 in recognition of the significant and formative role that the late Harry Giese AM MBE played in the establishment of the Menzies School of Health Research. His important legacy is acknowledged and remembered through this award. Both Harry and his wife Nancy "Nan" Giese were resolute in their

commitment to providing educational opportunities for Territorians and for their support of Menzies. This award has been made possible through the generous support of the Giese family.

Dr Josie Povey was the 2023 recipient, for her project titled: Ngirramini ngini awarra yimanka api awarra ngawurrangurumiga - 'We look after the story that we made'. This will build on work done during 2019-20 through the Ngawurrangajirri ('We care for each other') initiative. In collaboration with community leaders, a Tiwi-language digital resource for mental health and wellbeing will be created, developed and distributed. The aim is to improve mental health literacy, self-awareness and self-management while strengthening connections to language and culture. This project harnesses protective factors for wellbeing, and forms a community led, culturally grounded suicide prevention activity.

# EDUCATION & TRAINING



↑ Master of Public Health /Master of Health Research (Double degree) student, Aditi, chats with Associate Dean of Menzies Education, Dr Sharon Chirgwin.

In 2023, Menzies put COVID border restrictions well and truly behind us as we welcomed our largest international student cohort from an increasingly diverse range of international locations. This surge not only reflected our institution's growing reputation on the international stage but also highlighted how globally, public health has become a priority area of study.

Our public health and health research coursework units also garnered increasing recognition across CDU, with a 300% increase in student numbers from other postgraduate courses, these students electing to integrate our units into their study plans.

This recognition demonstrates the relevance of research skills and public health perspectives, as they address pressing global challenges while providing students with valuable insights applicable across an increasing number of disciplines.

We celebrated 52 students graduating from our coursework awards and congratulated our two new scholarship recipients –

- **Ms Ellie Aniulis** for the 2023 Menzies Graduate Certificate Postgraduate Coursework Scholarship
- **Ms Sharna Motlap** for the 2023 Menzies Aboriginal and Torres Strait Islander Postgraduate Coursework Scholarship.

#### Master of Public Health Graduates completing with a research thesis:

- **Asha Kaur Singh (Barnes)**  
Implementing chronic condition self-management programs in Aboriginal Health settings; learnings from health service staff involved in the Aboriginal DESMOND program.
- **Ellie Chan**  
A process to identify healthy food and drinks in remote food retail point-of-sale systems: a feasibility and validity study.
- **Kelly Blackburn**  
Exploring 15 years of Aboriginal health research in the Kimberley region of Western Australia: 'We've been researched, we think, from head to toe, inside and outside, upside down.'

- **Nicola Coalter**  
The role marketing plays in gambling beliefs and behaviour of young male sports bettors living in Darwin.
- **Radhika Krishnan**  
An evaluation of pharmacist and pharmacy services in the remote communities of Top-End Region in Northern Territory.
- **Ling Hong Yeoh**  
Attitudes and Perceptions on Advance Care Planning among Chinese-speaking Older Australians Living in Sydney.
- **Lori Roberts**  
Exploring Barriers and Facilitators for Employing Allied Health Therapy Assistants in Private Practice.
- **Mele Palu**  
The role of cultural safety as part of a human rights based approach to improve the health of Indigenous Peoples: a scoping review of the qualitative evidence.

#### Master of Health Research Graduates completing with a research thesis:

- **Nicole Evans**  
COVID-19 vaccination and the menstrual cycle; an integrative review.



↑ Menzies graduates attend one of the 2023 Graduation ceremony's in Darwin.



## HDR Graduates

### 2023 HDR Program

Menzies continues to attract excellent students into the Higher Degree by Research program. In 2023, the cohort consisted of 67 students enrolled in Master by Research and PhD awards, including 10 new commencements.

During the year, we were proud to see six students graduate. Menzies HDR students are conducting health research with local, national and global importance. Students are located across Australia and overseas.

Many projects relate to First Nations health with invaluable support from community-based researchers and local health services including Aboriginal Community Controlled Health Organisations (ACCHOs). While other projects extend globally including research projects in Ethiopia, Indonesia, Cambodia, Timor Leste, Bhutan, Laos, Pakistan, Solomon Islands, Malaysia, Zambia, and Papua New Guinea.

### HDR Completions 2023

- **Bianca Middleton, PhD**  
Strategies to reduce the burden of gastroenteritis for Aboriginal children
- **Matthew Hare, PhD**  
The epidemic of diabetes among Aboriginal people in the Northern Territory, Australia, and its impact on women during and after pregnancy
- **Will Cuningham, PhD**  
Innovative approaches to surveillance and quantifying the burden of bacterial infections and antibiotic resistance in northern Australia
- **Trisasi Lestari, PhD**  
Strengthening health system responses to tuberculosis in eastern Indonesia
- **Sukoluhle Moyo-Nuwagaba, PhD**  
Exploring how healthcare staff can provide carer smoking cessation programs in paediatric hospital settings to reduce smoking-related childhood illness.
- **Bernard Leckning, PhD**  
The epidemiology of hospital-treated self-harming thoughts and behaviours in the NT

### HDR Scholarships announced in 2023

- **Lexi Gregory, PhD**  
Measuring parenting constructs in ways that work for families and practitioners (RTP)

- **Emma Weaver, PhD**  
Exploring effective strategies to support Aboriginal and Torres Strait Islander youth, children and families to prevent and manage type 2 diabetes in Central Australia (RTP)
- **Emma Smith, PhD**  
Remote Aboriginal Communities Ending Tuberculosis: Co-design of a holistic package of care moving towards elimination (NHMRC)
- **Alice Mengi, PhD**  
Enhanced malaria control during pregnancy to improve maternal and child health in Papua New Guinea (RTP)
- **Samuel Hailegebreal Gele, PhD**  
Application of Machine Learning classifier approach for identifying the predictor of maternal mental health among pregnant women data from the Northern Territory of Australia, Australia (RTP)
- **Keith Kwan, PhD**  
Identify novel phenotypes in children with chronic cough (CDUDES)
- **Natalie Merida, PhD**  
Evaluating consumer engagement models in health in the Northern Territory-Working towards sustainability, cultural safety and impact on policy and practice (RTP)
- **Jorja McErlane, Master by Research**  
Access, Action and Accountability: Intersectoral Coordination of health and social services in the NT (Menzies Primary Scholarship)

## Student case study

### Corrine Butler

Corrine Butler is passionate about improving the health of Aboriginal and Torres Strait Islander communities. She encourages other aspiring researchers to explore study pathways as she prepares to graduate with a Master of Health Research at Menzies.

After being awarded the Menzies' Aboriginal and Torres Strait Islander Postgraduate Scholarship in 2022, Corrine started a master's degree and research project focussed on evaluating type 2 diabetes among First Nations young people across Northern Australia.

"It had been about 12 years since I graduated from occupational health therapy and I was looking into doing more research that helped to guide my career aspirations," she said.

"I liked Menzies' contributions around population health and Indigenous health. That's why I chose the institute. They also had the scholarship opportunity for Aboriginal and Torres Strait Islander students."

Corrine is a proud Aboriginal woman with strong family connections to Yarrabah, Far North Queensland. She completed a Graduate Diploma in Health Research with Menzies in 2021 after being awarded her first scholarship.

Corrine hopes her research project in type 2 diabetes, involving the collaboration of First Nations communities in Queensland, will go on to be published in an academic journal.

"It was always the learning aspect that drew me to this degree. I have always wanted to further my learning and further enhance my practices in health research for Aboriginal and Torres Strait Islander peoples - those are the two main things."

"Menzies was able to support me in identifying research areas of interest. I was also able to choose the supervisors to work with and select the project to study type 2 diabetes for my master's degree," she said.

Corrine highlighted that it's wonderful there's more support than ever before for aspiring Aboriginal and Torres Strait Islander researchers.

As a crucial part of this work is the recognition there are First Nations ways of knowing, being and doing in health research.

"For someone who works full time in government, it's a great program. It gives me the opportunity and the flexibility to be able to access resources at a time that's suitable. I do all the study externally."

"Menzies has supported me the entire way through. There are so many options for others to receive academic support - another area I'm passionate about," she said.

Corrine is on track to finish her master's degree with Menzies in March 2024. She plans to continue her studies and pursue a PhD to further her career in Aboriginal and Torres Strait Islander Health.

In recognition of her academic achievements, she also received the 2020 Indigenous Commonwealth Reward Scholarship and the 2021 Val Asche Memorial Prize for Academic Excellence.



"Menzies' support for aspiring Aboriginal and Torres Strait Islander researchers is wonderful - the coordinators are always helpful, and the supervisors have always been so supportive as I work to achieve my study goals."

# IN OUR COMMUNITY



↑ Menzies team members admire the art at launch of Menzies Art Gallery Exhibition.



## Menzies launches its Art Gallery Exhibition

Menzies was proud to unveil a collection of more than 20 artworks drawn from Aboriginal and Torres Strait Islander people and our research teams.

The art collection represents the translation of health and science knowledge from an Aboriginal and Torres Strait Islander perspective. Menzies continues to value the immense contribution that Aboriginal and Torres Strait Islander people, communities and organisations have made and continue to make to our understanding of knowledge translation.

We want research at Menzies to result in real improvements in health and wellbeing, and to be valued highly by the people participating in research, our community and health service partners. Aboriginal and Torres Strait Islander perspectives, and way of representing knowledge shown through art, makes a fundamental contribution to knowledge translation at Menzies.

We thank all the artists and Menzies staff for working together to make this art exhibition a reality, and we look forward to enjoying this display for many years to come.



↑ Menzies staff and visitors discussing the artwork.



↑ Leonie Leigh, Norma Bengel and Auntie Barbara Nasir.



↑ Mark Mayo with artist Jayde Hopkins and her artwork series on scientific discovery at Menzies.



↑ Diane Walker, Prof Alan Cass, artist Norma Bengel and Dr Sean Taylor.

## National Reconciliation Week

The theme for 2023 National Reconciliation Week was 'Be a Voice for Generations', calling on us all to keep the momentum going for change and making reconciliation tangible in our lives.

Prior to the start of the week, Menzies recognised the importance of National Sorry Day, highlighting the strength and resilience of Aboriginal and Torres Strait Islander people.

Throughout National Reconciliation Week, a number of events were held across Menzies including the launch of Menzies Art Gallery Exhibition, a Referendum presentation and a Mabo Day event.

## The Referendum and the Voice to Parliament

In 2023, the Federal Government held a referendum to ask voters to approve a constitutional change to recognise the First Peoples of Australia by establishing a body to be called the Aboriginal and Torres Strait Islander Voice.

We were delighted to have Pat Anderson AO, an Alywarre woman, Co-chair of the Uluru Dialogue, and an architect of the Uluru Statement from the Heart, as a guest speaker during Menzies Reconciliation Week.

True change comes through listening, learning and taking action, and Pat shared words of encouragement to seek reliable information and participate in this key step towards reconciliation.

## Mabo Day

Mabo Day (3 June) commemorates the day the High Court of Australia handed down the Mabo decision, which led to the passing of the Native Title Act and the legal recognition of Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of the Country.

Menzies staff member Peggy Tom, a proud Torres Strait Islander from Moa, Badu, and Mabuig Islands, facilitated an event to celebrate Mabo Day and the culture of Torres Strait. Guest speakers included her mum Edna Wittkopp and her sister Edna Tom.



↑ Peggy Tom, Edna Wittkopp and Edna Tom recognising Mabo Day.

## NAIDOC Week

Menzies kicked off NAIDOC Week with a smoking ceremony and morning tea. Trent Lee from Bundirrik Cultural Services performed the smoking ceremony for all Menzies staff and explained its significance. Larrakia Elder Tony Lee also played the didgeridoo during the ceremony.



↑ NAIDOC Week Smoking Ceremony

The Luva Cuppa coffee cart was set up in the courtyard and Menzies staff connected over coffee and cupcakes, which were themed with Aboriginal and Torres Strait Islander flags. Many Menzies staff ordered NAIDOC T-shirts by Larrakia Nation, and Jo Campbell from the Biyamarr ma team facilitated this.



↑ Jo Campbell, Jenny Mezzel from Juninga Centre Aged Care Facility and Dr Sean Taylor

To encourage connection with both the local community and our Menzies community, team members also came together for a NAIDOC lunch. This included a performance by the Upai Purri Torres Strait Islander dance troop. In support of the 2023 NAIDOC theme, 'For Our Elders', our Biyamarr ma team put together a fundraiser, with the proceeds being donated to Juninga Centre Aged Care Facility in Darwin.

Throughout the week, Menzies staff were involved in community events, including the Jak Ah Kit Memorial Golf Day and the NAIDOC March, which celebrated the history, culture, and achievements of Aboriginal and Torres Strait Islander peoples.

## Menzies HealthLAB in 2023

Menzies HealthLAB continued its success in 2023, delivering interactive health education to over 1,900 people across the Northern Territory. Their collaborative approach with the Northern Territory Department of Health and Miwatj Health Aboriginal Corporation, working alongside local community providers, highlights the effectiveness of community-based partnerships in delivering strength-based health education.

The incorporation of community consultation to identify and address health priorities, such as Healthy Kidneys, Healthy Hearts, and Healthy Eating, as core themes of education demonstrates HealthLAB's responsiveness to the specific needs of the communities it engages with. The initiative provided training and upskilling to Menzies First Nations

trainees, allowing them to gain work experience in health promotion and travel to communities (Top End West and Northeast Arnhem Land) building capacity within the local workforce. Participating in National Science Week 2023 in Darwin, Palmerston, and Wurrumiyanga, combined with responding to invitations from communities and schools, underscores HealthLAB's commitment to making health education accessible on

a larger platform. The positive reception and numerous invitations to return in 2024 reflect the genuine need and appreciation for the interactive health education programs provided by HealthLAB.

Various communities' ongoing support and interest lay a strong foundation for future collaborations and initiatives in health education and promotion in the Northern Territory.



↑ The HealthLAB team

## Learning the art of weaving

In September, the Menzies Biyamarr ma team invited Master Weaver Freda Masina from Jitta Art to teach weaving at Menzies. This was an opportunity to promote reconciliation through building relationships and increase understanding of Aboriginal and Torres Strait Islander cultures and practices. By the end of this workshop, everyone had a good yarn and completed a small, woven item. Participants of the workshop said, "it was a great way to connect as a team and focus our minds on learning a new skill," and, "Jitta Art is a wonderful group who understands their culture and is very willing to share it with other people and make it easy and fun to learn."



↑ Weaving result

## Re-establishing the Renal Advocacy Advisory Committee

During 2023, the Renal Health Program financially and operationally supported a group of Aboriginal Kidney Health Mentors - Lachlan Ross, David Croker, Neil Wilkshire, Peter Henwood and Cedrina Algy - to re-establish the Renal Advocacy Advisory Committee (RAAC). RAAC is an independent group that gives a strong voice to kidney patients and their issues in the Top End region. Four meetings were held in 2023 with patients setting the agenda and identifying their service delivery priorities. The RAAC invited senior

Renal Services staff and members of NT Health Executive, including Chief Executive Professor Marco Briceno and Chief Health Officer Christine Connors, to hear their concerns, priorities for attention and suggested strategies. The NT Health Executive has committed to working with RAAC to address these issues, and the Renal Health Program will continue to support RAAC for the next two years as part of their commitment to consumer-led initiatives, including consumer-driven policy and research agendas.



↑ Attendees of the 2023 RAAC Meetings



↑ Attendees of the 2023 RAAC Meetings

## First Nations Health Communication Symposium

The Communicate Study Partnership hosted the third First Nations Health Communication Symposium in October. The event was attended by 140 participants from across Australia. The biennial symposium served as a platform for inspiration, learning, and collaboration in the pursuit of culturally safe care in the Northern Territory and beyond, against the theme of 'Preparing for our Futures'. The event showcased a steadfast dedication to improving communication in health, with equal representation of First Nations individuals as speakers and chairs. The keynote presentation delivered by Rarrtjiwuy Melanie Herdman and Claire Rafferty from the Djalkiri Foundation, was titled "Gurrutu: A System of Communicating and Collaborating in Intercultural Spaces". Preceding the symposium, a day of workshops concentrated on enhancing intercultural communication between non-Indigenous health professionals and First Nations peoples in the NT. Yolngu researchers Dikul Rachel Baker, Galathi Dhurrkay, and Balanda researcher Emily Armstrong, developed and facilitated the morning workshop, which explored intercultural communication through metaphors derived from water's journey through Yolngu lands to the sea. The afternoon workshop on Working with Interpreters was delivered by Mandy Ahmat from the NT Aboriginal Interpreter Service. Participants also met and received advice from the Royal Darwin Hospital based Interpreters and Aboriginal Liaison Officers. Attendees, spanning healthcare and non-healthcare sectors, engaged in reflective exercises and developed tools to make healthcare more culturally safe.

## Animal Health in Timor-Leste

In Timor-Leste, little is understood about Brucellosis – a zoonotic disease impacting cattle and humans. Following the June launch of the BRUCE TL (Brucellosis Reduction Using Codesign Elements in Timor-Leste) project, Menzies has been encouraged by the community's willingness to take a One Health approach to tackling Brucellosis in humans and cattle.

Launched in June 2023, the Maliana community is co-designing sustainable control measures to reduce the spread of Brucellosis, in collaboration with Menzies, the Ministry of Agriculture, Livestock, Fisheries and Forestry (MALFF), the Ministry of Health (MoH) and other partners. Together with the Ministry of Agriculture, Livestock, Fisheries, and Forestry (MALFF) and Ministry of Health (MoH), the Maliana Community, located Southwest of Timor-Leste part of Bobonaro

Municipality, are participating in co-designing sustainable control measures to reduce the spread of Brucellosis. The Menzies research team has conducted interviews and collected blood samples from farmers and their cattle. Due to strong community support, 189 cattle-owning households have participated so far.

Local Maliana cattle farmer Mr Armino Amaral, was happy to have the team come to his home and understand how Brucellosis can negatively impact his family's wellbeing and economic health. Community members have welcomed the team back to their homes for the next stage of the co-design process. The BRUCE-TL project is funded by the Australian Centre for International Agricultural Research (ACIAR) and Canada's International Development Research Centre. Its implementation builds on ongoing One Health work to

tackle antimicrobial resistance (AMR) through the Fleming Fund Country Grant to Timor-Leste. This is funded by UK Department of Health and Social Care.

Menzies is also implementing the Bacterial Enteropathy and Nutrition (BEN) study using a One Health approach, in collaboration with Australian National University (ANU), funded by ACIAR and International Development Research Centre (IDRC).



↑ Menzies researchers and MAF Vet technicians engage with local community leaders

## Community partnerships for co-design of echo screening for rheumatic heart disease

Rheumatic heart disease (RHD) affects many children and young people in Northern Australia and in Timor-Leste.

Building on Menzies-led research which has demonstrated that echocardiographic screening for RHD can be carried out by local health workers following focused training, Menzies is working with communities in Northern Australia and Timor-Leste to co-design implementation strategies, so that children and pregnant women at high risk of RHD can be reached with

this potentially life-saving screening tool. The NEARER SCAN / LENO BESIK (Tetum) study is funded by an Medical Research Futures Fund grant, with additional support from donors including Rotary, Medtronic, Edwards Life Sciences and Humpty Dumpty Foundation. Its implementation science approach sees Menzies' researchers working with community members to understand how best to apply this novel approach to early detection of RHD in their own specific context. What has emerged in the first year of the study, are different

theories of change, developed with local input to address the specific challenges and opportunities that exist in different remote communities across the two countries.

Local healthcare workers are undergoing training in 10 different communities across the Northern Territory, Western Australia and Timor-Leste, and the evaluation that is conducted will help to inform strategies for further scale-up in a way that respects and elevates local community leadership.

## Evaluating zoonotic malaria transmission and agricultural land use in Indonesia (ZOOMAL)

The ZOOMAL project commenced in January 2020, encompassing a large and highly experienced consortium of partners from Indonesia and Australia to strengthen the surveillance and control of zoonotic malaria in Indonesia using a One Health multidisciplinary approach. Funded by Australian Centre for International Agricultural Research (ACIAR) and The Department of Foreign Affairs and Trade (DFAT) as part of the regional Research for One Health Systems Strengthening Program, it has recently been granted a three-year extension taking the project to June 2026. In November 2023, we had the opportunity to bring together the whole project team. The team includes public health researchers,

entomologists, primatologists, health economists, social scientists, agricultural geographers, diagnostic laboratory scientists and spatial epidemiologists, along with external stakeholders to disseminate the results of the project from the last three years. There were 78 people who attended. Representatives from the Ministry of Health and the Ministry of Forestry and Environment, and provincial Health Departments from North Kalimantan, North Sumatra and Aceh were also present. It was an exciting opportunity to discuss changes to policy to help further understand and control zoonotic malaria in Indonesia. Evident from the meeting was also the positive role in both capacity building

and outcomes related to One Health research approaches. The approaches use perspectives and enhanced communication across different research disciplines and Government agencies to address emerging zoonotic infectious diseases. This national-level meeting followed our previous community-level engagement events for results dissemination held across five rural research sites in 2023.



↑ The ZOOMAL project team leaders with the external stakeholders.

## Hep B PAST

The Hep B PAST project is reaching the end of its five years and has produced outstanding improvements in chronic hepatitis B (CHB) care in the Northern Territory's Aboriginal and Torres Strait Islander population. The project has produced the first hepatitis B educational app in a First Nations language. The "Hep B Story" app is now available in nine Aboriginal languages meaning approximately 47,000 (around 60% of the NT's Aboriginal population) have access to hepatitis B educational information in their first language.

Additionally, a culturally safe, accredited hepatitis B management education course has been developed with and for the Aboriginal health workforce. A transferable model for the development of culturally safe

training was established as a product of this training. Approximately 150 Aboriginal health workers have undertaken Managing Hepatitis B training. A hub and spoke model of care has been established within communities, with core clinical care teams trained and iteratively developing to facilitate timely, on country, guideline-based care for those living with CHB. As a result, the NT is the only jurisdiction nationally to be reaching and exceeding National Hepatitis B Strategy targets. We are also the only jurisdiction in Australia where mortality data has improved; "the largest increase over time (in all measures) occurred in the Northern Territory. Previously declining mortality is predicted to plateau or increase in all jurisdictions except

the Northern Territory.\*" The project has been acknowledged in the 4th National Hepatitis B Strategy 2023-2030 as a successful model of care; "Existing successful, innovative person-centred models of care, such as the Hep B PAST program in the NT, should be considered for expansion and national scale up, including in rural, remote, regional and other underserved areas."

\* McCulloch, K., Romero, N., Allard, N., MacLachlan, J. H., & Cowie, B. C. (2023). Modelling jurisdictional disparities in the cascade of care for chronic hepatitis B in Australia: impact of treatment uptake on mortality. *Australian and New Zealand journal of public health*, 47(1), 100011. <https://doi.org/10.1016/j.anzjph.2022.100011>



↑ Managing Hepatitis B, training for Aboriginal Health Workforce – course attendees and facilitators in Darwin.

## COVID-19 and influenza immunology

The LIFT study is investigating immune responses in Australia's First Nations peoples to both COVID-19 and Influenza infection and vaccination. This year, the team have vaccinated over 500 First Nations people as part of this initiative. This is a fantastic example of how research can be helpful and contribute to the health of Territorians in a really positive way.

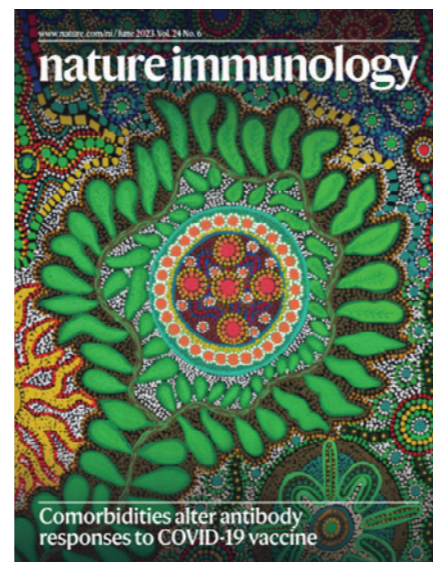
We are also very proud of our nature immunology publication this year which demonstrated for the first time that COVID-19 vaccines induce robust and broad immune responses in Australian First Nations Peoples. It also identified

for the first time a mechanism that may explain the important role of comorbidities in vaccine responses.

The front cover of the issue featured a beautiful piece of Aboriginal art designed to tell the story of the study and form part of the community feedback process. It was developed in partnership with Zoe Fitzpatrick, an Aboriginal artist and nurse.

This process of community input and consultation has been a consistent and prominent feature throughout this study and will be ongoing for the next few years thanks to National Institutes of Health (NIH) and Medical Research Future Fund (MRFF) funding and in collaboration

with the Kedzierska laboratory at the Doherty Institute, Melbourne.



↑ Zoe Fitzpatrick's artwork featured on the front cover of Nature Immunology.

## One Health Symposium in Timor-Leste 2023

Menzies in collaboration with the Ministry of Health (MOH) and Ministry of Agriculture, Livestock, Fisheries and Forestry (MALFF) conducted a symposium titled: "One Health: Environment, Zoonosis and Antimicrobial Resistance" in Dili on 5 December 2023.

MALFF National Veterinary Director Joanita Bendita Jong in her opening remarks said "the seminar theme 'Environment, Zoonoses and Antimicrobial Resistance', is timely as these are cross-cutting One Health issues that cannot be tackled individually within a single sector. It requires cooperation between animal health, environmental health and human health to address these issues holistically". The event was opened by Dr Florindo Pinto Gonzaga, National Director of Prevention and Disease Control at MOH and was attended by

100 people from human health, animal health and environment sectors. This included representatives from MOH, MALFF, AIFEASA, Ministry of Tourism and Environment, Hospital Nacional Guido Valadares (HNGV), WHO, Menzies, Maluku, Timor, Wateraid, UNTL, UNIDIL.

Presentations from Menzies, HNGV, National Health laboratory, Diagnostic Vet lab, UNTL were well received on

topics such as Salmonella, AMR trends in clinical isolates of waterborne diseases, melioidosis, AMR results in chicken samples, Brucellosis, Rabies, prudent and appropriate use of antibiotics in hospitals, and knowledge of Veterinary Technicians about antibiotics. This program is funded by UK Aid Direct, Fleming Fund Country Grant to Timor-Leste, which is managed by the Mott MacDonald Group.



↑ Presentation at the One Health Symposium in Timor-Leste

## Direct contributions to WHO Policy Change

Four Menzies malaria researchers were invited to participate in separate WHO policy and advisory meetings in Geneva in 2023, a testament to the quality and global impact of Menzies malaria research. Dr Rob Commons presented the evidence for primaquine dosing policy change. Professor Nick Anstey attended the WHO Severe Malaria Meeting held every 10 years to review the current

evidence on severe malaria, and to update the WHO Handbook on the Management of Severe Malaria. His presentation of Menzies' severe malaria research over the last 10 years in all three species causing severe malaria (falciparum, vivax and knowlesi malaria) contributed to updates and revisions to both the WHO severe malaria criteria and WHO Handbook management guidelines, and the compilation

of the evidence as a special WHO supplement on severe malaria, anticipated to be released in 2024. Professor Ric Price and Dr Angela Devine participated in the WHO Guidelines Development Group updating recommendations for the testing for glucose-6-phosphate dehydrogenase deficiency, a critical test in maximising safe deployment of primaquine to prevent vivax malaria relapses.

## The Hearing for Learning Initiative

The Hearing for Learning Initiative (HfLI) is an innovative community-based service enhancement project led by our Ear Health Research Program. The aim of the initiative is to reduce the prevalence of ear disease and hearing loss among First Nations children in the Territory. Thereby enhancing early language development, school readiness, school attendance and performance. The initiative is a stepped-wedge cluster randomised controlled trial. The trial objectives are to develop, implement and evaluate the initiative's model of enhanced ear health care and hearing support. This support is delivered by newly funded positions for local community members (up to

40 Ear Health Facilitators) across 20 communities. In 2023, 25 Ear Health Facilitator (EHF) trainees completed their HfLI training. Additionally, 5 new Ear Health Facilitators were employed across 6 remote communities. The HfLI has now completed all training phases of the project in the participating communities.

The HfLI provides opportunities for community members to become employed as an EHF in their community. Over a 6-week period, the HfLI delivers on-country training to local community members who complete two accredited units of the Certificate II in Aboriginal Primary Health Care and training in ear and

hearing testing equipment. Once trained, individuals can then apply for the Ear Health Facilitator position at the local clinic. If successful, they will provide culturally appropriate, sustainable ear and hearing services for children up to 16 years of age. In each community, the HfLI is guided by a community reference group that provides cultural advice, helps to promote the opportunity, selects trainees and makes recommendations as to the most appropriate person to have the role and responsibility of Ear Health Facilitator. Graduation ceremonies celebrate achievements and show the community the trainees' confidence, new knowledge and skills.



↑ Celebrating the achievement of completing the six-week Hearing for Learning Initiative training course in Galiwin'ku.

# OUR DONORS & SUPPORTERS



→ As part of the Menzies-Ramaciotti Centre, artist and scientist Jayde Hopkins developed a series of artworks based on Menzies scientific discovery.

## The Training Centre Scale Up Begins

The Menzies-Ramaciotti Centre has been operating for the past three years, supporting young people living in the NT with traineeships, academic pathways, leadership opportunities, and careers in health. The program has been a massive success, and demand for it has only increased.

We are immensely grateful to The Ramaciotti Foundations for funding the establishment of the formal training centre. The foundations' funding will end in 2023.

In light of the Centre's achievements combined with the unmet demand for NT-relevant, fit-for-purpose training and education in health, it was recognised that work needed to be completed to ensure the centre was in a good financial position to continue to grow.

To this end, an exciting five-year plan has been developed, and some of the largest philanthropic foundations committed in 2023 to support the 'Scale up' phase of the centre, which will commence in 2024.

# \$2.5M

committed by the Ian Potter Foundation to the 'Scale Up' phase

# \$1M

committed by a large anonymous philanthropic trust

# \$540K

supported by the Medical Research Future Fund (MRFF) for the centre's evaluation

## Bridging the Gap Foundation

Bridging the Gap Foundation (the Foundation) was established by Menzies to support and fund initiatives to address the gap between Aboriginal and Torres Strait Islander and non-Indigenous people's health and education opportunities and outcomes. Ear health was a major focus of the Foundation during 2023. In a nation where equitable access to health care is fundamental, one fact that cannot be disputed is the unseen and rarely reported health crisis facing Indigenous populations.

It is a little-known fact that Australia's Indigenous populations, especially those in rural and remote communities, are particularly susceptible to ear disease, with this issue particularly prevalent amongst children. Ninety per cent of Indigenous children in remote areas of the Northern Territory currently suffer some form of otitis media, a disease that results from

inflammation and/or infection of the middle ear, causing hearing loss. The disease has been found to persist for years in up to 70 per cent of Indigenous children, with nearly 30 per cent developing chronic ruptured eardrums, the most severe form of the disease which causes hearing loss classified as disabling by the WHO. Notably, these rates are the highest reported in the world.

While many Australians are unaware of this alarming situation, it continued to be a driving motivation for the Foundation to shine a light on the inequalities experienced by Indigenous Australians. To ensure Indigenous community members have access to the same opportunities as every other Australian.

The Foundation was able to donate almost \$400,000 to Menzies during 2023 to support their ongoing work including Ear health, the Ramaciotti

Centre and the Diabetes, Health LAB and Stay Strong Programs.

The Foundation auspiced a generous stage one donation of 50,000 British Pounds from the Compass Group Foundation in the UK and, by Deed of Agreement, assigned the project to Menzies, who will undertake the research in collaboration with the Maningrida community and Compass Australia.

Due to a range of factors a decision was made to close the foundation on 29 December 2023. Menzies continues its fundraising efforts in different avenues.

We wish to acknowledge the eminent voluntary board, the staff, and supporters of the foundation for the tremendous work undertaken in collaboration with Menzies over many years, to the benefit of First Nations people.

## Major donors and partners

We are immensely grateful to the following donors for their generous support in 2023:

Anonymous Foundation

Australasian Society For HIV, Viral Hepatitis

And Sexual Health Medicine

Australian Government

Australian Graduate Women Inc.

Barlow Impact Group

Bill and Melinda Gates Foundation

Bridging the Gap Foundation

Charles Darwin University

Compass Group Foundation

ConnectEast Pty Ltd

Deeble Institute for Health Policy Research

Edwards Lifesciences Foundation

Edwina Menzies & Ian Albrey

Graham Blashki

Harry Giese Research in Action Award

Henry M Jackson Foundation

Leducq Foundation

Maple-Brown Family Foundation

Medibank Health Research Fund

Megan Duffy

National Heart Foundation of Australia (National)

Northern Territory Government

PPD Australia Ltd

Ryan Family Prize

Sabeline Pty Ltd

Sylvia And Charles Viertel Charitable Foundation

The Colvin Foundation

The Gemma McLeod Foundation

The Ian Potter Foundation

The Ramaciotti Foundations

The Ray and Margaret Wilson Foundation

The Rotary Foundation of Rotary International

The Thrasher Research Fund

The Val Asche Memorial Prize

Women and Infants Research Foundation

# \$207,271

Donations

# \$1,991,621\*

Corporate & Philanthropic Partners

\* Corporate and Philanthropic Partners are recorded as Consultancy and contract research in the presentation of the Menzies financials.







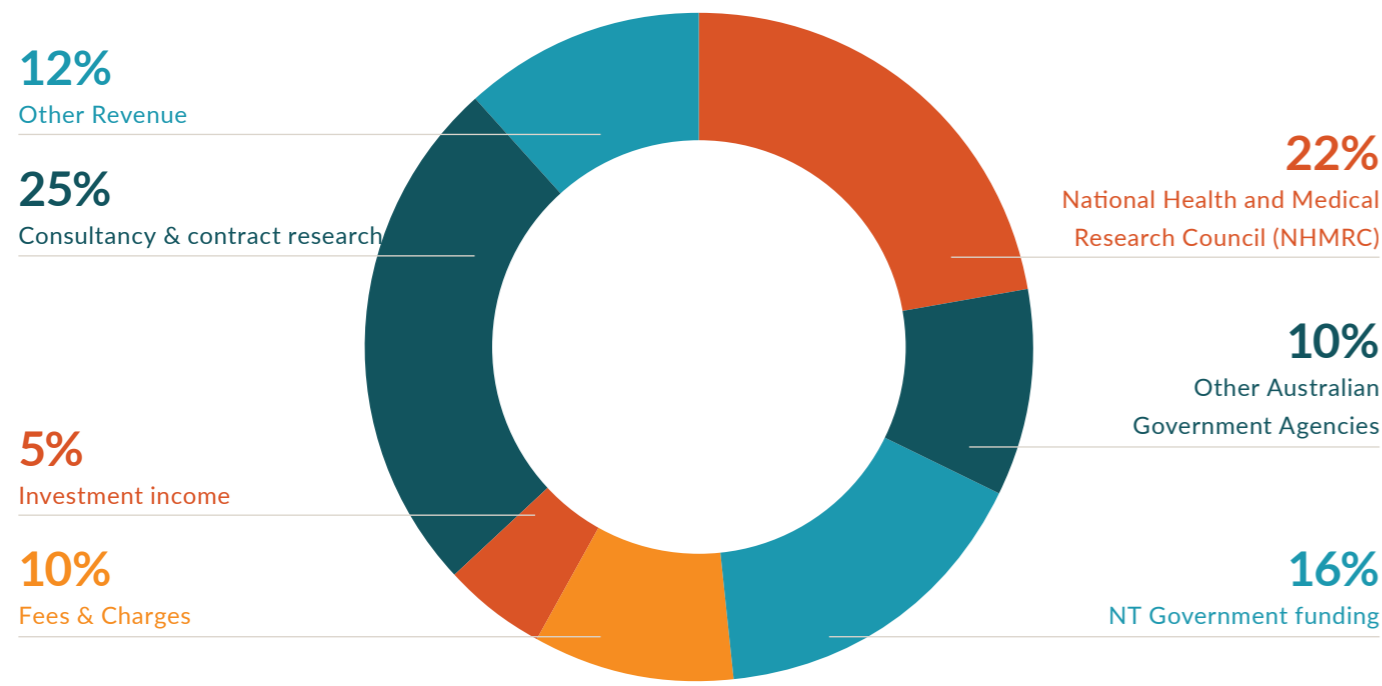
# OUR FINANCIALS



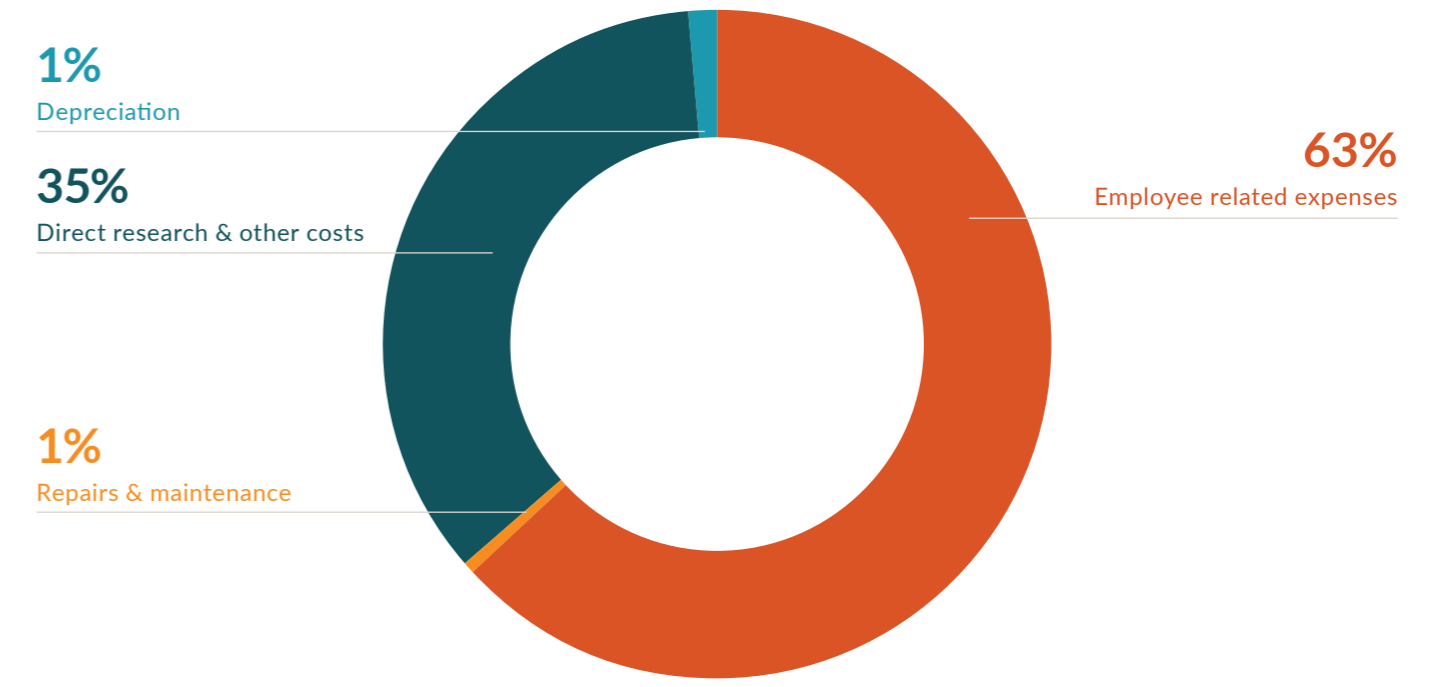
↑ Menzies School of Health Research, John Mathews Building, Royal Darwin Hospital Campus.



# Financial Summary

<b>Total Revenue</b>	<b>\$55,459,704</b>
 National Health and Medical Research Council (NHMRC)	<b>\$12,420,218</b>
 Other Australian Government Agencies	<b>\$ 5,449,647</b>
 NT Government funding	<b>\$8,984,849</b>
 Fees & Charges	<b>\$5,360,897</b>
 Investment income	<b>\$2,891,898</b>
 Consultancy & contract research	<b>\$13,982,726</b>
 Other Revenue	<b>\$6,369,469</b>



<b>Total Expenses</b>	<b>\$52,972,925</b>
 Employee related expenses	<b>\$33,415,150</b>
 Direct research & other costs	<b>\$18,531,471</b>
 Depreciation	<b>\$728,224</b>
 Repairs & maintenance	<b>\$298,080</b>



 Loss on disposal of assets	<b>\$69,755</b>
 Gain on value of investments	<b>\$83,958</b>

We thank the many individuals and communities who granted permission to use photographic images of themselves and their children throughout this publication.



† CEO of Council to Homeless Persons (CHP), Deborah Di Natale delivers the 2023 Menzies Oration.

For the purposes of this document, "Indigenous" refers to Australia's Aboriginal and Torres Strait Islander peoples.

© 2023 Menzies School of Health Research

The material contained in this document is the subject of copyright and/or privileged information. Any use, disclosure (written or verbal), copying or dissemination of this document is prohibited without written consent from the Menzies School of Health Research. Menzies is working in compliance with the NT Information Act 2002, including Part 9 Records and archives management

PO Box 41096  
Casuarina NT 0811  
Australia

John Mathews Building (58)  
Royal Darwin Hospital Campus  
Rocklands Drive, Tiwi NT 0810

T 08 8946 8600  
F 08 8946 8464  
E [communications@menzies.edu.au](mailto:communications@menzies.edu.au)  
W [menzies.edu.au](http://menzies.edu.au)

ABN: 70 413 542 847

