



Annual Report 2012





To conduct  
**innovative,**  
world-class  
medical research  
to improve  
human **health**  
and wellbeing

Our **ultimate**  
goal is to **cure**  
or prevent disease  
and **save lives**



# Contents

|                                  |    |
|----------------------------------|----|
| About Us                         | 2  |
| Chairman's and Director's Report | 6  |
| Research Highlights              | 8  |
| Education and Training           | 18 |
| Global Collaborations            | 20 |
| Community Engagement             | 22 |
| Building Developments            | 24 |
| Financial Report                 | 26 |
| Board and Senior Management Team | 28 |

# About Us

## Who We Are

Menzies Research Institute Tasmania, an institute of the University of Tasmania, is one of Australia's leading health and medical research institutes.

**Menzies is first and foremost about improving human health and wellbeing.**

**Our ultimate goal is to cure or prevent disease and save lives.**

## Our Research

Menzies is recognised worldwide for its research excellence. We are renowned internationally for our innovative research that utilises the unique competitive advantages Tasmania offers, including our island geography, stable population and our extensive genealogical records.

Menzies is at the forefront in the fight against disease and intensely committed to this global call for action through our ongoing advances in medical research.

Menzies has the ability to perform high quality basic, clinical and population health research. Research at Menzies takes a bench-to-bedside and disease prevention approach aimed at improving patient care and clinical outcomes for the community by translating knowledge into clinical and policy actions.

One of Menzies' strengths stems from the multi-disciplinary nature of our research. The Institute offers a dynamic and stimulating scientific environment where scientists share ideas and knowledge to facilitate faster and more effective research results.

## Our Key Research Areas

Our research is structured around five key research themes: public health and primary care; neurodegenerative disease/brain injury; cardio-metabolic health and diseases; musculoskeletal health and diseases; and cancer, genetics and immunology.

### Public Health and Primary Care

Public health research seeks to better prevent and manage important population health problems. Projects address a broad range of conditions including cardiovascular disease, type-2 diabetes, cancer and depression. Several projects are investigating how lifestyle factors (e.g. smoking, physical activity, diet, alcohol consumption and sun exposure), obesity and hormones in childhood and early adulthood affect the risk of developing disease later in life. Research in the public health area includes epidemiology, behavioural science, environmental health, biostatistics and health economics.

Established partnerships with the Tasmanian State Government and management of the Tasmanian Cancer Registry and Tasmanian Data Linkage Unit ensure a focus on applied research.

### Neurodegenerative Diseases/Brain Injury

Hundreds of thousands of Australians are affected each year by diseases of the brain and nervous system. Our researchers use cutting-edge tools to understand the mechanisms underlying the brain's response to trauma (e.g. road accidents and falls) and diseases such as dementia (including Alzheimer's disease), multiple sclerosis, Parkinson's disease and motor neurone disease. This laboratory-based research will assist in the development of new ways to diagnose, prevent or treat these devastating disorders.

### Cardio-Metabolic Health and Diseases

The primary aim of this theme is to reduce the burden of cardiovascular and metabolic diseases on our community. The group uses interventions targeted at identifying and preventing the development of obesity, insulin resistance, type-2 diabetes and hypertension. Particular areas of interest include blood pressure assessment, assessment of large and small blood vessels functioning 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.

## Musculoskeletal Health and Diseases

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

## Cancer, Genetics and Immunology

The Cancer, Genetics, and Immunology theme comprises of laboratory-based researchers and biostatisticians. Research into cancer genetics is aimed at understanding genes that contribute to the development of different types of cancers. At present the group is studying genetic susceptibility to prostate cancer and blood cancers, such as leukaemia. In addition, the team is looking at the immune response in the context of cancer including the Tasmanian Devil Facial Tumour Disease, infectious diseases and autoimmune diseases with a particular interest in lupus and multiple sclerosis.



*Menzies' research is building healthier and happier lives for future generations*

# About Us

## Making Discoveries

For over 24 years, significant breakthroughs have been made by our scientists into the cause, prevention and treatment of a number of diseases impacting 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)
- Genetic markers linked to men's risk of developing prostate cancer
- The potential irreversible impact of childhood exposure to parental cigarette smoke on cardiovascular health later in life
- Association of higher vitamin D levels with a lower relapse risk in multiple sclerosis
- The development of new therapies for rheumatoid arthritis and osteoarthritis
- Potential avoidance of increased cardiovascular risk from childhood obesity if obesity in adulthood is avoided
- Remodelling of nerve cells in undamaged parts of the brain in response to acquired brain injury
- Ability of platelets found in the blood to kill the malaria parasite during the early stages of a malarial infection.

## Our History

The University of Tasmania established the Menzies Research Institute Tasmania, formerly known as the Menzies Centre for Population Health Research, in 1988, with significant strategic direction and base funding from the Sir Robert Menzies Memorial Foundation. Significant base funding was also provided by the University and the Tasmanian Government. Menzies was primarily established to conduct population health research with health care shifting gradually but steadily towards preventative medicine and the identification and discouragement of disease-causing behaviour.

From modest beginnings, Menzies quickly gained an international reputation for its innovative work into the link between babies' sleeping position and sudden infant death syndrome (SIDS). From this work our research expanded and population health and epidemiological research programs were developed. In 2006, we expanded our focus to include both clinical and basic science, to ensure that the depth and quality of our research was enhanced and strengthened.

In 2010, Menzies opened a new \$58 million world-class medical research, clinical and education facility known as Medical Science 1 (MS1).

In 2013, a \$90 million facility known as Medical Science 2 (MS2) will officially open.

Together MS1 and MS2 will be known as the UTAS Medical Science Precinct. The new medical science precinct will keep Tasmania at the forefront both in Australia and internationally in medical research, clinical translation and education, well into the future.

## How We Spend Our Donor Funds

Menzies relies on the generosity of donors to seed fund priority research projects, provide scholarships for our students, salaries for our researchers, and to purchase essential pieces of research equipment. Every donation received by Menzies, no matter how big or small, goes towards research undertaken in Tasmania. Many of our research projects that receive government funding were initially established with funding from our supporters. Without donor support, some of our important research would simply not get off the ground as government and competitive funding bodies tend to support established research.

**Gifts to Menzies Research Institute Tasmania are an investment in a healthier future – your future, and the future of all those who will come after you.**



*Menzies' volunteer participant-based clinical trials play an important role in the translation of our research discoveries into healthy outcomes for the community*

# Chairman's and Director's Report

The past 12 months were a landmark year for Menzies Research Institute Tasmania (Menzies) with the arrival of our new Director, the development of a new facility and a year of remarkable research discoveries and grant successes.

## New Director

Professor Tom Marwick joined Menzies as the new Director in October 2012 from the Cleveland Clinic in the United States. Professor Marwick has a long and distinguished career in cardiovascular health and research. In addition to his expertise in cardiac imaging, he has an interest in population health, which will interface well with other researchers at Menzies.

Menzies is very fortunate to have such a distinguished research leader and clinician to guide our efforts to deliver improved health outcomes for people in Tasmania and elsewhere.

## New Research Facility

Menzies' staff and students began moving into the new \$90 million Medical Science 2 (MS2) building in late 2012. Construction of our new building is well ahead of schedule and we look forward to full completion of MS2 in May 2013.

This new world-class facility will enable us to further expand our highly innovative research program, attract more internationally renowned researchers to Tasmania, make more discoveries and intensify the pace of turning our discoveries into better treatments and health practices for the Tasmanian community and beyond.

## Research Excellence

Our researchers were key to a number of significant research discoveries in 2012. These discoveries were published in peer-reviewed journals around the world, including some of the world's most prestigious medical journals.

Some interesting and significant findings from among these publications were:

- An international collaborative study involving Menzies, found a new link between multiple sclerosis (MS) treatment and vitamin D. The study suggests that one of the main treatments for MS may also increase the amount of vitamin D patients receive from sun exposure.
- Research that showed smoke from landscape fires is an important contributor to deaths worldwide.
- Our researchers were involved in the discovery of new genes that may play a role in adding to the risk of Alzheimer's disease in older people up to 20 years before clinical symptoms become apparent.

- The National Institutes of Health (USA) named research from the Institute, published in the *New England Journal of Medicine*, as one of two major advances in cardiovascular epidemiology for 2012. This study showed that childhood obesity does not permanently increase cardiovascular risk if children become non-obese adults.
- An international study found that the Devil Facial Tumour Disease (DFTD) that affects the Tasmanian devil population is a relatively stable cancer and has fewer mutations than some human cancers.
- A collaborative study, involving Menzies' researchers, uncovered two molecules in human platelets that work together to kill malaria.
- Researchers were involved in a study that identified numerous genes underlying the risk of osteoporosis.

Grants from the Federal Government and external funding bodies are awarded based on the quality and significance of the research. In 2012 Menzies was awarded 13 grants totalling \$8.5 million by the National Health and Medical Research Council for new research projects commencing in 2013. This result is the best from an NHMRC Project Grant perspective in Menzies' 24-year history and reflects the scientific competitiveness of our research.



## Donors

Our donors make a very significant contribution to the success of the Institute by providing vital funding for research projects that need seed funding, scholarships for our students, salaries for our researchers and important scientific equipment. We sincerely thank all our supporters who have given generously to our fundraising program and also those who support our work by donating their time through volunteering. Your donation supports Menzies in achieving its vision in building a healthier future for all of us.

## Key Partners

We wish to acknowledge a number of major organisations that support our work including: the University of Tasmania, the UTAS Foundation, The Atlantic Philanthropies, the Menzies Foundation, the Federal Government, the Tasmanian Government and the Royal Hobart Hospital. Menzies also has a strong collaborative working relationship with the UTAS Faculty of Health Science. A full list of our generous supporters can be found on our website [www.menzies.utas.edu.au](http://www.menzies.utas.edu.au)

## Our People

At the heart of Menzies are our people – our staff, our students, our volunteers and our Board members. We thank our Board members for their expertise and ongoing support and dedication. Our staff and students, we thank them for their hard work and determination, and for contributing to improving the health and wellbeing of others.

We would like to acknowledge the contribution made by retiring Board members Sir Guy Green, Professor Jonathan West and Dr David Boadle.

We are pleased to welcome new Board members Mr John Ramsay, Mr Greg Johannes and Mr Brian Doyle, as well as Professor Paddy Nixon, UTAS Deputy Vice-Chancellor (Research) and Professor Denise Fassett, Acting Dean, Faculty of Health Science, on an ex-official basis.

We would especially like to thank Professor Alison Venn, for stepping into the position of Acting Director of Menzies. Professor Venn did an exemplary job of overseeing the Institute and we thank her for the expertise and dedication she brought to the role.

## Looking to 2013 & Beyond

2013 marks a significant milestone in the history of Menzies with the official opening of our new building and the celebration of our 25th Anniversary. We look forward to celebrating our 25 years of research excellence with you.

Over the next decade, our research activity will continue to primarily focus on the major diseases affecting the Tasmanian community and beyond, including arthritis, cancer, dementia, diabetes, heart disease, mental health and multiple sclerosis. We will also continue to further strengthen and develop our international collaborations around the globe. This will enable key discoveries to be more quickly adopted and translated, ensuring better treatments and health practices for our community.

**Dr Dan Norton**  
Chairman

**Professor Tom Marwick**  
Director

# Research Highlights

Our researchers continued to conduct world-class research in 2012 to improve human health and wellbeing. Among the highlights:

## Neurodegenerative Disease/Brain Injury

### Multiple Sclerosis (MS)

A world-first MS prevention clinical trial called the PreANZ study was launched in Australia and New Zealand. This important trial will test whether vitamin D can prevent MS in those at risk of developing the disease. The trial will focus on the possibility of using vitamin D supplementation to prevent a diagnosis of MS following a person's presentation with the first symptoms that may lead to a diagnosis of MS. It will also test appropriate dosage levels and safety, information that may eventually lead to an effective preventative strategy for MS. Menzies will play a pivotal role in the clinical trial. The PreANZ study will run for four years from 2013-2016. Results from the study will be available in 2017.

Menzies' researchers also discovered that a common MS treatment may help increase vitamin D levels. It is widely believed, but not yet proven, that increasing your vitamin D level reduces the risk of getting MS and that higher levels of vitamin D are associated with a lower relapse risk in patients with MS. Menzies' researchers have now discovered that people on the MS drug, interferon-beta, absorb up to three times as much vitamin D from the sun as those not on the treatment or on other MS treatments. This observational study was published in the international journal, *Neurology*. This study provides further support for people with MS to periodically have their vitamin D measured and kept in the sufficiency range, especially in winter. These new findings have the potential to markedly affect clinical practice in the treatment of MS.

### Alzheimer's Disease

A further research highlight for 2012 was Menzies' involvement in a new Alzheimer's discovery. The paper, published in *Nature Genetics*, detailed the discovery of new genes that may play a role in adding to the risk of Alzheimer's disease (AD) in older people up to 20 years before clinical symptoms become apparent. Researchers looked at the genes that contribute to the size of the part of the brain known as the hippocampus, which is important for memory. The hippocampus invariably shrinks during the course of ageing, but the shrinkage is thought to become more pronounced during the progression of AD. Menzies' researchers investigated what new genetic markers there might be to explain why the hippocampus shrinks and have discovered a set of new genes that are likely to be responsible. The functions related to these genes may indicate pathways that underlie the development of AD in people up to 20 years before symptoms actually surface. This new research could potentially lead to new treatments for AD.



*Professor Bruce Taylor's work has been pivotal in establishing the link between vitamin D deficiency and MS*

# Research Highlights

## Cancer, Genetics and Immunology

### Devil Facial Tumour Disease

Menzies' researchers in collaboration with researchers from the UK, USA and Australia discovered new facts about the genetic make-up (genome) of the cancer cells that causes Devil Facial Tumour Disease (DFTD). This is a transmissible cancer that is affecting the Tasmanian devil population. The researchers found that DFTD first arose in a female devil and although this devil is now dead, her DNA is still 'alive' in the genome of DFTD. The research results highlighted that DFTD is a relatively stable cancer and has fewer mutations than some human cancers. This indicates that cancers do not need to be unstable in order to become transmissible. The paper was published in the international journal *Cell*.

### Malaria

Menzies' researchers, in collaboration with researchers from Macquarie University and Macfarlane Burnet Institute for Medical Research and Public Health, uncovered two molecules in human platelets that work together to kill malaria. The findings published in the highly prestigious journal *Science*, revealed the two molecules, (PF4 and the Duffy antigen) work in

combination to kill the malarial parasite *Plasmodium falciparum*. PF4 plays an important role in protecting against the parasite by penetrating red blood cells infected by the parasite and killing it. This study provides us with a better understanding of how the human body protects itself against malaria. These findings may help scientists to develop new vaccines and new therapies for treating malaria.

## Cardio-Metabolic Health and Diseases

### Heart Failure

An international observational study, led by Menzies' researchers found that women who were taking a statin (medication used to lower bad cholesterol) during and after being treated for breast cancer with anthracycline chemotherapy, had fewer heart problems than women who were not taking a statin during their cancer treatment. While these results are promising, more research is now needed to understand the role statins may play in protecting the heart during anthracycline chemotherapy. These findings were published in the *Journal of American College of Cardiology*.

## Musculoskeletal Health and Diseases

### Osteoporosis

In the largest genetic study in osteoporosis to date researchers from around the world, including Menzies' researchers, discovered 56 genes underlying the risk of osteoporosis. Fourteen of the 56 genes discovered were found to increase the risk of bone fracture. This is the first time such a large number of genes have been found associated with fracture risk. This research leads to better understanding of the biology of skeletal health and fracture susceptibility. The genes found may also contribute to identifying future drug treatments for the treatment of osteoporosis.

## Public Health and Primary Care

### Global Burden of Disease

The results of an important study from the Global Burden of Disease 2010 Project were published in the prestigious journal, *The Lancet*, in late 2012. This enormous international collaboration involved hundreds of researchers across 291 diseases in 21 countries. Data from Menzies' Tasmanian Older Adult Cohort (TASOAC) participant-based study contributed to the burden of disease estimates for the project.



*New research highlights that DFTD is a relatively stable cancer and has fewer mutations than some human cancers (image: Rob Elliott)*

# Research Highlights

The study highlighted that globally, the burden of disease has shifted away from communicable to non-communicable disease, and from premature death to years lived with disability, but there are distinct regional patterns of disease burden. The data will be important in setting health priorities across both developed and developing countries. The data also demonstrates that as chronic diseases become more common in society, humans are living longer but not necessarily with good health into old age.

## Wood Smoke and Health

A Menzies' study exposed the fact that smoke from landscape fires is an important contributor to deaths worldwide. Most emissions originate from fires set in tropical rainforests and savannah, where they cause recurrent episodes of severe pollution that affect some of the poorest regions in the world. The research highlighted that poor health outcomes associated with fire-smoke could be considerably reduced by restricting

the deliberate burning of tropical rainforests, which rarely burn naturally. This research further highlighted that interventions in reducing smoke emissions from landscape fires could potentially provide benefits for the slowing of global warming and slowing the loss of biodiversity. This research was published in the journal *Environmental Health Perspectives*.

## Childhood Obesity and Cardiovascular Health

A world-first international collaborative study involving Menzies, Murdoch Childrens Research Institute and researchers in the USA and Finland, that showed childhood obesity does not permanently increase cardiovascular risk if obesity in adulthood is avoided, was named by the National Heart, Lung, and Blood Institute, a division of the National Institutes of Health (USA) as one of two major advances in cardiovascular epidemiology for 2012. The paper was published in the *New England Journal of Medicine* in 2011.

## Evidence of Long-Term Effects of Parental Smoke on Children and Adolescents

A collaborative project between researchers in Finland and Menzies found that children who are exposed to their parents' cigarette smoke may suffer irreversible damage to blood vessels and increase their risk of cardiovascular disease later in life. This is the first worldwide study to examine the long-term effects of passive smoking on blood vessel health. The study found that people who had been exposed to parental smoking when they were children had less elastic arteries, an early indicator of poor cardiovascular health. Studies like this are important in helping our policy-makers make well-informed decisions when developing or reviewing related policies, to ensure our children have the best opportunity to grow up leading healthy lives.



*Dr Fay Johnston's work highlights that smoke from landscape fires is an important contributor to deaths worldwide*

# Research Highlights

## Publications

In 2012, Menzies again published a high number of scientific papers, with 170\* papers published by our researchers. As in previous years, a number of our researchers published in top-tier journals including *Cell*, *The Lancet*, *Science* and *Nature Genetics*.

*\*2012 figures are preliminary and final 2012 figures will not be finalised until mid-2013.*

## Grant and Fellowship Successes

In 2012, Menzies secured over \$9.3 million in competitive research grant funding from the Federal Government including 13 grants awarded by the National Health and Medical Research Council (\$8.5 million) and two grants awarded by the Australian Research Council (\$755,000), to carry out new research projects commencing in 2013.

The funding will enable our researchers to further their work into diseases such as traumatic brain injury, osteoarthritis, cardiovascular disease and multiple sclerosis. Applications undergo a rigorous selection process based on scientific quality and significance and applicant track record.

## NHMRC Project Grants Awarded in 2012

### Glaucoma research

Dr Jac Charlesworth, \$671,331

### Therapy trial for pre-term babies with breathing difficulties

Associate Professor Peter Dargaville, \$1,172,978

### Microtubule stabilisation: promoting adaptive plasticity, brain healing and functional recovery after traumatic brain injury

Associate Professor Tracey Dickson, \$490,420

### A 10-year follow up of the Tasmanian Older Adult Cohort (TASOAC): a population based study looking at the causes and course of osteoarthritis using state of the art techniques

Professor Graeme Jones, \$652,772

### A randomised trial of zoledronic acid for osteoarthritis of the knee

Professor Graeme Jones and Dr Dawn Doré, \$954,597

### T Bone Study: 25-year follow-up. This study will follow up a birth cohort for 25-years with the aim of looking at critical periods for bone development including the role of in utero exposures, early infancy, age 8 and 16 years old

Professor Graeme Jones and Dr Tania Winzenberg, \$376,284

### The role of microvascular flowmotion in skeletal muscle glucose metabolism. Outcomes from the study may lead to diagnostic tools and treatments for cardiovascular disease associated with obesity, hypertension and type-2 diabetes

Professor Steve Rattigan, Dr Michelle Keske and Dr Stephen Richards, \$576,533

### Lowering central blood pressure in patients with hypertension

Dr James Sharman, \$1,384,302

### The role of environmental and genetic factors in progression of multiple sclerosis

Professor Bruce Taylor, Dr Ingrid van der Mei and Associate Professor Leigh Blizzard, \$945,084

## NHMRC Fellowships Awarded in 2012

### Microvascular involvement in cardiovascular disease

Professor Steve Rattigan, \$120,284

### Using magnetic resonance imaging (MRI) to improve understanding of knee osteoarthritis and develop effective therapeutic treatments

Dr Dawn Doré, \$299,564

### Central blood pressure research

Dr James Sharman, \$439,920

### Adding new cells to the mature central nervous system – their role in plasticity, maintenance and repair

Dr Kaylene Young, \$439,920

## Australian Research Council (ARC) Grants Awarded in 2012

### ARC Discovery Grant

### Host-tumour interplay in Tasmanian devils with devil facial tumour disease: can immune cells be harnessed for therapy?

Associate Professor Greg Woods, \$380,000

### ARC Discovery Early Career Researcher Award

### Living with bushfires: generating essential evidence for sustainable fire

Dr Fay Johnston, \$375,000



Professor Graeme Jones was awarded three NHMRC project grant awards for his research into osteoarthritis and bone development

# Research Highlights

## Other Competitive Grants

Our research is generously supported by many charitable foundations and state government departments, which provide competitive funding for excellent research. The following organisations awarded research funding in 2012:

Arthritis Australia, Australian Rotary Health Research Fund, Brain Foundation, Cancer Council Tasmania, Clive & Vera Ramaciotti Foundation, David Collins Leukaemia Foundation, Department of Health and Ageing, Department of Health and Human Services (TAS), Department of Sustainability and Environment (VIC), Masonic Centenary Medical Research Foundation, Mazda Foundation, Motor Neurone Disease Research Institute of Australia Inc, Multiple Sclerosis Research Australia, National Heart Foundation, Osteoarthritis Research Society International, Royal Australian College of General Practitioners/Osteoporosis Australia, Royal Hobart Hospital Research Foundation, The Marian and EH Flack Trust, The Select Foundation, University of Tasmania and the University of Tasmania Foundation.

## Other Research Highlights and Awards in 2012

- Dr Catherine Blizzard won the Science and Technology Award at the Southern Cross Young Achiever Awards. PhD student Clare Smith and Dr Dawn Doré were selected as finalists.
- Dr Costan Magnussen was awarded the 2012 Vice-Chancellor's Award for Research Excellence. Dr Magnussen's work focuses on the paediatric origin of adult cardio-metabolic disease using data from an international consortium of population-based prospective cohort studies known as the International Childhood Cardiovascular Cohort (i3C) Consortium.
- Professor Graeme Jones was named runner-up for the Premier's Scientist of the Year Award, in the inaugural Tasmanian Science Excellence Awards. The Awards showcase Tasmania's outstanding scientists and highlight the importance of science research and innovation to the State.
- Dr Dawn Doré was awarded top rated abstract from young investigators by the organising committee of the OARSI Imaging Biomarker Validation and Qualification Workshop, Hilton Head Island, USA.
- Menzies was awarded \$650,000 in funding from the Department of Health and Human Services (DHHS) through the Tasmanian Cancer Care project via the Australian Department of Health and Ageing's Regional Cancer Centres Initiative, Health and Hospital Fund. The funding will be used to purchase necessary research equipment to establish a cancer biobank.
- Menzies unveiled Tasmania's first 'moving laboratory', the Tasmanian BioBus. The BioBus is equipped as a mobile laboratory and clinical room and will provide people across Tasmania with the opportunity to participate in clinical research trials.
- Dr Tania Winzenberg was selected to undertake the International Primary Care Research Leadership Programme at Oxford University.
- Associate Professor Tracey Dickson was invited to Government House to honour Under-Secretary-General and Executive Director of UN Women, Ms Michelle Bachelet. Associate Professor Dickson was chosen to represent Tasmania at this event due to 'her contribution to medical research' and 'her special interest in advancing women'.

- Professor David Small was appointed as Deputy Editor of the *Journal of Neurochemistry* (the top journal in the field of neurochemistry) covering the field of “Molecular Basis of Disease”.
- Professor Alison Venn was appointed to the Tasmanian Health Minister’s Healthy Tasmania Advisory Council.
- Menzies was awarded a UTAS visiting fellowship grant that enabled Professor Olli Raitakari, from the University of Turku, Finland, to visit Menzies for two months and conduct research into the risk factors of children and cardiovascular disease.



*Dr Catherine Blizzard won the Science and Technology Award at the Southern Cross Young Achiever Awards*

# Education and Training

Menzies provides a unique learning and teaching environment for our honours and research higher degree students, our next generation of great medical research scientists, to carry out significant research projects. As well as ensuring the development of scientific knowledge and skills for the future, students play a key role in the Institute's research activities, working alongside our senior researchers undertaking hands-on research and making significant research discoveries.

## Undergraduate Research Training

The Undergraduate Research Opportunity Program (UROP) is a six-week paid scheme designed to give students an early opportunity to experience real life in a research laboratory or population-based research environment and gain insight into a career in medical research.

Five UTAS undergraduate students, Nabil Cherawal, Sanith Cheriyan, Luke Fairburn, Anna Talbot and Arul Thalaivasal were awarded UROP Scholarships in 2012, to undertake their study during the 2012–2013 summer break.

## Honours Students

In 2012, there were eleven Honours students undertaking their Honours studies at Menzies. Twenty-three students successfully completed Honours in 2012, and we congratulate them on this wonderful effort.

## 2012 Honours Degree Graduates

Emily Ainslie, Sarah Blackwood, Aascha Brown, Eliza Burke-Polden, Tedman Chau, Jayden Clarke, Rosemary Clark, Daniel Collins, Anne Cooray, Huw Jarvis, Adrian Lee, Kathleen Lim, Emily Mulcahy, Wan Daniel Noor, Jessica Phillips, Anna Rasmussen, Melissa Robertson, Katherine Roberts-Thomson, Oliver Sargent, Claire Sayers, Alice Stoneman, Thomas Strochnetter and Arabella Young.

## Research Higher Degree Students

There were 54 students undertaking their postgraduate research studies in 2012. Eleven students graduated in 2012, with many of them staying on and continuing their careers at Menzies, as postdoctoral research fellows.

## 2012 Research Higher Degree Graduates

Beverley Curry, Thanh Hoang, Jacqueline Leung, Charlotte McKercher, Ruth Musgrove, Jeremy Ng, Dino Premilovac, Abeer Qadi, Clare Smith, Cesar Tovar and Shuying Wei.

## Notable Student Achievements in 2012

- Ben Hunn received the 2013 Tasmanian Rhodes Scholarship. Ben undertook the Undergraduate Research Opportunity Program (UROP) and his Honours year at Menzies. He will attend Oxford University in 2013 to undertake his PhD studies into Alzheimer's disease.
- Nicholas Blackburn was the winner of the Australian Society of Medical Research (ASMR) Medical Research Student Award 2012 (Tasmania) for research into *Telomeres in Haematological Malignancies*.
- Laura Laslett was a named author on two papers on the global burden of disease, published in the prestigious international journal, *The Lancet*.
- Camilla Mitchell, Sarah Blackwood and Arabella Young were awarded University Medals for academic excellence for their outstanding performance throughout their undergraduate and Honours years.
- Camilla Mitchell was first author on a paper published in the *Journal of Neurochemistry*. She was also selected to give an oral presentation at the 'Axon Guidance, Synapse Formation and Regeneration' biennial conference at Cold Spring Harbour in New York, USA.

- Gabby Brown won the Kumar award at the 6th Australian Health and Medical Research Congress, which is for the best oral presentation by a postgraduate research student at the Molecular and Experimental Society of Australasia section of the Congress.
- Rachel Climie won the best poster prize at the Central Haemodynamics satellite symposium, International Society of Hypertension Conference, in Sydney, for her poster titled: *Exercise aortic reservoir function predicts brain atrophy in patients with type 2 diabetes*. Rachel was also awarded the ARTERY Society Bridgette Loulex Award, which is a travel grant to attend the ARTERY 12 conference, Vienna, Austria, October 2012.
- Benny Eathakkattu Antony presented his work (oral presentation) on childhood physical activity and adult knee health at the American College of Rheumatology Annual Meeting, in Washington DC, USA.
- Clare Smith was a finalist in the science category for the Southern Cross Young Achievers Award (Tasmania) 2012.
- Clare Smith, Laura Wieczorski, Chalachew Mitiku and Ming Huang were co-authors on a malaria paper published in December in the prestigious international journal *Science* titled: *Platelet factor 4 and Duffy antigen required for platelet killing of Plasmodium falciparum*.



Honours student Sarah Blackwood, Heart Foundation (TAS) CEO, Mr Graeme Lynch, Honours student, Katherine Roberts-Thomson and research fellow, Dr James Sharman enjoyed the Honours Scholarship Morning Tea

- Dr Faline Howes was a named author on four papers published in peer-reviewed journals in 2012, including one paper in the international British Medical Journal (BMJ) titled: *Ankle-Brachial Index determination and peripheral arterial disease diagnosis by an oscillometric blood pressure device in primary care: validation and diagnostic accuracy study*. Faline was also a finalist in the Australian Society for Medical Research (ASMR), Medical Research Week Tasmanian Student Award and she won the Young Investigator Travel Award, awarded by the Foundation for High Blood Pressure Research.

### Postdoctoral Appointments

There were 18 postdoctoral fellows on individual fellowships in 2012. Menzies was also successful during 2012 in securing three prestigious NHMRC postdoctoral fellowships that will commence in 2013. These comprised two Career Development Awards for mid-career researchers and an Early Career Fellowship. The areas of research are osteoarthritis, neuroscience and cardiovascular research.

# Global Collaborations

Menzies continues to have a global focus and is intent on strengthening, and further developing international collaborations. Global collaboration is vital to sharing skills and knowledge that will enable us to find answers to health problems more rapidly.

## Building Relationships with China

In early 2012, Menzies' Professor Alison Venn and Associate Professor Changhai Ding along with the University of Tasmania's Dean of Graduate Research, Professor Peter Frappell, visited China to establish a new collaboration between Menzies and the Anhui Medical University (AMU). The visit was extremely productive, with strong links created between the two organisations.

AMU is one of the oldest educational institutions in Hefei, Anhui province is located in the east of central China and honoured as "the city with State Innovation of Science and Technology". There are more than 17,000 students studying at AMU and the researchers from this university have an international reputation in areas including dermatology genetics, epidemiology and pharmacology.

Following on from this visit to China, a number of leading professors from AMU came out to Tasmania for three months, to visit Menzies and experience first-hand the world-class facilities we offer and to meet with a number of our senior researchers and exchange research skills and knowledge.

A scholarship program has since been introduced between Menzies and AMU that will enable AMU postgraduate students to come to Menzies to undertake their PhD studies with us.

## Local and National Collaborations

Menzies works closely with the University of Tasmania's Faculty of Health Science and School of Medicine, the Department of Human Health and Services Tasmania, and clinicians from the Royal Hobart Hospital. Close collaboration with the resources of the Royal Hobart Hospital enables Menzies to increase the impact of its research by translation from 'bench to bedside'.



Menzies' Associate Professor Changhai Ding (bottom far left) with the visiting AMU professors from China

# Community Engagement

Menzies is committed to engaging and sharing its medical research discoveries with the community and has an established community engagement program.

In 2012, more than 1,200 people either visited the Institute or had a Menzies' researcher or staff member visit their organisation to hear about our current research activities.

Tours of our laboratories often form part of these Institute visits, giving members of the public the opportunity to engage with our scientists and learn about the research we are currently undertaking. These tours consist of both private and public tours and include visits from community organisations such as Probus and Rotary, business organisations, individuals and school groups.

During 2012, Menzies took part in the CSIRO Scientists in Schools program, where a number of Year 12 science students visited Menzies during Science Week. A number of our researchers and students also visited schools and colleges to provide career talks and discuss their current research discoveries.

Four public lectures were held during the year on mental health, cancer, cardiovascular health and diseases, and multiple sclerosis, with more than 320 attendees.

## Thank You Day 2012

Our annual Thank You Day morning tea was held for our major donors, sponsors and volunteers at the Royal Tasmanian Botanical Gardens, in Hobart, in April. Acting Director, Professor Alison Venn thanked everyone for their support and guests took home some beautiful bulbs to plant in their garden.

## Art of Christmas 2012

In October, The Art of Christmas 2012 event was held at the Long Gallery, Salamanca. Thirty established and emerging Tasmanian artists donated works for the charity art exhibition in support of the Institute.

This event has gone from strength to strength since its inception in 2005. The event raised over \$64,000 for research in 2012, including money raised from Christmas cards that are uniquely designed by Tasmanian artists.

Menzies is grateful for the contributions made by all of those involved:

### Artists

Max Angus, Bert Aperloo, Raymond Arnold, Deborah Asma Mather, Lorraine Biggs, Lucy Bleach, Keith Climpson, Stuart Clues, Katherine Cooper, Nathan Dunn, Katina Gavalas, Jane Giblin, Nick Glade-Wright, Patrick Grieve, Todd Jenkins, Richard Klekociuk, Jon Kudelka, Nigel Lazenby, Cathy McAuliffe, Mish Meijers, Simone Pfister, Kate Piekutowski, Troy Ruffels, Michael Schiltz, John Vella, Michael Weitnauer, Tricky Walsh, Katy Woodroffe and Marlon Zarins.

### Sponsors

Arcom, Art Poster, Bottega Rotolo, Cascades, Corporate Express, Emily Snadden Designs, Fig Flowers, Fullers, Maria Island Walk, MONA, Print Applied Technology, Pure Tasmania, Salamanca Arts Centre, Spicers, Spreyton Fresh, Red Jelly, Smolt and Villa Howden.

### Special Thanks

Ryk Goddard, Hank Petrusma, TMAG, Samuel Shelley and Les Coqs Incroyables.



*Mrs Thurza Whiting, Ms Lyn Wilkie, Ms Caroline Wells and Ms Alison Parsons at our supporters' Thank You Day Event*

# Building Developments

Over the past year we have watched with much anticipation as the Medical Science 2 (MS2) project evolved right in front of us. By November 2012, a number of research groups and administration staff moved from our Medical Science 1 (MS1) building into the new MS2 building.

The new MS2 building is the first educational building in Tasmania to achieve a Green Star rating for environmental design. The project was awarded a 5-star Green Star – Education Design v1 rating by the Green Building Council of Australia. MS2 is only the fifth building in Tasmania to achieve a Green Star rating.

MS2 and MS1 were designed by Lyons Architecture and constructed by a joint venture between John Holland and Fairbrother.

We are pleased to advise that construction of MS2 is ahead of schedule and expected to be fully completed by May 2013. It has been a long but exciting process and we will celebrate the formal opening of our new building in mid-2013.

The Medical Science Precinct project (MS1 & MS2) could not have occurred without the generous financial support of the Federal Government, the Tasmania Government, The Atlantic Philanthropies, the University of Tasmania and a number of Australian supporters, who made the \$148 million project possible. We are extremely grateful for their strong support and the philanthropic support of Mr Graeme Wood, the Tasmanian-based Select Foundation and the UTAS Foundation.



*Medical Science 2 (MS2) is due for completion in May 2013*

# Financial Report

1 January to 31 December 2012

|  | 31 Dec 2012<br>\$ | 31 Dec 2011<br>\$ | 31 Dec 2010<br>\$ |
|--|-------------------|-------------------|-------------------|
| <b>Income</b>                                    |                   |                   |                   |
| Commonwealth Government Research Support         | 4,240,696         | 4,263,481         | 5,657,103         |
| Teaching Income                                  | 251,034           | 383,000           | 207,000           |
| Menzies Foundation                               | 75,000            | 150,000           | 150,000           |
| Commonwealth Government Research Grants          | 4,769,029         | 8,410,777         | 9,419,067         |
| Tasmanian Government Grants                      | 1,825,714         | 1,484,235         | 1,523,506         |
| Other Contracts and Agreements                   | 2,288,028         | 3,187,076         | 3,289,682         |
| Donations  | 489,094           | 657,377           | 435,318           |
| Bequests   | 392,635           | 1,992,948         | 1,593,932         |
| Investment Income                                | 839,167           | 321,280           | 370,807           |
| Sales  | 260,827           | 62,495            | 71,089            |
| Other Income                                     | 137,422           | 264,793           | 486,813           |
| Transfer of Assets from Major Projects           | –                 | –                 | 603,073           |
| Operating Contribution to University of Tasmania | (1,124,764)       | (1,705,392)       | (2,262,841)       |
| <b>Total Income</b>                              | <b>14,443,883</b> | <b>19,472,069</b> | <b>21,544,549</b> |
| <b>Expenses</b>                                  |                   |                   |                   |
| Salaries and On-Costs                            | 9,798,281         | 13,448,939        | 12,044,954        |
| Building and Related Expenses                    | 37,889            | 29,315            | 35,776            |
| Other Equipment and Infrastructure               | 422,216           | 954,934           | 1,267,407         |
| Travel and Training Related Costs                | 414,222           | 483,432           | 615,551           |
| Scholarships                                     | 349,938           | 551,962           | 429,578           |
| Consultancy and Advisory Costs                   | 1,108,746         | 2,104,121         | 2,400,172         |
| Other Expenses                                   | 1,743,392         | 2,131,530         | 1,842,242         |
| <b>Total Expenses</b>                            | <b>13,874,683</b> | <b>19,704,231</b> | <b>18,635,679</b> |
| <b>Surplus/(Deficit)</b>                         | <b>569,201</b>    | <b>(232,162)</b>  | <b>2,908,869</b>  |

## Notes

- The University of Tasmania introduced a new budget model in 2012. The following changes have been made to this statement as a result:
  - In 2010 and 2011 40% of the Commonwealth Government Research Support funding was retained by the University to contribute to the cost of central services provided to the Institute. In 2012 100% of this funding was received by the Institute and an "Operating Contribution" was paid to the University to cover the central costs. For comparison purposes, this report shows 100% of the funding received by the Institute and an Operating Contribution paid to the University for all three years.
  - From 2012 University Strategic Funding was not provided as income. Instead the relevant Researchers had an approved amount of expenditure they could incur. For comparison purposes, the above report includes strategic expenditure (summarised below) and excludes strategic income for all three years.

|                                    | 31 Dec 2012<br>\$ | 31 Dec 2011<br>\$ | 31 Dec 2010<br>\$ |
|------------------------------------|-------------------|-------------------|-------------------|
| <b>Strategic Expenditure</b>       |                   |                   |                   |
| Salaries and On-Costs              | 566,998           | 784,516           | 894,264           |
| Building and Related Expenses      | 11,000            | 313               | –                 |
| Other Equipment and Infrastructure | 1,075             | 126,403           | 65,500            |
| Travel and Training Related Costs  | 45,820            | 64,649            | 85,982            |
| Scholarships                       | 33,624            | 160,915           | 94,056            |
| Consultancy and Advisory Costs     | 41,923            | 2,626             | 55,492            |
| Other Expenses                     | 93,472            | 357,934           | 240,078           |
| <b>Total Strategic Expenditure</b> | <b>793,912</b>    | <b>1,497,355</b>  | <b>1,435,372</b>  |

- As at 31 December 2012, the Institute held Trust Funds totalling \$9,016,617.

Of this, \$7,438,965 has been capitalised and will not be drawn down to fund the Institute's research. It is envisaged that this Trust Fund will grow as more bequests are received and the interest earned will provide the Institute with a future source of research income.

The remainder, and all un-capitalised earnings, will be made available for current use, noting that the instructions of the benefactor are always adhered to.

# Board and Senior Management Team

## Board Directors as at 31 December 2012

Dr Dan Norton (Chairman)

Dr David Boadle

Professor Denise Fassett (ex-officio)

The Hon Sir Guy Green AC KBE CVO

Professor Tom Marwick (Director – ex-officio) Oct 2012 to current

Professor Paddy Nixon (ex-officio)

Professor Jonathan West

Professor Judith Whitworth AC

Professor Robert Williamson AO

Professor Alison Venn (Acting Director – ex-officio) Jan 2012 to Oct 2012

**Profiles available at [www.menzies.utas.edu.au/board-directors](http://www.menzies.utas.edu.au/board-directors)**

## Senior Management Team as at 31 December 2012

Professor Tom Marwick (Chair)

Mr Mark Bennett (General Manger) Oct 2012 to current

Ms Kate Brown (General Manager)

Associate Professor Tracey Dickson

Dr David Gell

Professor Heinrich Korner

Professor Stephen Rattigan

Dr Stephen Richards

Dr James Sharman

Professor Bruce Taylor

Professor Alison Venn

**Profiles available at [www.menzies.utas.edu.au/senior-management-team](http://www.menzies.utas.edu.au/senior-management-team)**

## More Information

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

Menzies Research Institute Tasmania  
Medical Science Precinct  
17 Liverpool Street  
(Private Bag 23)  
HOBART TAS 7000

Phone: +61 (0)3 6226 7700  
Email: [info@menzies.utas.edu.au](mailto:info@menzies.utas.edu.au)  
[www.menzies.utas.edu.au](http://www.menzies.utas.edu.au)

ABN 30 764 374 782 – University of Tasmania

# Our research builds healthier, happier lives

Donate today to improve tomorrow

Call **1800 638 124** or visit [menzies.utas.edu.au](http://menzies.utas.edu.au)



The Menzies Research Institute Tasmania  
is proudly supported by:





Menzies  
Research  
Institute  
Tasmania



research thanks to you



An Institute of  
the University  
of Tasmania

