

Strength at home and abroad

At Menzies we play on two stages, each as important as the other.

Through collaboration and peer review, our research is conducted in an international setting. But at the same time, this work is focused on our community close to home. As our mission states, we perform internationally significant medical research leading to healthier, longer and better lives for Tasmanians.

As we go into 2017 we see these two settings played out in another way. Our two Deputy Directors both grew up in the Tasmanian community but have forged international reputations in their chosen fields of medical research. They assist the Menzies Director, Professor Alison Venn, in keeping our mission focused on Tasmania while remaining internationally competitive through world-class research, peer-reviewed journal publications, grant funding and PhD student enrolment.

Associate Professor Tracey Dickson is a leading neuroscientist, and has been a Deputy Director at Menzies for the past two years.



Talent times two: Associate Professors Tracey Dickson and James Sharman.

In 2017 she will be joined by Associate Professor James Sharman, in the vacancy that was created when Professor Venn became Director. Associate Professor Sharman, who has an international reputation in blood pressure research, will be returning to

Hobart after spending 2016 as a Visiting Research Fellow at the Paris Cardiovascular Research Centre. He will lead the development of clinical research at Menzies.

Associate Professor Sharman said he enjoyed the opportunities that Menzies

offered in collaborative research, and also the relationship between Menzies and the Tasmanian community, which “feels like great teamwork”. As a blood pressure researcher, he is excited that the work undertaken by his research group in cardiovascular physiology

“ Our relationship with the Tasmanian community feels like great teamwork

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How to sign up for the Menzies Walk

To sign up for the Menzies 5k Walk on February 19, or any of the other events within Hobart Run the Bridge 2017, go to:

hobartrunthebridge.com.au

#HRTB17

You must register to enter!

Walk the Bridge for medical research

Feel like taking a walk to raise money for medical research? How about doing it with a group of friends or family?

Menzies will receive a percentage of the entry fee for a new event within the 2017 Hobart Run the Bridge – the Menzies 5km Walk. So while all the runners fly off the mark in the 10km and 5km running events on February 19, those of us who prefer a slower pace can enjoy the walk catching up with friends

and enjoying the view as we cross the Bridge. The Menzies 5km Walk will start at the Montagu Bay Primary School and finish at PW1, which is the same course as the Jaguar 5km Run, but with time to smell the roses.

Hobart Run the Bridge organisers are looking for volunteers to help with drink stations and event logistics.

To get involved please contact the Menzies volunteer co-ordinator at griffin.blizzard@utas.edu.au



Director's message

Welcome to the Summer Bulletin for 2016

Our friends in the community are often surprised by the intensity of the battle that we wage to win medical research funding in Australia. The largest allocation of medical research funding comes through a competitive process run by the Federal Government's National Health and Medical Research Council.

This annual application process, by thousands of individual researchers on behalf of research teams, is extremely demanding in time and the research required just for the application itself. All applications go through strict peer review to determine how the funding will be allocated. At the end of this process, only around 15% of all applications Australia wide are successful.

The upside is that when NHMRC grant applications are successful they can establish research projects for as long as five years. The downside to this process is that a lot of

very strong applications are left unfunded and there is almost always a significant funding gap between the level of funding granted and the actual costs of undertaking the research.

Donations and bequests to our research from the community and non-government and corporate organisations are so vital. This funding allows us to bridge the gap between successful grant applications and the actual cost of doing the research. They also allow us to continue to pay salaries to outstanding researchers who may be between grants. They allow

Menzies to support new lines of inquiry in pilot projects that could become the foundation of a successful grant application to the NHMRC. In addition to reminding ourselves how fortunate we are to have your support, we are also buoyed by the progress of the Federal Government's new Medical Research Future Fund. I attended the launch of the Fund's Priorities and Strategy documents by Prime Minister, the Hon Malcolm Turnbull MP, and the Health and Aged Care Minister, the Hon Sussan Ley MP, in Canberra on November 9, and keenly anticipate the allocation of these funds to research. I wish you all a safe and happy festive season and look forward to sharing more great research stories from Menzies in 2017.

Kind regards,

Professor Alison Venn
Director

“ A lot of very strong applications are left unfunded

SUMMER APPEAL

You can help us to better understand stroke and improve stroke outcomes

There is growing evidence that increasing the amount of therapy after a stroke, particularly in the first six months, improves outcomes. Despite this, numerous studies have reported that physical and cognitive activity is low in inpatient rehabilitation facilities and when patients return home.

At Menzies, Dr Michele Callisaya (top photo) and PhD student Dawn Simpson, both physiotherapists, are investigating innovative and practical ways to increase rehabilitation after stroke. This research aims to increase

the speed of recovery, improve the quality of life for stroke survivors and reduce the costs associated with stroke.

Stroke is one of Australia's biggest killers and a leading cause of disability, which is why we have made it the focus of our Summer appeal. Just looking close to home, 12,000 Tasmanians are stroke survivors and this number will continue to rise in coming years as we feel the personal and societal impacts of high blood pressure, high cholesterol, physical inactivity and smoking.

Two-thirds of stroke survivors require care each day and the vast majority live with needs that are not being fully met.

A second stroke team at Menzies, led by Dr Seana Gall (bottom photo),



is seeking to better understand the specific causes of haemorrhagic stroke and to use this knowledge to develop interventions to reduce risk factors (particularly in women).

It is possible to improve our understanding of the cause and prevention of stroke and to improve the quality of care provided in our hospitals and at home. Help us continue vital stroke research by making a donation today.



Go to the **Donate** tab at menzies.utas.edu.au, return the donation slip attached to this Bulletin or call 1800 638 124 or 03 6226 7700

MAKING A DIFFERENCE

in so many ways

Once again Government House was the beautiful setting for our annual Thank You Day, held on October 4. Menzies volunteers and donors gathered in the evening as guests of Her Excellency Professor the Honourable Kate Warner AM and Mr Richard Warner. The occasion allowed staff to meet some of our supporters and celebrate the contribution they make. In thanking each and every donor and supporter of Menzies, our Director, Professor Alison Venn, outlined the depth of their contribution:

- Menzies has 72 active volunteers who as a group have contributed around 12,000 hours over the past year – that’s a saving of around \$400,000 that we have been able to direct into medical research.
- Every donation received by Menzies, whether big or small, goes towards research undertaken in Tasmania. This contribution is very significant – it makes up around 13% of our income.
- This year Menzies has received over \$1.7 million in philanthropic income through more than 700 donations, including regular giving by those who have joined our Everyday Angels program.



- This figure excludes gifts left in wills, which are a major source of charitable income. In 2015 \$1.08 million was bequeathed to Menzies.
- This year two of our most pressing needs were addressed through the 2016 Autumn Appeal and the 2016 Chairman’s Equipment Appeal – these resulted in over \$400,000 worth of donations and enabled the purchase of a new DNA sequencer and a High Speed Confocal microscope.
- As a direct result of funds raised through the 2015 and 2016

Community spirit: Professor Alison Venn, above, with Her Excellency Professor the Honourable Kate Warner AM and Mr Richard Warner.



- Winter Appeals, we appointed neurodegenerative disease researcher Dr Catherine Blizzard as the first Menzies Community Research Fellow.
- More than \$130,000 has been raised through community organisations undertaking fundraising activities for Menzies so far in 2016.
- We now have 31 scholarships for research students enabled by the generosity of individuals and organisations.



STRENGTH AT HOME AND ABROAD...

CONTINUED FROM PAGE 1

is helping to make blood pressure measurement more accurate. “I am also very excited about a new health service that we are helping to set up with a local business that should substantially improve the way cardiovascular disease is detected and managed,” Associate Professor Sharman said.

Associate Professor Dickson, who investigates diseases such as Parkinson’s, dementia and motor neurone disease, says that new technologies

and cutting edge experimental approaches are giving scientists a clearer picture of the fundamental mechanisms of neurodegenerative diseases. “This is exciting as it brings us closer every day to the development of cures and treatments,” she said.

Both of the Menzies Deputy Directors are graduates from the University of Tasmania and both have worked internationally before returning to their home State. Associate Professor Dickson, who grew up in Burnie,

was awarded a fellowship to spend three years of post-doctoral training at the Mount Sinai School of Medicine in New York City before coming back to the “excellent facilities and great research environment” at Menzies. “We are so lucky to have such a great relationship with the Tasmanian community. Not all medical research institutes have this, and it makes a difference to our ability to recruit participants into our studies, and to work closely with members of the community who are affected by the diseases that we research.”

Apart from spending 2016 in Paris, Associate Professor Sharman, who grew up in Launceston, studied at the Wales Heart Research Institute in Cardiff for some of his PhD research. He also spent five years with a cardiac imaging research team at the Princess Alexandra Hospital in Brisbane, before moving to Menzies to establish his own research group.



RESEARCHER PROFILE

Dr Benny Antony

2016 Young Tall Poppy Award winner

You have recently started in a new role at Menzies...

What were you doing now and what did you do before this? I am working as a postdoctoral research fellow in the Musculoskeletal Health and Diseases research theme, generously supported by an Early Career Fellowship from Arthritis Australia and the Farrell Family Fellowship. Previously, I worked as a Medical Officer in India before I moved to Australia and completed my PhD at Menzies.

What is the current focus of your research?

My PhD focused on the childhood and adulthood determinants of knee joint health in young adults. I used MRI to quantify knee joint health in young adults by assessing their abnormalities in cartilage, bone and meniscus. We explored the association between childhood obesity and fitness measures and adult knee pain and structural abnormalities. Currently, I am co-ordinating a multi-centre clinical trial into the effect of krill oil on knee

osteoarthritis. Recently, I have been exploring the use of novel MRI sequences as outcome measures in clinical trials.

What are some of the recent findings from your work?

We followed the 1985 Australian Schools Health and Fitness Survey participants over 25 years and found that childhood physical performance measures were beneficially associated with adult knee cartilage volume. Conversely, childhood overweight measures were associated with adult knee pain, stiffness and dysfunction and knee cartilage defects. Using the Tasmanian Older Adults Cohort Study, we reported that the imaging biomarkers such as the cartilage defects, bone marrow

lesions, meniscal tears and excess fluid signals in the joint and the infrapatellar fat pad predicted the changes in knee pain, cartilage volume loss and total knee replacement over 10 years.



I am fascinated by the groundbreaking innovations in medical imaging

What is the most interesting aspect of your work?

Osteoarthritis is the most common joint disorder in the world, but there are no disease-modifying treatments available. I am fascinated by the groundbreaking innovations in

medical imaging, and I am excited about introducing this to osteoarthritis research to answer clinically relevant questions. Modern imaging methods will provide details about the molecular structure of the abnormal tissue within a single scan, and these methods can be used to assess the effect of a drug at the compositional level.

What do you enjoy doing in your spare time?

I really enjoy nature and I like to travel, especially if it is off-road. I do hikes or walks in the nature reserves. I used to like to play all sorts of sports (particularly soccer, cricket and table tennis) but I watch these on television now. I have also recently taken up bike riding and I enjoy it.

THANK YOU TO ALL OF OUR DONORS FOR YOUR ONGOING FINANCIAL SUPPORT AND COMMITMENT TO MENZIES

Listed below are individual and community supporters who donated for the first time between August and mid-November 2016.

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CWA- Selbourne
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Department of Human Services: Health and Wellness Team
Georgie Gallagher
Judith Linton
Hilary Mackenzie
Alice H Minchin
Judy Nash
Riverside Capital Pharmacy
James F Rowbottom
Denise Smith
Vintage Kart Club of Tasmania
Jack Voutnis

Listed below are our Everyday Angels – our supporters who make regular gifts to Menzies.

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Barbara White
Janice Wilson
Elizabeth M Woolley

Latitude link with age of MS onset

A large international study led by Menzies has found that the age at which symptoms of multiple sclerosis (MS) first start is strongly linked to latitude.

The lead author of the study, Menzies' neuroscientist and clinician Professor Bruce Taylor, said that each 10-degree increase in distance from the equator was associated with a 10-month earlier onset of symptoms.

MS is thought to be caused by a complex interplay of genetic and environmental factors, including latitude and/or exposure to sunlight and vitamin D levels. But until now it was not clear whether latitude might also affect the age at which symptoms start. The research team drew on an international database of more than 22,000 MS patients from 21 countries in Europe, North and South America, Asia Minor, South

Asia and Australia to find out. Around one in six patients in the study were from Australia, including around 300 people with MS from Tasmania. More than 80% of participants in the study were from the northern hemisphere.

The average age at which symptoms first appeared was around 32. But after taking account of potentially influential factors, it emerged that each 10-degree increase in latitude was associated with a 10-month earlier start of symptoms, with those furthest from the equator



Leaders: Professor Bruce Taylor with fellow MS researcher and author on the latitude article, Associate Professor Ingrid Van der Mei.

starting their symptoms almost two years earlier than those closest to the equator.

In common with known data on the incidence and

prevalence of MS, nearly three out of four of the participants were women, and most (91.5%) had the relapsing-remitting type of MS, which typically starts earlier than the progressive type.

The research has been published online in the *Journal of Neurology Neurosurgery & Psychiatry*.

“ Each 10-degree increase in distance from the equator was associated with a 10-month earlier onset of symptoms

GRANT SUCCESSES

Research boost from national grants

Menzies has won significant funding from the Australian Government in the competitive grant rounds announced in October.

Professor Graeme Jones received a five-year Practitioner Fellowship (\$406,585) and Dr Benny Antony a four-year Early Career Fellowship (\$318,768). Both Professor Jones and Dr Antony (see researcher profile, page 4), work in large clinical trials into better treatment of osteoarthritis.

Neuroscientist **Dr Catherine Blizzard**, who researches motor neurone disease and Alzheimer's disease, has received an Australian Research Council grant to study how neuroplasticity – the brain's ability to remodel and make new circuits – is controlled in both excitatory and inhibitory

neurons (\$372,000 over three years). As part of our collaborative research, Menzies researchers are among the chief investigators in three new **Centres of Research Excellence** being led from other institutions:

- **Associate Professor Alex Hewitt and Associate Professor Kathryn Burdon** – From Discovery to Therapy in Genetic Eye disease (led by the University of Western Australia)
- **Dr Fay Johnston** – Energy Transitions, Air Pollution and Health in Australia (led by Woodcock Institute for Medical Research)



Joint effort: Professor Andrew Palmer.

- **Professor Andrew Palmer** (pictured) – Pulmonary Fibrosis – comprehensive and integrated clinical research program for PF: transforming the approach to PF in Australia (led by University of Sydney)



It's not too late!



Menzies Christmas and greeting cards are available at the Menzies reception desk (17 Liverpool St, Hobart); the Combined Charities Christmas Shop, St David's Cathedral, 23 Murray St, Hobart; and Fullers Bookshop, 131 Collins St, Hobart.

The Art of Christmas card range includes artworks donated by Tasmanian artists, and all proceeds support medical research at Menzies.

Our cards are proudly supported by Clemenger Tasmania, Mercury Walsh and Staples

Prize for MND researcher

After a peer reviewed application process Dr Catherine Blizzard has been awarded the inaugural 2017 Motor Neuron Disease Research Institute of Australia Betty Laidlaw Research Prize for an outstanding mid-career researcher.

The award, with funding of \$250,000, was announced on 21 October at the 2016 MND Australia Research Meeting at the Queensland Brain Institute.

Dr Blizzard also holds the Menzies Community Research Fellowship, which will now be re-allocated.

Menzies PhD student **Dean Picone** won the young investigator prize at the ARTERY 16 conference in Copenhagen, one of the world's toughest audiences in the field of arterial haemodynamics. Mr Picone presented work on the discovery of a new blood pressure phenotype that explains why accurate blood pressure measurement is so difficult among some people.

Dr Michele Callisaya, a physiotherapist whose current research is focussed on stroke rehabilitation, has received an Endeavour Research



Awesome foursome: Dean Picone, second from left, with Menzies blood pressure researchers.

Fellowship. She will spend four months in the USA next year with Professor Joe Verghese in the Divisions of Cognitive and Motor Aging and Geriatrics at the Centre for the Aging Brain at Albert Einstein College, Bronx, New York.

Dr Kaz Negishi, who works in the Menzies Cardiovascular Health and Diseases research theme and as a cardiologist at the Royal Hobart Hospital, has been awarded an Avant Doctor in Training Research Scholarship.

STUDIES RECRUITING PARTICIPANTS

COAST-1: Clinical Knee Osteoarthritis Symptom Treatment 1 Study

to determine whether AXS02 (disodium zoledronate tetrahydrate) can relieve pain caused by knee osteoarthritis. Participants must be: aged 50 years or more; have moderate to severe knee pain most days; be able to have a knee MRI scan.

Contact: Kathy Buttigieg 6226-6909 or Kathy.Buttigieg@utas.edu.au

KARAOKE: A randomised trial of krill oil for osteoarthritis of the knee

to examine use of krill oil to improve knee pain and slow progression of knee osteoarthritis. Participants must be: aged 40 years or more; have significant knee pain and swelling most days for at least six months; be able to have a knee MRI.

Contact: Carole Goff 6226-4648 or Carole.Goff@utas.edu.au

INVEST: Investigating obEesity Surgery in Tasmania.

Participants need to have been referred to a surgeon for weight loss surgery.

Contact: Dr Michelle Kilpatrick, obesitysurgery.study@utas.edu.au or 6226-4630.

Genetics of Eye Diseases for genetic studies in **diabetic retinopathy** (participants should have Type 2 Diabetes treated with medication for at least five years, or Type 1 Diabetes); **keratoconus** (participants should have keratoconus diagnosed by an optometrist or ophthalmologist); and **advanced glaucoma** (participants should have any type of glaucoma with severe vision loss treated by an ophthalmologist).
Contact: maria.cooper@dhhs.tas.gov.au or 6226-4731

AirRater is recruiting Tasmanians with asthma, hay fever or other lung conditions, or carers of those with these conditions.

Contact: 1800 322 102 or air.rater@utas.edu.au

Using an activity monitor and smart device application to improve physical therapy after stroke – a pilot study is recruiting people in the Hobart region who have had a stroke in the past two years.

Contact: Dawn.Simpson@utas.edu.au or Michele Callisaya 6226-4785 (Mon, Thur, Fri)

STAREE: STATins in Reducing Events in the Elderly

is investigating whether a statin can prolong good health and maintain independence among people aged 70 years and older.

Contact: staree@monash.edu or phone 1800 770 664

Caught-CAD: Reducing Risk of Coronary Artery Disease in Families is looking for people who are between 40-70 years of age; have a close family member (parent, brother or sister) who has had a heart attack, stent or surgery under the age of 60, and are not currently taking a statin.

Contact: Kristyn Whitmore 6226-4235 or Menzies.CAUGHT@utas.edu.au

PPMS: Primary Progressive MS Study

into risk factors for the onset and rate of progression of Primary Progressive MS.

Contact: Susan Dobson 6226-4269 or ppms.study@utas.edu.au
www.menzies.utas.edu.au/PPMS

AMSLS: The Australian MS Longitudinal Study

to provide data of practical use for improving the lives of Australians living with MS. **Contact:** Kirsty Hawkes 6226-4739 or AMSLS.Info@utas.edu.au, www.msra.org.au/AMSLS



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More than flowers

In Memoriam

August 2016 to
November 2016

One sentence in your Will can fund life-saving medical research.

If you would like more information, please contact the Institute Advancement Manager on 03 6226 4236.

Bequests save lives by funding research. Thank you.

We gratefully acknowledge gifts made in honour of:

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