MENZIES INSTITUTE FOR MEDICAL RESEARCH

ANNUAL REPORT 2015

UNIVERSITY of TASMANIA | MENZIES Institute for Medical Research

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UNIVERSITY of TASMANIA | MENZIES Institute for Medical Research

ABOUT US

The Menzies Institute for Medical Research is one of Australia's leading health and medical research institutes and is recognised worldwide for its research excellence.

Our mission is to perform internationally significant medical research leading to healthier, longer and better lives for Tasmanians.

Our research

Menzies performs excellent basic laboratory, clinical and population health research in themes that reflect the burden of disease in the Tasmanian community and our expertise in addressing these diseases.

Our research is community-focussed and takes a bench-to-bedside and disease prevention approach that is aimed at improving patient care and clinical outcomes by translating knowledge into clinical and policy actions.

Menzies trains and educates future research scientists, clinicians and related health professionals. As the State's only medical research institute, Menzies has a unique role and profile in Tasmania. We benefit from a relatively stable population base and an environment where there are substantial challenges to the provision of health care based on funding limitations and specific challenges relating to disadvantage.

Menzies has five key research areas

Public Health and Primary Care
Our Public Health and Primary Care theme seeks to better prevent and manage important population health problems. Projects address a broad range of conditions including cardiovascular disease, type-2 diabetes, obesity, cancer, multiple sclerosis and depression. Several projects are investigating how lifestyle factors (e.g. smoking, physical activity and diet) affect the risk of developing chronic disease. Research in this area includes epidemiology, behavioural science, environmental health, biostatistics and health economics.

Within this theme we have established partnerships with the Tasmanian Government. This theme also includes the management of the Tasmanian Cancer Registry and Tasmanian Data Linkage Unit.

Neurodegenerative Diseases / Brain Injury
Our neuroscientists aim to understand the mechanisms underlying the brain's response to trauma (for example, road accidents and falls) and diseases such as dementia

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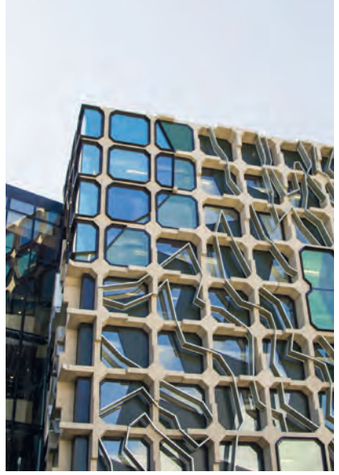

PRIME POSITION: Research at Menzies takes place in state-of-the-art facilities in the centre of Hobart.

Every donation received by Menzies, whether big or small, goes towards research undertaken in Tasmania

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(including Alzheimer's), multiple sclerosis, Parkinson's and motor neuron disease. This research will help in the development of new ways to diagnose, prevent and treat these devastating disorders.

Cardio-Metabolic Health and Diseases

The primary aim of this theme is to reduce the burden of cardiovascular and metabolic disease on our community. Researchers use interventions targeted at identifying and preventing the development of obesity, insulin resistance, type-2 diabetes, hypertension and heart disease.

Areas of interest include blood pressure assessment, assessment of large and small blood vessel function and cardiac imaging in heart disease. Research techniques from laboratory models, clinical and population health studies and clinical interventions are used to discover new ways to prevent the progression of cardio-metabolic disease. Clinical trials are in progress to reduce the risk of developing cardiac disease in people with early "sub- clinical" disease and in those who have first-degree relatives with heart disease.

Musculoskeletal Health and Diseases

Research in this area optimises Tasmania's unique population characteristics to investigate musculoskeletal disease, with a particular emphasis on osteoarthritis and osteoporosis. Epidemiological research into musculoskeletal disease helps us understand the impact of arthritis and other musculoskeletal conditions on the individual and the community, so the best medical care can be developed and delivered where needed. Volunteer participant-based clinical trials are a key feature of this area.

Cancer, Genetics and Immunology

Work in this theme is aimed at identifying the underlying causes of complex disease and the drivers of disease progression. These complex diseases include eye disease, cancer and immune disorders. We are using innovative technologies to identify the genetic changes which underlie risk of developing a disease or influence disease progression, in addition to laboratory-based approaches to understanding the biology of these diseases. Our work includes studies of prostate and breast cancer; eye diseases such as keratoconus and glaucoma; the Tasmanian Devil Facial Tumour Disease; and immune disorders such as multiple sclerosis and lupus.

A history of discoveries

Menzies was established on 1 January, 1988 by the University of Tasmania with support from the Menzies Foundation and the Tasmanian Government. Menzies was primarily established to address the health issues facing the Tasmanian community.

We are located within the University of Tasmania's state-of-the-art Medical Science Precinct, in close proximity to the Royal Hobart Hospital. Over our 28 years, significant breakthroughs have been made by our scientists into the cause, prevention and treatment of several diseases impacting on Tasmanians and people around the world.

Menzies' impressive record of research discoveries includes:

- The link between babies' sleeping position and sudden infant death syndrome (SIDS);
- Remodelling of nerve cells in undamaged parts of the brain in response to acquired brain injury;
- Genetic markers linked to men's risk of developing prostate cancer;
- Understanding of how bones develop in childhood and risk factors for childhood fracture;
- The impact of childhood exposure to parental cigarette smoke on cardiovascular health later in life;
- Recognition of high rates of vitamin D deficiency in Tasmania, development of ways to improve this and the association of higher vitamin D levels with a lower relapse risk in multiple sclerosis;
- Development of risk algorithms for prediction of heart failure.

How we spend our donor funds

Every donation received by Menzies, whether big or small, goes towards research undertaken in Tasmania. Donations may fund research projects, provide student scholarships, contribute to researcher salaries, or finance equipment purchase. Donations may support an initial research project that later attracts competitive funding. This is very important because government and competitive funding bodies favour funding established projects, which can make it difficult to get new research off the ground.

Gifts to the Menzies Institute for Medical Research are an investment in a healthier future for all Tasmanians.

MESSAGE FROM THE DIRECTOR

Our mission at the Menzies Institute for Medical Research is to perform internationally significant medical research leading to healthier, longer and better lives for Tasmanians. In 2015 we saw that mission reflected in our published research and our success in securing funds for new research relevant to this population. A new generation of researchers working on these challenges can be found in our growing PhD student cohort, which is larger than ever before.

We were delighted to see the contribution of Menzies so strongly reflected in the University of Tasmania's success in the 2015 Excellence in Research for Australia rankings. In the categories of clinical sciences, neurosciences, human movement and sports science, and ophthalmology and optometry, the University was evaluated to be "well above world standard", the highest possible ranking. Public health and health services, and cardiovascular medicine and haematology were ranked "at world standard". This is a testament to Menzies' focus on chronic disease and the diseases of ageing that are prevalent in Tasmania. In 2015, Menzies researchers published 248 journal articles, a record for the Institute. Our work appeared in high-impact journals such as *Nature Genetics*, *Journal of the American College of Cardiology*, *Acta Neuropathologica*, *Annals of the Rheumatic Diseases* and *Circulation*. We had 83 Research Higher Degree students enrolled in 2015 and received $15.7 million in funding from external sources. Many of our researchers were recognised through awards and honours, with the leader of blood pressure research at Menzies, Associate Professor James Sharman, invited by *The Lancet* to the membership of an international Commission on Hypertension; environmental health researcher Dr Fay Johnston addressing the Royal Society in London; and physiotherapy researcher Dr Michele Callisaya being awarded the prestigious Stroke Society of Australasia's Peter Bladin New Investigator award.

It gave us great pleasure to host a visit from the Governor-General, His Excellency Sir Peter Cosgrove and Her Excellency Lady Cosgrove, who toured Menzies and met some of our researchers. More than 200 people attended the 2015 Menzies Debate, where an entertaining and learned panel discussed the case for and against prostate cancer screening. In 2015, the community generously contributed $2.7 million to Menzies through donations and bequests. A highlight of the year in philanthropy was the work of a dedicated group of community volunteers in organising the Seconds Count Gala Ball, which raised more than $70,000 for metastatic breast cancer research at Menzies. This was just one of many donations and bequests in 2015 and we are delighted to report that this partnership has continued with another Seconds Count Gala Ball in 2016.

I am leaving Menzies to take up a new position, knowing that the Institute has an exciting future under the expert leadership of Professor Alison Venn. My time at Menzies has been richly rewarding – through my interaction with the community and through working with such a talented and dedicated group of researchers. I wish the Institute every success in the future and look forward to continuing to collaborate.

– Professor Tom Marwick

SPECIAL GUESTS: Menzies Director Professor Tom Marwick, Her Excellency, Lady Cosgrove, Deputy Director of Menzies Professor Alison Venn, and the Governor-General, His Excellency Sir Peter Cosgrove.

CHAIRMAN'S REPORT

As 2015 closed we farewelled our Director of the past three years, Professor Tom Marwick. Professor Marwick came to Menzies in 2012 from the Cleveland Clinic in Ohio. He brought a formidable research record, renowned clinical expertise and a huge enthusiasm for our mission. Menzies thrived under his leadership, pushing ahead in the contest for research funding while reaching new heights in research publications and PhD enrolments.

I would like to extend my thanks to Professor Marwick for his very significant contribution, and to welcome Professor Alison Venn as Director. With more than 140 publications and $30 million in research funding, Professor Venn's knowledge of Menzies and the health challenges in Tasmania is second to none. I am very pleased that we were able to make an internal appointment to this position, as it highlights the quality of our people.

In 2015, we advanced the Menzies board process with the addition of a Philanthropy Committee and a Scientific Advisory Committee, the latter including two of Australia's leading medical scientists, Professor Ian Frazer and Professor Bob Williamson. My thanks to all those who have contributed through these committees.

I would like to thank Professor Paddy Nixon and Mr John Ramsay, both of whom left the board in 2015, and to welcome our new directors in 2015 – Professor Brigid Heywood, Professor Moira Clay and Mr Bob Gozzi. Special thanks goes to long-term member Professor Bob Williamson, whose counsel is invaluable. The contribution of all board members is much appreciated as we look forward to continuing this work of great importance.

– Bruce Neill

NEW DIRECTOR
PROFESSOR ALISON VENN

In late 2015 the University of Tasmania announced the appointment of Professor Alison Venn as Menzies' new director.

The directorship is among the most important leadership roles in medical research in Australia, and a high-level selection panel worked to secure the best appointment possible. Professor Venn will bring to the role a combination of research excellence and an intimate understanding of the institution. She was previously a Deputy Director of Menzies and has twice been Acting Director.

Professor Venn is an internationally renowned population health expert with broad experience in chronic disease. Over her career she has been awarded more than $30 million in research funding and has had more than 140 peer-reviewed journal articles published, including in *The Lancet*, *New England Journal of Medicine*, *British Medical Journal* and the *Journal of the American College of Cardiology*.

Professor Venn's current research focuses on obesity and the childhood determinants of health. She is Director of the Tasmanian Cancer Registry and the Tasmanian Data Linkage Unit. She leads the Australian component of International Childhood Cardiovascular Cohort (i3C) Consortium.

Professor Venn is excited to be leading an institute she knows so intimately.

"I look forward to continuing to build important partnerships for the Institute across the research sector, with Government and with the community.

"I will be actively encouraging the translation of research into evidence-based healthcare and policy, and continuing to mentor the incredible talent pool that we see in our young scientists here."

I WILL BE ACTIVELY ENCOURAGING THE TRANSLATION OF RESEARCH INTO EVIDENCE-BASED HEALTHCARE AND POLICY

Peter Mathew

We have been making discoveries to improve the health of our community since our establishment in 1988. Once again, in 2015 we delivered some remarkable results that will contribute to improving health and well-being locally and globally.

RESEARCH HIGHLIGHTS

SMOKING RISKS: Dr Costan Magnussen was the co-lead author on new findings published in 2015 on the long-term damage to cardiovascular health when children are exposed to passive smoking.

Peter Mathew

Public Health & Primary Care

The effects of passive smoking

This paper brought new findings on the long-term damage done to cardiovascular health when children are exposed to passive smoking. Researchers compared data from thousands of people from Finland who had blood samples taken in 1980, when they were aged between 3 and 18, with carotid artery ultrasound data collected from the same people in adulthood. The analysis found that children exposed to parental smoking in childhood had about twice the risk of having plaque in their carotid artery 26 years later as did those whose parents did not smoke. Further analysis of the data revealed that maintaining good smoking hygiene, that is, smoking away from your child so to

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Peter Mathew

MIND MATTERS: Associate Professor Tracey Dickson is a Menzies Deputy Director. Her research group is investigating the mechanisms that cause certain brain cells to degenerate, stop functioning and ultimately die in diseases such as motor neuron disease, Parkinson's and fronto-temporal dementia.

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not expose them to the smoke, was vitally important in reducing children's risk of artery thickening later in life.

Can the risk of developing multiple sclerosis (MS) be changed?

We investigated five of the main risk factors for developing MS that are thought to interact to have a cumulative effect. In order of strength of association, these are an immunological gene, smoking, sun exposure, history of glandular fever and levels of vitamin D. For each additional factor, we found the risk of MS doubled. People who had four or five risk factors were over 20 times more likely to develop MS than those who had none. Together, the five risk factors account for almost 64 per cent of the risk of developing MS. Importantly, over half of the risk of developing MS can be modified through lifestyle or environmental changes.

Weight gain after quitting smoking

Fear of weight gain is a commonly cited reason for not quitting smoking, despite evidence that quitting will result in better overall health. By combining data from 63,403 quitters and 388,432 continuing smokers, researchers found that people who quit smoking gained an average of 4.1kg in weight over about five years, 2.6kg greater than the gain in continuing smokers. This weight gain was greater in women than men, and greater in studies conducted in North America than Asia. Changes in brain activity and metabolism are probably among the complex causes of weight gain, but the gain is relatively modest and should not discourage smokers from quitting.

Funding of general practice after-hours care

This research looked at whether there was objective data to support widespread concerns about the way government has supported after-hours general practice care. We identified specific problems with the way funding was being allocated to this care. The study's findings fed directly into a Tasmanian funding model and are expected to stimulate similar research across the country to help refine policy developments.

> Importantly, over half of the risk of developing MS can be modified through lifestyle or environmental changes

> Work published in 2015 has brought us a step closer to understanding the cause of motor neuron disease and where it begins in the central nervous system

Musculoskeletal Health and Diseases

Does fish oil help osteoarthritis?

Fish oil is commonly used to treat osteoarthritis, but ours was the first clinical trial into the efficacy of this. We studied whether high-dose was superior to low-dose fish oil for symptomatic and structural outcomes in knee osteoarthritis. In patients with knee osteoarthritis and regular knee pain we saw improvement in both the high and low-dose groups, but greater improvement in pain and function in the low-dose group. There was no difference between the two groups in cartilage volume loss at two years. A low-dose fish oil/canola oil combination appeared to be better at reducing pain at two years, suggesting that this requires further investigation.

Genetic factors and pain

Our aim was to investigate whether offspring with at least one parent with a total knee replacement for severe primary knee osteoarthritis have an increased risk of worsening knee pain over eight years, compared to people with no family history of knee osteoarthritis. Our results showed that offspring more frequently had an increase in total knee pain (66 per cent versus 41 per cent) in all subscales apart from walking. Thus, offspring with a family history of knee osteoarthritis have an increased risk of worsening knee pain, which is independent of structural factors.

Inflammation and osteoarthritis

Osteoarthritis is usually considered to be a non-inflammatory condition due to wear and tear and thus an inevitable part of ageing. This study described the associations between fluid on the knee and structural changes in 977 older adults over three years. We concluded that there are independent associations between fluid on the knee and knee cartilage defects in both cross-sectional and longitudinal analyses of the knee. This opens the door for therapy with newer anti-inflammatory agents.

Neurodegenerative Diseases/ Brain Injury

Causes of motor neuron disease (MND)

Work published in 2015 as a feature article in the journal *Disease Models and Mechanisms* has brought us a step closer to understanding the cause of MND and where it begins in the central nervous system. Using new experimental models, we have found that MND is likely triggered in the spinal cord due to "excitotoxicity" or overactivation of motor neurons. It then propagates or spreads forward to the muscle, ultimately leading to degeneration of the connection. Understanding the excitotoxic mechanisms of motor neuron loss and the degeneration at the point where nerves and muscles meet is a vital step towards developing therapeutics for MND.

New data on traumatic brain injury (TBI)

TBI continues to be a leading cause of death and disability in developed nations, with very high economic and personal costs. There are currently no drugs available to prevent, minimise or reverse the primary damage and complex secondary changes that develop. We have new data that suggests that post-injury treatment with compounds that stabilise the structural integrity of the cell could positively affect the brain's response to trauma. Using a primary culture or 'brain in a dish' approach, we found that treatment with the drug Epothilone D was safe, with no evidence of toxicity. Most importantly, it was found that treatment of neurons with EpoD after injury resulted in a significant increase in nerve growth that was highly dose-dependent. This is the first critical step towards development and testing of highly targeted treatments for people with TBI.

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Cardio-Metabolic Health & Diseases

Home blood pressure measurement: Guidelines for doctors and patients

Blood pressure measured by a doctor in the clinic has some important limitations on accuracy that can result in falsely high readings. One solution is for people to measure their own blood pressure using a standardised approach at home. Menzies investigators led a national expert panel to produce guidelines on home blood pressure monitoring, and a series of web-accessible practical documents for patients and doctors to improve measurement and education. Education sessions continue to be conducted around Australia.

Vitamin D supplementation: is it worthwhile for cardiovascular protection?

To date, observational data has implicated low vitamin D in adverse cardiovascular health, such as increased blood pressure and increased stiffness of the large central arteries. However, there has been no randomised controlled trial evidence to support using vitamin D to reduce cardiovascular problems.

This study tested this hypothesis over 12 months among 241 people who were randomised to a monthly dose of vitamin D compared to placebo. We found absolutely no effect of vitamin D on the cardiovascular system and concluded that supplementation for this purpose is not worthwhile.

Early stages of heart failure

The detection of early stage heart failure that may precede the development of heart failure symptoms is of major interest to Menzies' cardiovascular researchers. This year, our group published an important study of 510 asymptomatic patients with type 2 diabetes mellitus, hypertension or obesity, where we showed that heart muscle thickening, elevated cardiac pressure and abnormal myocardial deformation were independently associated with impaired exercise capacity. This important observation about the methods for recognition of early heart disease is helping to inform our efforts to identify cardiac problems in the Tasmanian community.

Other cardio-metabolic group advances

We have seen growth in the Menzies Blood Pressure Clinic. This clinic provides an expert service for referred patients whose blood pressure is difficult to manage. It also provides the one-year follow-up for patients in our statewide randomised trial to identify the benefit of early diagnosis of heart failure (Tas-ELF). We have seen progress in studies aimed at reducing hospital readmission for heart failure and targeted lowering of central blood pressure. Our $2.6 million grant to identify the value of coronary CT in family members of patients with premature coronary disease has started strongly, with screening of more than 100 patients.

JOINT EFFORT: Xia Wang is investigating the role of inflammation in knee osteoarthritis, especially focusing on its diagnostic and therapeutic value.

Cancer, Genetics & Immunology

Major contribution to understanding glaucoma

Menzies researchers and collaborators have provided a major contribution to understanding the common genetic variation underlying primary open angle glaucoma (POAG) susceptibility. The research identified three new sites on the genome implicated in risk for POAG. It highlighted related candidate genes and pathways that might be involved in developing glaucoma. These findings will improve risk assessment for glaucoma and provide better opportunities for the management of high-risk individuals.

New breast cancer research

We have focused on health problems that result from breast cancer treatment, such as the risk of women developing short or long-term arm and shoulder disability and complications such as lymphedema after breast surgery. In the laboratory, we have been addressing the challenges of treating secondary breast cancer or metastatic disease. This revolves around the investigation of a group of proteins called integrins. Changes in these proteins occur in a number of types of cancer cells, enabling them to move from the primary tumour, such as a prostate tumour or breast tumour, through the body to set up new tumours.

Saving the Tasmanian devil

Researchers from Menzies and the University of Tasmania's School of Medicine have made significant steps on the path towards a vaccine against Devil Facial Tumour Disease (DFTD), the transmissible cancer that has wiped out about 80 per cent of the Tasmanian devil population. Based on laboratory data, researchers have induced an immune response in Tasmanian devils against the DFTD tumour cells. Nineteen immunised devils have since been released into Narawntapu National Park in the first test of the vaccine in the wild.

Simon De Salis, DPIPWE

DEVIL'S ADVOCATE: One of the 19 vaccinated Tasmanian devils is released at Narawntapu National Park.

TASMANIAN DEVIL RESEARCH PROGRESS

The release of 19 immunised devils into Tasmania's Narawntapu National Park marked a highlight for the year. This was the first time a vaccine against the deadly cancer threatening the species has been tested in the wild. Previous trials of the vaccine against devil facial tumour disease (DFDT) had taken place in our laboratory, where the devil research team led by immunologist Professor Greg Woods had successfully activated an immune response against cancer cells. Eighteen of the 19 devils released had produced an immune response to the vaccine. Our researchers collaborated with the University's School of Medicine and CSL Ltd to develop the vaccine. Scientists from the Walter and Eliza Hall Institute of Medical Research in Melbourne developed tools to measure immune (or antibody) responses and natural devil proteins that stimulate DTFD cells to "reveal" themselves to the devil's immune system. Researchers at the Universities of Sydney and Southampton also collaborated.

Unfortunately, routine field research during 2015 identified a second transmissible cancer in Tasmanian devils, with eight cases found in the D'Entrecasteaux Channel area in southern Tasmania. Chromosome analysis at the Cytogenetics Department of the Royal Hobart Hospital, and subsequently at the Tasmanian Government's Animal Health Laboratories, confirmed these chromosomal changes were not DFTD. Genetic analysis performed at the University of Cambridge in the UK provided conclusive evidence that a second transmissible cancer is affecting Tasmanian devils. This new cancer has similarities to DFTD as it causes tumours, primarily on the face or inside the mouth, and is probably also spread between devils by biting. Its similarities mean it can be incorporated into the vaccine research.

The original transmissible cancer is now referred to as DFT1, and the second as DFT2; collectively they will be known as DFTD. Researchers question whether transmissible cancers may not be as rare in nature as previously thought, or whether Tasmanian devils are particularly vulnerable to the emergence of transmissible cancers.

EDUCATION AND TRAINING

Congratulations to the following students who completed their PhD in 2015:

Jennifer Bannan
Siyan Baxter
Nicholas Blackburn
Tan Van Bui
Benny Eathakkattu Antony
Lisa Jarman
Michelle Kilpatrick
Tran Lan Pham
Yiing Chiing Yap

One of the key goals of Menzies is to attract successful Australian and international research students and train them to become future research leaders. Providing a stimulating and rewarding learning environment that is responsive to student needs has become an important focus of Menzies.

In 2015 we had a record number of students, with 83 enrolled at the end of the year. Of these, 25 began in 2015 and nine students completed their PhD. Seventeen students undertook Honours during 2015 and six undertook the Undergraduate Research Opportunities Program.

WHO CIDI

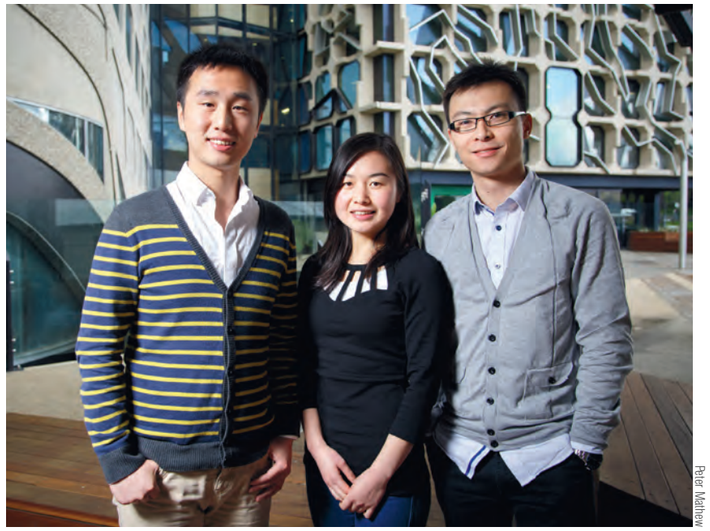
The Australasian CIDI Training and Resource Centre is based at Menzies. It provides training on the World Health Organisation World Mental Health Composite International Diagnostic Interview, a comprehensive, fully-structured interview designed to be used by trained lay interviewers for the assessment of mental disorders. We are one of three English-language training centres (the others are at Ann Arbor in the US and Groningen in The Netherlands) and our focus is on the Asia-Pacific region. In recent years we have trained people from Australia, Cambodia, Japan, New Zealand and Singapore.

In 2015, the Australasian CIDI Training and Resource Centre ran two off-site training workshops:

- Corrections New Zealand – a week-long workshop in Auckland where 24 interviewers were trained to conduct a national prevalence survey of mental disorders in correctional facilities.
- Institute of Mental Health in Singapore – 10 Institute staff in Singapore were trained in preparation for Singapore's next national prevalence survey of mental disorders.

INSTITUTE SEMINARS

Institute seminars for research staff and health sector professionals were held each week for most of 2015. The seminars featured Menzies and School of Medicine researchers as well as the following researchers from other institutions:



Peter Mathew

HIGH ACHIEVERS: Lei Si (left) and Jason Jin (right) both received a Chinese Government Award for Outstanding Self-Financed Students Abroad in 2015, while Jing Tian (centre) received a Ten of the Best award.

WORLD-CLASS: PhD student Rosemary Clark received international recognition for her work on motor neuron disease.

Peter Mathew

- Professor Elizabeth Coulson, Queensland Brain Institute, University of Queensland
- Professor Felix Eckstein, Paracelsus Medical University, Salzburg
- Professor Markus Juonala, University of Turku, Finland, Murdoch Children's Research Institute
- Professor Cate Taylor, Telethon Kids Institute and the University of Western Australia
- Dr Isabel Ferreira de Sousa, University of Queensland
- Associate Professor Clare Parish, The Florey Institute of Neuroscience and Mental Health
- Professor Paul Glasziou, Bond University
- Professor Jonathan Sprent, Garvan Institute of Medical Research
- Associate Professor Neil Spratt, University of Newcastle, NSW

STUDENT RECOGNITION

- Rosemary Clark, a PhD student in the Dickson laboratory, was awarded the Scientific Poster Prize 2015 at the 26th International Symposium on ALS/MND (Amyotrophic Lateral Sclerosis/Motor Neuron Disease), Orlando Florida in December. The international symposium is the sole international meeting for ALS and MND, with the scientific poster session attracting more than 300 submissions.
- PhD candidate Ricardo Fonseca received the American Society of Echocardiography (ASE) Foundation 2015 Abstract Presenter Travel Grant. He used this to present his abstract "Geographical variation in the use of trans-thoracic echocardiography in Australia" at the 26th Annual Scientific Sessions of the American Society of Echocardiography in Boston, MA.
- Two Menzies PhD candidates were among about 500 worldwide to be recognised by the Chinese Government for outstanding academic achievement. Lei Si (health economics research) and Xingzhong Jin (osteoarthritis research) received the Chinese Government Award for Outstanding Self-Financed Students Abroad.
- PhD candidate Rachel Climie was a finalist in the St Lukes Health & Wellbeing Award section of the Southern Cross Young Achiever Awards

GLOBAL COLLABORATION

Building our links with China

A Memorandum of Understanding between the University of Tasmania and Xi'an Jiaotong University (XJTU) was proposed in 2015 and has since been signed. In March 2015, the Menzies Director, Professor Tom Marwick, and Menzies researchers Professor Changhai Ding and Dr Joy Rathjen visited Southern Medical University in Guangzhou, Anhui Medical University in Hefei and XJTU in Xi'an. They were awarded "Guest Professor" titles by XJTU.

Eight PhD students were recruited from Anhui Medical University in 2015, bringing the number of PhD students from this collaboration to 28. Sixteen visiting academics came to Menzies from Anhui in 2015. A delegation of five professors, led by Vice President Professor Qian Wang from Southern Medical University, visited us in November and discussed further collaboration.

Other international collaborations and consortia

Cardiovascular disease

The International Childhood Cardiovascular Cohort (i3C) Consortium: This consortium was established by former Menzies Director Professor Terry Dwyer in 2002, initially with three cohorts (Australia, Finland and the USA). Incoming Menzies Director Professor Alison Venn is one of the consortium's Principal Investigators. It has grown to include seven cohorts, with five from the US and recently received a $13.3 million grant from the National Institutes of Health in the US. Data is pooled from similar studies around the world that have looked at cardiovascular risk factors in childhood, following participants over several decades into adulthood. Menzies' involvement is through the Childhood Determinants of Adult Health study (CDAH), which involves follow-up tests on school-age participants from a 1985 health survey.

The Long-Term Effects of Early Nutrition on Later Health Project: Researchers from 35 institutions in 12 European countries, the United States and Australia are studying how early nutrition programming and lifestyle factors affect the rates of obesity and related disorders.

SUCCOUR: An international multi-centre randomised controlled trial trying to demonstrate that the use of strain imaging can alter heart function in patients with breast cancers and lymphomas.

INternational STRoke oUtComes sTudy (INSTRUCT): A consortium of 14 population-based stroke incidence studies with long-term follow-up data. The study is being used to explore the reasons for differences in outcomes between men and women after stroke.

Multiple sclerosis (MS)

ANZgene consortium, co-ordinated by MS Research Australia: Menzies is a key contributor to this investigator-led consortium across Australia and New Zealand. The consortium has been studying MS genetics since 2007 and is actively aligned with the International Multiple Sclerosis Genetics Consortium. ANZgene is a collaborative effort between a multi-disciplinary team of neurologists, geneticists, bioinformaticians and molecular biologists. It comprises eight geographical nodes with stewardship of more than 3500 DNA samples for use in MS research.

International MS Genetics Consortium: Uses large-scale whole genome association studies to identify the genes that play a part in the development and progression of multiple sclerosis.

MSBase: An international, online registry and platform for collaborative outcomes research in multiple sclerosis.

International Progressive MS Alliance: A collaboration of 15 MS organisations and other stakeholders that brings together international researchers.

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MENZIES IS A KEY CONTRIBUTOR TO THE ANZGENE CONSORTIUM, WHICH HAS BEEN STUDYING MS GENETICS SINCE 2007

RESEARCH DETOUR: Henry West undertook the Undergraduate Research Opportunities Program and enjoyed a very successful Honours year at Menzies.

DETOUR INTO RESEARCH PAYS OFF

Henry West was three years into training to become a doctor when he decided to take a detour. The treatment and curing of people interests him greatly, but so do big questions about the causes and prevention of illness that can only be answered through studying populations, not individuals. He decided to take a break from the Bachelor of Medicine and do a year of medical research training, and his curiosity was rewarded.

Henry undertook the Undergraduate Research Opportunities Program and his Honours year at Menzies. He studied under the supervision of epidemiologist Dr Costan Magnussen, whose area of expertise is the impact of childhood lifestyle on adult cardiovascular health.

The research Henry undertook won the "2015 Best of the Best" award, which recognises the most outstanding of the Institute's 10 best research articles published in a medical journal in a given year.

Henry's detour out of medical practice training and into medical research training allowed him to spend a month in Finland at the University of Turku working with Dr Magnussen's collaborators. This, along with many hours immersed in population data, brought new findings on the long-term damage done to cardiovascular health when children are exposed to passive smoking.

To come to this finding, the researchers compared data from thousands of Finns who had blood samples taken in 1980, when they were aged between 3 and 18, with carotid artery ultrasound data collected from the same people in adulthood. The analysis found that children exposed to parental smoking in childhood had approximately twice the risk of having plaque in their carotid artery 26 years later as did those whose parents did not smoke. Further analysis of the data revealed that maintaining good smoking hygiene, that is smoking away from children so to not expose them to the smoke, was vitally important in reducing children's risk of artery thickening later in life.

Henry was the first author on the resulting research paper, which was published in the highly respected international journal Circulation.

"Meeting the other researchers and working with them, being able to put a face to the name rather than just seeing the name on an email list means you feel really involved in the research," Henry said. "That was really exciting."

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Genetics

Multi-ethnic genetics study of Diabetic Retinopathy: Looking for genes that lead to diabetic eye disease.

PRACTICAL consortium (the Prostate Cancer Association Group to Investigate Cancer Associated Alterations in the Genome): Menzies works collaboratively as a member of PRACTICAL, which was established in September 2008. The aims of the consortium are to combine data from many studies to provide a reliable assessment of the risks associated with genes that may be related to prostate cancer, and to validate new findings.

The International Consortium for Prostate Cancer Genetics (ICPCG): Focusing on the genetic causes of familial and hereditary prostate cancer.

The Prostate Collaborative Cancer Research Alliance: A group of scientific and clinical prostate cancer experts focusing on advancing and translating prostate cancer research.

International Glaucoma Genetics Consortium (IGGC): Aims to identify genes contributing to glaucoma. The consortium consists of members from Australia, North America, Asia and Europe and uses population-based studies to map genes for clinical traits that lead to glaucoma, and family and case control studies to look at how those genes influence glaucoma risk.

The International Age Related Macular Degeneration Gene Consortium: Includes multiple groups from around the world and has assembled the largest collection of AMD cases ever studied.

Healthy ageing

ASPREE (ASPirin in Reducing Events in the Elderly): Menzies is a critical part of the ASPREE randomised controlled trial of aspirin, the largest primary prevention aspirin study ever undertaken in healthy older people. This collaboration is through Monash University and the Bermann Center in the US city of Minneapolis, and is investigating whether taking daily low-dose aspirin extends healthy active life in those aged over 70.

GOOD (Gait, cOgnitiOn & Decline consortium): An international collaboration investigating the interplay between gait and cognition/dementia in older people.

CREAM (Consortium for Refractive Error And Myopia)

TREATOA: Studying genes for pain and osteoarthritis.

GeFOS: Studying genes for osteoporosis.

CONNECTED:
Menzies Associate Director (International) Professor Changhai Ding (back row, sixth from left) with visiting researchers from Anhui Medical University and Menzies students.

GRANTS, FELLOWSHIPS AND FUNDING

IN HER SIGHTS:
Associate Professor Kathryn Burdon and collaborators aim to uncover the genes that cause keratoconus.
Image by Peter Mathew


Peter Mathew

NHMRC Grants Awarded in 2015

Associate Professor Kathryn Burdon
Project grant – $912,880
Associate Professor Burdon and her colleagues are investigating the genetic causes of a common eye disease called keratoconus, which affects the cornea, the clear window at the front of the eye. In people with keratoconus, the cornea becomes progressively thinner, which leads to it bulging outwards. This causes severe visual distortion and if untreated leads to blindness. Current treatments involve invasive surgical procedures and rarely last for the lifetime of the patient.

It is not yet known what causes keratoconus, but genetics plays a role, with the disease often seen running in families. This research project aims to uncover the genes that cause keratoconus to develop treatments to prevent or slow down disease progression. The research is being done in collaboration with researchers at Flinders University in Adelaide, and the Centre for Eye Research in Melbourne.

Professor Graeme Jones
Project grant – $751,491
Professor Jones will lead a randomised trial of krill oil for osteoarthritis of the knee. Osteoarthritis is a major public health problem, with limited choice in terms of therapy. This study will test whether krill oil (a natural and sustainable anti-inflammatory agent) will help pain in patients with painful osteoarthritis and fluid on the knee. It will be carried out in five centres around Australia, with Hobart as the co-ordinating centre.

Associate Professor Alex Hewitt
Practitioner fellowship – $467,961
Associate Professor Hewitt, a joint appointment between Menzies and the School of Medicine, is undertaking molecular profiling to identify therapeutic targets for blinding diseases. He was the top ranked Practitioner Fellow applicant in the 2015 NHMRC grant round. In collaboration with other local and national researchers, he is using induced pluripotent stem cells to dissect the molecular mechanisms of disease.

It is hoped that in the near future, this will mean better treatments for blinding conditions such as glaucoma, macular degeneration and many retinal dystrophies.

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Peter Mathew

INNOVATIVE: App developer Chris Lucani with Dr Fay Johnston, who leads the AirRater team.

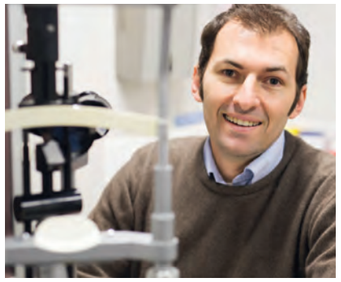
ON THE MOVE: Dr Michele Callisaya (opposite page) has been awarded a Fellowship to continue her work on the relationship between exercise and brain health.

Continued from page 17

Dr Costan Magnussen
Project grant – $336,419
Using information that has been collected from individuals at several ages extending from childhood to adulthood, this project aims to determine the role that childhood factors play in the development of diabetes. The project's findings could lead to improvements in the identification of people at risk of adult diabetes.

Dr Martin Schultz
Early career fellowship – $314,644
An abnormal (excessively high or low) blood pressure response to exercise is a signal for future development of cardiovascular disease. Despite this, there are no guidelines available to doctors outlining what level of exercise blood pressure may signify this increased disease risk. This study aims to fill this knowledge gap through establishment of a large, national database of exercise test results linked to acute and chronic disease outcomes. Results will be used to inform clinical practice guidelines, enabling doctors to more easily identify those at high risk related to exercise blood pressure.

STAR FELLOW: Associate Professor Alex Hewitt, below, was the top-ranked Practitioner Fellow for the NHMRC in 2015.



Significant research grants administered externally

Dr Fay Johnston
For the Sense-T AirRater project – $842,957
This project is building a Tasmania-wide sensor network to measure air quality and to deliver alerts and information to agencies responsible for public health and safety. The project is relevant for landscape burning, heatwave responses and air quality management.

The AirRater smartphone application is being developed to gather crowd-sourced symptom data and correlate these with air quality, pollen and weather in the vicinity of the user, providing individualised alerts for users. Other AirRater collaborators are the University of Tasmania, Environment Protection Agency (EPA) Tasmania, the CSIRO, Australian National University, and the Tasmanian Department of Health and Human Services.

THE SENSE-T PROJECT IS RELEVANT FOR LANDSCAPE BURNING, HEATWAVE RESPONSES AND AIR QUALITY MANAGEMENT.

Dr Amanda Neil
Among the applicants awarded $751,876 by the NHMRC for a Project Grant entitled 'An empirical framework for assessing mortality and morbidity in people with psychotic disorders'. The work is led by Professor Vera Morgan from the University of Western Australia.

Associate Professor Alex Hewitt
Among the applicants awarded $1,345,055 by the NHMRC for a Project Grant entitled 'High penetrance deleterious mutations in blinding glaucoma'. The research is led by Professor Jamie Craig of Flinders University.

Fellowships – $125,000

The Select Foundation continued its generous support of these Fellowships:
Associate Professor Tracey Dickson – Neurodegenerative disease research
Professor Bruce Taylor – clinical multiple sclerosis research
Dr Kazuaki Negishi – clinical cardiovascular research
Dr Michele Callisaya – exercise and brain health
Dr Amanda Neil – health economics

Menzies Institute for Medical Research Community Fellowship:
Dr Catherine Blizzard – neurodegenerative disease research

A new Fellowship supported by the Farrell Family Foundation was awarded for the first time in 2015:
Dr Benny Eathakkattu Antony – osteoarthritis and osteoporosis research

Honours Scholarships

Thank you to the following donors:
- Mr Alan Jones
- Cuthbertson Brothers Pty Ltd
- Diagnostic Services
- Doctors Tasmania
- Estate of the late Mrs Evelyn Pedersen through the Cancer Council Tasmania (CCT) and the University of Tasmania Foundation
- Groom Kennedy Lawyers & Advisors
- Mr Ian Matterson and family
- Mr Leon and Mrs Sue Morrell
- Moonah Navy Club
- Mr Murray Gordon and family
- Rodger and Maxeme Tall
- Save the Tasmanian Devil Appeal
- The Estate of the late Mrs Maida Beatrice Vimpany through the University of Tasmania Foundation
- The Heart Foundation

Continued on page 20

Peter Mathew

MAKING A DIFFERENCE: Scholarship donors were able to meet up with PhD and Honours students at our annual Scholarships Morning Tea.

BY SUPPORTING US YOU ARE HELPING TO SECURE OUR FUTURE AT A TIME WHEN COMPETITION FOR MEDICAL RESEARCH FUNDING IS EXTREMELY TOUGH.

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PhD Scholarships

Thank you to the following donors:

- Cuthbertson Brothers Pty Ltd
- Diabetes Tasmania
- Estate of the late Merle White Weaver through the University of Tasmania Foundation/Pennicott Foundation
- The Halifax Foundation and the Gregory Patrick and Marie Dolores Farrell Foundation
- Hobart Cancer Auxiliary
- Masonic Centenary Foundation and the Motor Neurone Disease Research Association
- Mr Neil Ashdown
- Nekon Pty Ltd and Save the Tasmanian Devil Appeal
- Staples Australia and Konica Minolta
- Mr Ron Carthew and Dr Jo Statham

We received over $1 million of income from bequests, including from the:

- Estate of the late Joyce Isabel Batchelor
- Estate of the late Peter Coleman
- Estate of the late Muriel Jean Cooling
- Estate of the late Patricia Glasser
- Estate of the late Roy Michael Jensen
- Estate of the late Robert Malcolm
- Estate of the late Barbara Joan Pettit
- Estate of the late Jaap Wim Vermaas
- Estate of the late Jayne Wilson

Many other associations and charitable foundations awarded research funding to Menzies in 2015:

- Alzheimer's Australia Dementia Research Foundation
- Arthritis Australia
- Aurora Energy
- Australian Research Council
- Australian Podiatry Education and Research Foundation
- Blundstone Pty Ltd
- Department of Health and Human Services Tasmania
- Ian Potter Foundation
- Local Government Association of Tasmania
- Morris Animal Foundation
- Motor Neurone Disease Research Institute of Australia
- MS Research Australia
- the National Heart Foundation
- Parkinson's Tasmania
- Rebecca L Cooper Medical Research Foundation
- Royal Flying Doctors Service
- Royal Hobart Hospital Research Foundation
- Tas Community Fund
- TasNetworks
- the University of Tasmania and the University of Tasmania Foundation Inc.

For outstanding research achievement evidenced through publication in a scholarly journal in 2015:

BEST OF THE BEST – HENRY WEST

For 'Exposure to parental smoking in childhood is associated with increased risk of carotid atherosclerotic plaque in adulthood: The cardiovascular risk in young Finns study' in *Circulation*

TEN OF THE BEST

Menzies Ten of the Best and Professional Staff Awards for 2015

Population Health Category

Ricardo Fonseca: For research on whether the promulgation of appropriate use criteria has led to an improvement in the proportion of appropriate cardiac imaging requests published in *Journal of the American College of Cardiology*.

Jing Tian: For looking at the association between quitting smoking and weight gain, published in *Obesity Reviews*.

Rebecca Kelly: For looking at the changes possible in blood pressure from childhood to adulthood, published in *The Journal of Pediatrics*.

Laboratory Category

Catherine Blizzard: For research that identified the primary site in the nervous system for the development of motor neuron disease, published in *Disease Models & Mechanisms*.

Ruth Pye: For research that discovered that Tasmanian devils are being affected by a second transmissible cancer, published in *Proceedings of the National Academy of Science*.

Alex Kreiss: For research showing that Tasmanian devils can induce an immune responses against Devil Facial Tumour Disease cells, published in *Vaccine*.

Clinical Category

Xia Wang: For research showing a causal relationship between synovial inflammation and structural changes in knees, published in *Arthritis & Rheumatology*.

Martin Schultz: For research into the clinical relevance of exaggerated blood pressure during exercise, published in the *Journal of the American College of Cardiology*.

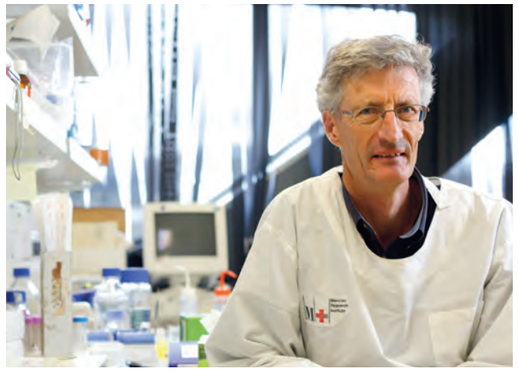
Weiyu Han: For research that used comprehensive MRI to find that alteration in infrapatellar fat pad signal intensity was significantly associated with knee osteoarthritic changes, published in *Annals of the Rheumatic Diseases*.

Professional Staff Award

Brian Stokes: Manager of the Tasmanian Data Linkage Unit and Tasmanian Cancer Registry.

Kristyn Whitmore: Study Co-ordinator for the 'Caught CAD' study and Research Nurse for 'TAS Help'.

SUCCESS STORIES: Left to right, laboratory category winners Ruth Pye, Dr Alex Kreiss and Dr Catherine Blizzard; the Vice-Chancellor of the University of Tasmania, Professor Peter Rathjen, and Professional Staff Award winner Brian Stokes; population health category winners Rebecca Kelly, Ricardo Fonseca and Jing Tian.



HIGH ACHIEVERS: Dr Kaylene Young won a Tasmanian Young Tall Poppies Award; Professor Greg Woods was recognised for Distinguished Service to Medicine, Science and Community in Tasmania.

Dr Michele Callisaya
Received the Stroke Society of Australasia's Peter Bladin New Investigator Award for a presentation entitled "Subcortical infarcts and the risk of falls: combined results of TASCOG and Sydney MAS".

Dr Claire Dickson
Her paper "Structure of the hemoglobin-IsdH complex reveals the molecular basis of iron capture by Staphylococcus aureus" was selected by the *Journal of Biological Chemistry* as one of their best 21 papers in 2014 (awarded in 2015), from more than 3000 papers published in the journal.

Dr Quan Huynh
Received the Cardiac Society of Australia and New Zealand's Allied Health and Technology Affiliate Prize for a presentation entitled "Prediction of 30-day heart failure readmission or death".

Professor Graeme Jones
Received the President's Prize from the Australian Rheumatology Association for Best Collaborative Research in the past three years.

Professor Tom Marwick
Was inducted as a Foundation Fellow into the Australian Academy of Health and Medical Sciences.

Associate Professor James Sharman
Was invited to the membership of an international Commission on Hypertension by *The Lancet*.

Professor Tania Winzenberg
Was appointed Chair of the Royal Australian College of General Practitioners Expert Committee – Research. She is also a member of the RACGP Red Book (9th Edition) Editorial Committee, leading the development of Chapter 14 – Osteoporosis.

Professor Greg Woods
Received the Australian Society for Medical Research Certificate in Recognition of Distinguished Service to Medicine, Science and Community in Tasmania.

Dr Kaylene Young
Won a Tasmanian Young Tall Poppies Award presented by the Australian Institute of Policy and Science. She was also invited to present at the National Science Teacher's Summer School in Canberra and was appointed Tasmanian State Representative for the Australian Brain Bee.

Ranked with the best, worldwide

Menzies had reason to celebrate its contribution to the University of Tasmania's outstanding success in the Excellence in Research for Australia (ERA) rankings in 2015.

In the fields of clinical sciences, neurosciences, human movement and sports science and ophthalmology and optometry, the University was evaluated to be "well above world standard", the highest possible ranking. It was ranked "at world standard" in the areas of public health and health services and cardiovascular medicine and haematology.

The outstanding success in the clinical sciences area reflects Menzies' focus on chronic disease and the diseases of ageing that are prevalent in Tasmania, particularly osteoarthritis, osteoporosis and multiple sclerosis.

Success in the human movement and sports science category reflects the focus on exercise physiology and research into the health benefits of physical activity seen in Menzies' Cardio-metabolic Health and Diseases and Public Health and Primary Care themes.

In the neurosciences area Menzies and the University's Faculty of Health conduct research in the areas of Alzheimer's disease, Parkinson's disease, multiple sclerosis, neurodevelopment, brain trauma and stroke.

The achievement of "well above world standard" in ophthalmology and optometry reflects the recruitment of outstanding researchers to Menzies and the Faculty of Health. These researchers are contributing to research into glaucoma, diabetic ocular complications, corneal diseases and congenital cataract, with a particular focus on the genetics of eye diseases and building on Tasmanian genealogical resources.

The ERA rankings are a comprehensive quality evaluation of all research produced in Australian universities against national and international benchmarks. They are determined and moderated by committees of distinguished researchers from Australia and overseas.

COMMUNITY ENGAGEMENT AND PHILANTHROPY

With medical research funding becoming more competitive every year, the support we receive from the community is vital to our success

REACHING OUT:
Showcasing our research at Agfest helped us connect with the community in northern Tasmania.

Each year, the Tasmanian community continues its amazing support of Menzies. With philanthropy totalling 13 per cent of the total income for Menzies in 2015, this support is absolutely vital to our success. In 2015, more than 4500 people participated in a range of events, including community talks and tours, Meet the Researcher events, the Student Showcase, Thank You Day, public talks and our two signature events – the Menzies Debate and the Art of Christmas.

In 2015, the Menzies Debate asked if all men aged between 50 and 69 should have annual prostate cancer screening with a PSA test. Our debaters, from research, clinical and advocacy backgrounds, were kept on track by the sharp wit of our moderator, the ABC Science Communicator Bernie Hobbs, in front of an enthusiastic audience of 220 people.

On November 25, friends, donors and supporters of Menzies gathered to celebrate another successful year at the Art of Christmas cocktail party and art auction. In 2015, our Art of Christmas event was also a farewell to our outgoing Director, Professor Tom Marwick, and a welcome to our incoming Director, Professor Alison Venn. Money raised through ticket and Christmas card sales, plus a percentage of every artwork sold, went to research at Menzies and will make a difference to the work undertaken in 2016.

In the second half of the year we joined the University of Tasmania 125 celebrations with a panel discussion on the topic Life at 125: Redefining Ageing in the 21st Century, and a historical display of medical and medical research equipment collected from throughout the University and the community.

A highlight of our year in philanthropy was the raising of more than $70,000 through the Seconds Count Gala Ball, an event organised by a dedicated group of community volunteers to raise funds for metastatic breast cancer research. Almost 500 people attended the event, including the Governor of Tasmania Her Excellency the Honourable Professor Kate Warner.

This was just one of many donations and bequests. We are delighted to report that our partnership with the Seconds Count organisers will continue with another ball in 2016.

Community organisations have remained a pillar of support. We would like to thank groups including the Hobart Cancer Auxiliary, Howrah School for Seniors, Clarence Probus, Lions Club of the City of Devonport, Little Footprints Auxiliary, Parkinson's Tasmania, Police Association of Tasmania, Penguin Indoor Bowls Club, Perfect Fit 4 Ladies, Rotary Club of Devonport North, Soroptimist International of Burnie and the South Hobart Senior Citizens Club.

A highlight of our year in philanthropy was the raising of more than $70,000 through the Seconds Count Gala Ball

FESTIVE FUN:
Left, Mr Dick Warner, husband of Her Excellency Professor the Honourable Kate Warner, AM, Governor of Tasmania, with Seconds Count organiser Nicole Tyson and the Menzies Institute Advancement Manager, Teisha Archer, at the Seconds Count Gala Ball; below left, revellers of all ages celebrated the year's end at the Art of Christmas.

CHARITABLE:
Below right, Associate Professor Jo Dickinson (right) with Assistant Commissioner Donna Adams, of the Tasmania Police, and her father, Dave. The generosity of Assistant Commissioner Adams and others enabled the Tasmania Police Charity Trust to make a $10,000 donation to breast cancer research at Menzies.

In 2015, we received the final instalment of a $120,000 donation from the Royal Flying Doctors Service (RFDS) in support of the ASPREE: Healthy Ageing Biobank research led by Professor Mark Nelson. The aim of the ASPREE Healthy Ageing Biobank is to contribute to a bank of bio-specimens held at Monash University in Melbourne. The donation from RFDS allowed the collection of specimens across rural and remote parts of Tasmania, ensuring that Tasmanians were represented in this internationally collaborative research.

Blundstone Pty Ltd and Aurora Energy were among the many corporate organisations who continued support in 2015. TasNetworks made a three-year commitment to workplace mental health and wellbeing research led by Associate Professor Kristy Sanderson.

In 2015, the Tasmanian community responded overwhelmingly to three mail appeals for different research needs at Menzies. One of our most pressing research needs was addressed through the Autumn appeal, with $160,000 secured to buy a new DNA sequencer.

Other significant areas of support included donations towards scholarships and fellowships. With the addition of six new Menzies Honours scholarships and one PhD for 2015 the total number of students on scholarships increased to 16 Honours students and 14 PhD students. The value of the 2015 externally funded Menzies scholarships grew to more than $400,000.

We thank almost 1000 individual supporters who made donations to our appeals in 2015. Every contribution is important and by supporting us you are helping to secure our future at a time when competition for medical research funding is extremely tough.

FINANCIAL REPORT

1 JANUARY TO 31 DECEMBER 2015

	2014 Actual	2015 Actual
Income		
Commonwealth Government research support	$ 4,170,358	$4,163,111
Teaching income	$748,941	$615,551
Menzies Foundation	$75,000	$75,000
Commonwealth Government research grants	$6,559,230	$5,943,950
Tasmanian Government grants	$1,625,609	$1,274,523
Other contracts and agreements	$3,001,419	$4,135,231
Donations	$1,141,392	$1,592,889
Bequests	$1,620,434	$1,082,955
Investment income	$828,525	$707,087
Sales	$411,409	$462,782
Other income	$360,529	$392,978
UTAS contributions	$1,237,287	$776,441
	$21,780,133	$21,222,499
Expenses		
Salaries and on-costs	$10,669,280	$11,911,885
Depreciation, equipment and infrastructure	$1,087,999	$1,097,516
Medical and laboratory materials	$1,663,028	$1,307,058
Travel and training-related costs	$602,057	$748,506
Scholarships	$577,685	$760,816
Research sub-contractors and consultants	$588,438	879,941
Other expenses	$764,456	$819,403
	$15,952,943	$17,525,125
Surplus/(Deficit)	$5,827,190	$3,697,374

Notes

1 Trust Funds

As at 31 December, 2015, Menzies held Trust Funds valued at $16,001,824. The capital amount of this trust was valued at $12,146,646. Interest distributions provide a source of research income for Menzies. The non-capital component of these trust funds is available for use in accordance with the benefactors' instructions.

The University Foundation manages a number of trusts on behalf of Menzies. As at 31 December, 2015, the value of these trusts was $764,803. Distributions are made by agreement between the University Foundation and Menzies in accordance with the benefactors' instructions.

MANAGEMENT

The 2015 Menzies Board Members

Mr Bruce Neill (Chair)
Professor Moira Clay (from 26 June, 2015)
Mr Brian Doyle AM
Professor Denise Fassett (ex-officio)
Mr Bob Gozzi
Professor Brigid Heywood (from 12 October 2015, ex-officio)
Professor Tom Marwick (ex-officio)
Professor Paddy Nixon (to 30 June 2015, ex-officio)
Mr John Ramsay (to 26 February 2015)
Professor Bob Williamson

The 2015 Menzies Senior Management Team

Professor Tom Marwick (Director)
Professor Alison Venn (Deputy Director)
Associate Professor Tracey Dickson (Deputy Director)
Mr Mark Bennett (General Manager)
Professor Changhai Ding (Associate Director – International)
Ms Teisha Archer
Associate Professor Jo Dickinson
Ms Miranda Harman
Professor Graeme Jones
Associate Professor James Sharman
Dr David Steele
Professor Bruce Taylor

If you would like more information about our research programs, collaborations or education opportunities please contact us.

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ABN 30 764 374 782 – University of Tasmania

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