Australian
ALZHEIMER'S
RESEARCH
Foundation

# YEAR IN REVIEW
2017

# THE FOUNDATION

Alzheimer's is one of the most important public health issues we currently face. Together with our supporters, we remain committed to continue our fight for memories and to our vision, mission, objectives and values.

## Our Vision

A world in which Alzheimer's disease no longer exists.

## Our Mission

To support research that makes Alzheimer's disease treatable and preventable.

## Our Objective

The Australian Alzheimer's Research Foundation becomes a self-sustaining Foundation that raises funds to support Alzheimer's disease research.

## Our Values

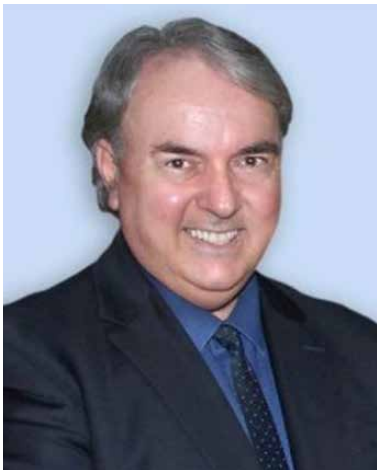
For our stakeholders and customers we will always focus on supporting Alzheimer's disease research; act with integrity; be transparent in everything we do; and celebrate our achievements.

Our key pillars are revenue generation through fundrasing, grants and research fee-for-service activity; research focused on understanding, preventing, diagnosing and treating Alzheimer's and other neurodegenerative diseases; and community services related to education and awareness.

To ensure our continued operations and sustainability we will always have a clear and shared understanding of our risk appetite and have mechanisms in place to ensure we operate within this; ensure appropriate policies and procedures are in place and compiled with; maintain strict financial discipline; and refuse to compromise on quality and competence in anything we do and represent.

# MESSAGE FROM THE CHAIRMAN

The Australian Alzheimer's Research Foundation remains strongly committed to its cause to fight for a world in which Alzheimer's disease no longer exists. At the same time, it has not waivered in its resolve to continue to support key research and key partnerships which will hopefully lead to a cure.



Enzo Sirna AM – Chairman

Established in 2001, the Foundation has continued to grow and 2017 was a particularly significant year. The move to the Ralph & Patricia Sarich Neuroscience Research Institute (SNRI) has allowed the Foundation to provide better opportunities to assist the quality research team led by Professor Ralph Martins and to work in a more inclusive and collaborative environment. The Foundation is also grateful to Edith Cowan University (ECU) for its continued support, contribution and role in the transition to SNRI. We warmly welcome ECU to the SNRI building where their Alzheimer's research team relocated to in early 2018.

The Cooperative Research Centre (CRC) for Mental Health has been operating since 2011, and the Foundation has been a major contributor, providing core funding which has assisted the research team. The CRC for Mental Health will conclude on 30 June 2018. Since its inception, the Foundation has provided approximately $5.7 million to assist with designated research projects which have been managed by Professor Martins.

These projects have focused on research into blood based biomarkers to detect Alzheimer's disease, understanding the genetic risk factors that may increase the rate of decline in a person diagnosed with Alzheimer's disease and the commencement of a study into the effects of testosterone as a potential preventative strategy. The Foundation is recognised as the most significant contributor to the CRC for Mental Health.

I was honoured to visit Macquarie University during the year and was impressed by its wholesome commitment to support Professor Martins in his role at the University, and its desire to work with the Foundation and other research partners. Professor Roger Chung, from Macquarie University, has been invited to be on the Foundation's Scientific Advisory Committee.

During 2017, the Foundation's research 'fee-for-service' arm, including the *Tommorrow Trial* and other trials conducted in our Clinical Trials Division under the supervision of Dr Roger Clarnette, has remained significant for the Foundation. Our Clinical Trials Division continues to grow as we are invited to participate in new research studies looking at interventional approaches to treat Alzheimer's disease which contributes to the quality and depth of research at the Foundation which is recognised at national and international levels.

The Foundation would like to also recognise the key contribution and guidance provided by Dr Judy Edwards who resigned in 2017 as CEO after many years of service to the Foundation. Dr Edwards played a significant role in overseeing major strategic and operational transformations at the Foundation, strengthening governance and operational infrastructure to support key research and to provide financial stability.

The Foundation would further like to recognise the contribution by Bruce McHarrie who stepped in as an interim CEO, and we now warmly welcome Liza Dunne who has been appointed in the role. With her strong background, skills and experience, Liza will continue to grow and strengthen the Foundation as a leader in the support of Alzheimer's disease research.

We remain grateful to all those who support our endeavours. The generosity of our donors, sponsors, supporters and ambassadors, continues to sustain our quest to seek prevention and ultimately a cure for Alzheimer's disease. The Foundation was pleased Bryan Brown accepted our invitation to be an ambassador to assist our cause and we were delighted to host Bryan in February this year. He participated in many successful media events and other activities, and his stay culminated in a wonderful fund-raising evening at Acqua Viva.

As Chairman, I am privileged once again to have provided this report to you on the challenges and opportunities the Foundation has experienced over the past year. We value you being part of the Foundation team. Along with the Board, research team, staff, volunteers and the many contributors who work tirelessly because they believe in the cause, we will meet the challenges to come with optimism. We are on this journey together and we remain determined to succeed.

**Enzo Sirna AM**
*Chairman, Australian Alzheimer's Research Foundation*

# MESSAGE FROM THE CEO

Since joining the Foundation in late 2017, I have seen first hand the extraordinary research being undertaken to understand this debilitating disease and the exploration of potential solutions to slow or stop its progression.

Liza Dunne – CEO

We urgently need to find better outcomes for patients with Alzheimer's given its devastating impact on those diagnosed with the disease, the impact on their family and friends and on our aging society as a whole.

Dementia has been described as the 21st century's biggest medical battle. Alzheimer's disease is the most common form of dementia accounting for approximately 70% of cases and facilitating research into this disease is the primary focus of the Foundation. Alzheimer's disease is a progressive neurodegenerative disease characterised by atrophy of the brain and loss of cognitive function; affecting memory, problem solving, language skills and behavioural function. While advancing age is a major risk factor for developing Alzheimer's disease, this disease is not a normal part of ageing.

Acknowledging the high individual and economic cost of Alzheimer's disease, interventions that can delay or prevent onset are of considerable research interest. While we work to make this devastating disease a distant memory, current research suggests lifestyle choices including diet, exercise and sleep, may reduce the risk for developing Alzheimer's disease.

I am delighted to have joined the Foundation on this journey to have a world where Alzheimer's disease no longer exists and to provide support for research that may make Alzheimer's disease treatable and preventable. Together with our staff, the board, researchers, collaborators, volunteers and study participants I am confident that we can make a significant contribution to achieving this goal.

**Liza Dunne**
*CEO, Australian Alzheimer's Research Foundation*

## ALZHEIMER'S KEY FACTS

244

244 Australians are diagnosed with dementia every day.

413,106

More than 413,106 Australians currently live with dementia.

70%

Approximately 70% of people with dementia have Alzheimer's disease.

2nd

Dementia, including Alzheimer's disease, is the 2nd leading cause of death in Australia.

50%

50% of residents in Australian Government-subsidised aged care facilities have dementia.

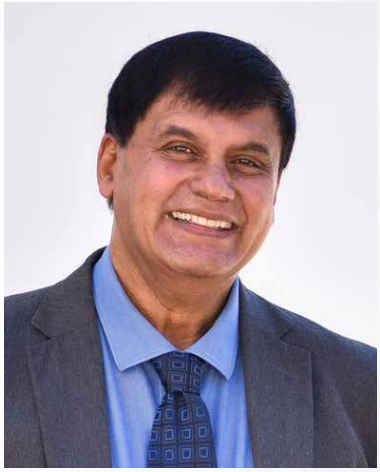


1,100,890

Without a significant medical breakthrough over one million Australians will have dementia by 2050.

# THE RESEARCH

The Foundation provides funding and extensive facilities to enable research and clinical trials into Alzheimer's disease to be conducted. These include phlebotomy rooms, consulting rooms, blood processing facilities, research consumables, a patient lounge, clinical trial ethics and governance support as required, insurance cover and administrative support.



Professor Ralph Martins

## Diagnosis

### AIBL

The WA arm of the **Australian Imaging, Biomarkers and Lifestyle Study of Ageing (AIBL)** celebrated its tenth year in 2017. This world-leading study has amassed clinical, memory and thinking, brain imaging, blood biomarker and lifestyle data from over 1500 older persons via 18 monthly visits. This data has given rise to landmark findings including confirming the diagnostic and prognostic power of amyloid brain imaging, permitting direct calculation of the very slow accumulation rate of Alzheimer's related pathology, shown the best measures for tracking very early cognitive decline, and revealed a wide window for early intervention enabling the current therapeutic trials in pre-symptomatic Alzheimer's disease.

With additional genetic data and detailed lifestyle analysis now emerging, AIBL promises to reveal further important genetic and lifestyle interactions that will guide future tailored early intervention and prevention trials. Moreover, with 200 publications to-date and 2500 citations per year, it is clear that AIBL is a world leader in Alzheimer's disease research.

We are incredibly grateful to the participants of the AIBL study for their commitment and dedication which has helped to significantly advance research into the early detection and causation of Alzheimer's disease. The AIBL study has enabled research into blood based and retinal biomarker for Alzheimer's disease, the impact of genetic risk factors, and the impact of lifestyle and therapeutic interventions.

The extensive use of brain imaging since the study began has significantly enhanced our ability to understand the progression of the disease and the potential impact of interventions. The WA State Government Imaging Grant has provided invaluable financial support to the Foundation to continue the important work to develop earlier and more accurate diagnosis of Alzheimer's disease. The completion of 2017 brings to an end the imaging grant with a total of 1,445 specialised PET brain scans performed.

The Foundation is most grateful to the WA State Government for the Grant which has made a significant contribution to the Foundation and Professor Martins and his team's research. The ability to track amyloid build up in the brain will lead to better and earlier diagnosis and will assist in determining the effectiveness of particular Alzheimer's disease treatments and interventions.

### NeuroVision Trial

An offshoot of the AIBL study has been the **NeuroVision trial** which began in 2013. This trial is being conducted at the Foundation's clinical research facility on Stirling Highway, Nedlands. The aim is to determine if a simple eye test could detect amyloid in the retina and therefore be used as a screening tool for Alzheimer's disease. The study will explore the correlation between PET brain imaging and beta-amyloid plaques in the retina.

The trial utilised participants from the AIBL study who had already undergone amyloid brain imaging. Several studies have been undertaken showing promising results and in February 2017 a new NeuroVision study commenced involving 284 AIBL study participants, across two sites, Perth and Melbourne, using a more sensitive camera.

The preliminary findings of this ongoing study were presented at the Alzheimer's Association International Conference (AAIC) in July 2016. We found the level of beta-amyloid protein detected in the eye was significantly correlated with beta-amyloid in the brain and allowed them to accurately identify those with Alzheimer's. The study is ongoing and is a collaboration between the Foundation, CSIRO, Edith Cowan University and NeuroVision Imaging based in California.

## WA Memory Study

**The WA Memory Study (WAMS)** was started in 1996 to serve two aims: a) to provide a platform for researchers, their students and volunteers to collect data, to learn cognitive and neuropsychological assessment and to publish and test new hypotheses regarding cognitive ageing; b) to be a service to the community by providing neuropsychological, clinical and imaging assessments to those who have been referred to us from all sources. We recently performed the Corrigin cognitive assessment challenge, where we travelled to this remote town and tested 40 individuals in 2.5 days. The results revealed that some of these individuals showed cognitive impairment and we are currently preparing their final reports to be sent to their doctors for further follow up. The WAMS has resulted in more than 25 publications contributing to the knowledge bank of Alzheimer's disease.

In addition, within the WAMS, we have developed our own measures for subjective cognitive decline, 'the WA test of prospective memory and olfactory measures'. After publishing the results the measures may become very useful in research and clinical screening.

### *WAMS Sub-study – Hearing Loss and Cognitive Decline*

A sub-study of the WAMS is looking at the association between hearing loss and cognitive decline, in collaboration with Ear Science Institute Australia. Specifically this study is looking into the relationship between memory complaints and hearing loss as well as the relationship between hearing impairment and brain function. This is an ongoing collaborative project and has resulted in hearing assessment and brain imaging carried out on more than 70 participants so far. This project is still in progress and more data is needed to determine the translational outcomes and clinical implications of this research.

## Causes

### Inherited Alzheimer's

The Australian Alzheimer's Research Foundation is a partner in the **Dominantly Inherited Alzheimer's Network (DIAN)** observational study. This unique international effort involves 28 sites across eight countries. This study investigates individuals from families who are effected by early onset inherited Alzheimer's disease, a rare form of the disease caused by genetic mutation. The information gained from participants in this study allows the testing of potential therapies to prevent, delay, or reverse the development of disease symptoms. The results will be invaluable, not only for those at risk of inherited Alzheimer's but also those affected by the more common older onset disease. During 2017 we had 26 participants continue in the DIAN study at our site, with a total of 6 in-person participant assessments (which include clinical and neuropsychological testing, fasting blood collection, MRI and PET imaging studies, and a lumbar puncture) and 19 remote follow up visits.

The Foundation is also participating in the **DIAN Clinical Trials**, which are investigating two potential disease modifying therapies in individuals at risk of, or with, dominantly inherited Alzheimer's disease.

### Cholesterol and Alzheimer's Disease

The majority of cholesterol in the body is transported via the bloodstream in the form of **Low Density Lipoproteins (LDL)**. These are sometimes referred to as "bad cholesterol" because if they are not cleared rapidly enough, they tend to become increasingly adherent to the inner walls of blood vessels. This can result in the formation of a site of injury on the blood vessel wall. Several types of immune system cells are attracted to the area and inflammation results. We investigated the possibility that increased LDL levels might also affect the brain, since this is a tissue with a very extensive blood supply, supported by a vast network of very small blood vessels. In the AIBL cohort, we found that raised LDL levels tended to correlate with increased brain amyloid, suggesting that impaired LDL metabolism could affect the brain.

**High Density Lipoproteins (HDL)** particles are often referred to as "good cholesterol" as they eliminate the excess of cholesterol from the cells and eliminate it through the bile, reducing the risk for cardiovascular disease. In addition, several anti-inflammatory and anti-oxidative properties have also been associate to many proteins that are carried onto HDL particles. We are investigating the possible association between HDL levels and Alzheimer's disease, by evaluating whether (a) reduced levels of HDL and/or (b) an altered HDL composition (with reduced anti-inflammatory and anti-oxidant properties) may confer an increased risk for the disease and alter its progression.

## Interventions and Treatments

### Exercise

A recently published article investigated the role of exercise on a subset of participants in the DIAN study. Previous studies of cognitively healthy older adults have established a link between higher physical activity levels and lower levels of Alzheimer's disease biomarkers through PET imaging. This study reports for the first time an association between higher exercise levels and lower brain amyloid in individuals who have already accumulated high levels of brain amyloid and are carriers of specific gene mutations which are known to cause Alzheimer's disease.

A new study called The Intense Physical Activity and Cognition (IPAC) study aims to evaluate the impact of a six month high-intensity exercise intervention on measures related to the development of Alzheimer's disease compared with a six month moderate-intensity exercise intervention and control group. The study will involve comprehensive memory testing, blood sampling, brain magnetic resonance imaging, and fitness testing at baseline and at the conclusion of the training intervention (six months). Results from the IPAC study will be used to inform a large-scale trial, with the ultimate aim of pinpointing the frequency, duration, and intensity of exercise that provides the most benefit to the brain, in terms of reducing dementia risk in older adults.

### Diet

Accumulating evidence suggests a diet high in protein and fibre may confer some protection against Alzheimer's disease. However, no human studies to-date have assessed the relationship between protein and fibre intake, and plasma and brain beta-amyloid. Consequently, we examined the diets of 541 Australians and measured the levels of beta-amyloid in their brain, which is a precursor to Alzheimer's disease. These cognitively normal older adults were drawn from the Australian Imaging, Biomarkers and Lifestyle (AIBL) study of ageing.

*"Easily accessible and low cost biomarkers are essential for developing early diagnostic tests to effectively prevent and treat Alzheimer's"*

Professor Ralph Martins

We observed that participants with higher levels of protein in their diet were less likely to have high levels of beta-amyloid in their brain, reducing their risk of developing Alzheimer's disease. Those with the highest consumption, around 118g per day, were 12 times less likely to have high levels of beta-amyloid than those in the lowest consumption group, who ate only 54g per day. The research clearly demonstrates that the more protein eaten the lower the chances someone has of having a high beta-amyloid burden on the brain, which corresponds to a lower risk of developing Alzheimer's in the future.

The next step is to further examine what role gender, genetics, age, cognition score and metabolic factors play in the relationship between protein consumption and Alzheimer's disease.

### Sleep

Evidence suggests sleep is an important contributor both to cognitive health and neurobiological changes in the brain. Critically however, few studies have explored the utility of interventions to improve sleep quality as a preventative approach to decrease Alzheimer's disease risk. To address this knowledge gap, an intervention study is currently underway, assessing whether cognitive outcomes and brain imaging biomarkers are improved following a cognitive behavioural therapy intervention targeted at improving sleep. Pilot data collected to-date reveals promising preliminary results. These data suggest the intervention effectively improves sleep measures, positively affects cognition, and is potentially protective through maintenance of brain activity (determined by FDG-PET brain imaging).

### Testosterone Study

Valuable information gained during the AIBL study revealed that a third of participants over 60 years old showing no cognitive impairment had amyloid build up in the brain. The years of beta amyloid build up in the brain prior to the onset of clinical symptoms may present the best possible time for intervention. Previous clinical studies have also shown that testosterone and DHA (the Omega-3 fatty acid found in fish) can independently benefit cognitive functions and cause a decrease in the accumulation of the specific proteins which are thought to be risk factors for Alzheimer's disease.

This information has guided the development of the Testosterone Trial, a ground breaking study investigating the effect of a combination of Testosterone and DHA on brain amyloid and cognition in men over 60 years of age. The study will be conducted in Perth and in NSW. Both sites will commence the trial in March 2018 and the trial is expected to run for two years.

The Foundation is looking for males over the age of 60 who are interested in participating in this study. For further information please call the Clinical Research site on 6304 3966.

This study is being made possible by generous contributions from our supporters, as well as grants from the WA Government and Lotterywest and invaluable support from Macquarie University.

# CLINICAL TRIALS DIVISION

The past year has seen a rapid extension of the Foundation's Clinical Trials Division led by A/Professor Roger Clarnette.

Associate Professor Roger Clarnette

In 2017, The Foundation was selected for seven new clinical trials which test different medical treatments in the hope of slowing the progression, stabilising or possibly even reversing the devastating effects of Alzheimer's disease.

Significant achievements in 2017 include being the first opened site in the world for an 'Agitation in Alzheimer's disease' trial, maintaining the highest enrolling site for Australia in the XanADu trial, taking part in our first Phase 1 trial (COG0102) and taking on a number of national responsibilities for various trials.

Looking on to 2018 the team is hoping to continue to provide the opportunity for more people to have access to clinical trials for Alzheimer's disease. The Foundation is extremely grateful for the time and contribution for everyone who participated throughout 2017.

*'The continued failure of novel drug therapy to provide an effective treatment in recent years has not deterred us from our goal. This does however compel us to consider non-pharmaceutical methods to alleviate the devastating effect of AD on the lives of those that come to the Foundation for help.'*

Associate Professor Roger Clarnette

# A SNAPSHOT OF TRIALS CURRENTLY UNDERWAY:

| STUDY NAME AND ELIGIBILITY | SCHEDULE |
|---|---|
| **AbbVie AWARE (Phase 2)**<br>• Males or females aged 55 to 85 years<br>• Diagnosed with mild cognitive impairment or mild Alzheimer's disease | • Monthly visits<br>• Monthly medications (infusions)<br>• 24 months duration<br>• Open label extension available |
| **Actinogen XanADu (Phase 2)**<br>• Males or females aged >50 years<br>• Diagnosis of mild dementia due to probable AD | • Monthly visits<br>• Daily medications (tablets)<br>• 20 weeks duration |
| **AVANIR AVP-796 (Phase 3)**<br>• Males or females aged 50 to 90 years<br>• Diagnosed with probable Alzheimer's disease<br>• Experiences moderate to severe agitation secondary to AD | • Fortnightly visits<br>• Daily medications (tablets)<br>• 16 weeks duration |
| **Biogen ENGAGE (Phase 3)**<br>• Males or females aged 50 to 85 years<br>• Must have mild cognitive impairment due to Alzheimer's disease or diagnosed with Alzheimer's disease | • Monthly visits<br>• Monthly medications (infusions)<br>• 18 months duration<br>• Open label extension available |
| **COG0102 (Phase I)**<br>• Males or females aged 50 to 80 years<br>• Diagnosed with mild to moderate Alzheimer's disease | • Weekly visits<br>• Daily medications (tablets)<br>• 28 days duration |
| **EISAI MissionAD (Phase 3)**<br>• Males or females aged 50 to 85 years<br>• Diagnosed with mild cognitive impairment or mild Alzheimer's disease | • Monthly initially then every 3 months visits<br>• Daily medications (tablets)<br>• 24 months duration<br>• Open label extension available |
| **ELI LILLY – LLCF/Navigate-AD (Phase 2)**<br>• Males or females aged 55 to 85 years<br>• Diagnosed with mild Alzheimer's disease | • Monthly visits<br>• Daily medications (tablets)<br>• 16 months duration |
| **NOVARTIS – Generation 1 (Phase 2/3)**<br>• Males or females aged 60 to 75 years<br>• Subject must be psychologically ready to receive APOE genotype information based on pre-disclosure rating scales<br>• Subject must be cognitively healthy or minor memory complaints | • 3 visits for pre-screening procedures<br>• 5 visits for genetic disclosure follow-up<br>• Oral tablets or intramuscular injections in clinical trial phase if deemed eligible<br>• Eligibility for treatment phase is based on genotype |
| **ROCHE – GrADuate (Phase 3)**<br>• Males or females aged 50 to 90 years<br>• Diagnosis of probable Alzheimer's disease or prodromal AD | • Monthly visits<br>• Monthly medication (subcutaneous injections)<br>• 26 months duration |
| **vTv Therapeutics Steadfast (Phase 3)**<br>• Males or females aged 50+ years of age at screening<br>• Diagnosis of probable Alzheimer's disease<br>• Must be on a stable dosage of cholinesterase inhibitor / Memantine | • Visits every 3 months<br>• Daily medications (tablets)<br>• 21 months duration |
| **Total Study (Phase 3)**<br>• Males aged 60 to 80 years<br>• Not currently receiving testosterone therapy<br>• Memory concerns | • 8 weekly intramuscular testosterone injections<br>• Daily fish oil capsules<br>• 8 weekly clinic visits<br>• 18 month duration |
| **Janssen Study (Phase 2b/3)**<br>• Males or females aged 60 to 85 years<br>• Risk of developing AD<br>• First degree relative with/had dementia | • Initially Monthly then 3 monthly<br>• Oral tablet<br>• 4.5 yrs study |

# THE PARTNERSHIPS

A commitment to forging collaborations and partnerships in research in Alzheimer's disease will be critical if we are to achieve an Alzheimer's free world. The continued support of leading edge projects in Alzheimer's research, and initiatives that allow researchers from diverse streams of science to share knowledge and work together, are priorities for the Foundation.

## Cooperative Research Centre (CRC) for Mental Health

The CRC for Mental Health is a national program researching the early detection and treatment of neurodegenerative diseases and psychoses. The CRC's research includes areas such as Alzheimer's disease, Parkinson's disease, schizophrenia and mood disorders. The CRC partnerships bring together industry, universities, research institutes, clinicians and patients. The Foundation has provided significant financial support to the CRC for Mental Health since its inception in 2011 which supports research into identifying biomarkers for Alzheimer's disease and furthering our understanding of the integral role of genetics in Alzheimer's disease.

The identification of biomarkers will allow for prevention and treatment strategies to be initiated early and will also have applications in the monitoring of medical and lifestyle interventions.

- The research team has been investigating whether **protein biomarkers** in biological fluids, such as plasma and serum, are altered between healthy and Alzheimer's disease individuals. The thoroughly characterized Australian Imaging Biomarkers and Lifestyle (AIBL) Study of Aging cohort stands the best chance of capturing the most sensitive and specific panel of biomarkers, which have the potential to diagnose, predict and/or monitor Alzheimer's disease.

  A number of potential protein biomarkers have been identified and validated and have the potential to be combined to identify optimal biomarker panels. The identification of such biomarkers will allow for the prevention and treatment strategies to be initiated early and will also have applications in the monitoring of medical and lifestyle interventions.

- Although **lipid metabolism** is tightly linked to the development and progression of Alzheimer's disease, knowledge of these processes are poorly defined. This project aims to provide a detailed lipidomic analysis of the association with cognition, mild cognitive impairment and Alzheimer's disease and provide an avenue to identify individuals at the greatest risk of developing this disease earlier.

  With the help of the CRC for Mental Health, a collaboration was established between Professor Ralph Martins at Edith Cowan University and Associate Professor Peter Meikle from Baker IDI Heart and Diabetes Institute in Melbourne. This collaboration is to better understand the relationship between lipid metabolism and dementia and to identify useful lipid biomarkers for the risk assessment for early diagnosis of dementia. This work has enabled the profiling of over 400 lipid species on the Australian Imaging, Biomarkers and Lifestyle study of Ageing (AIBL) cohort at 5 time points (baseline, 18 months, 36 months, 54 months and 72 months). To date all the samples have been lipid profiled and statistical analysis are in progress.

The Foundation also provides support, through the CRC, to the **Collaborative Genomics Group**, who focus on gaining a greater understanding of the integral role that genetics plays in underpinning not only the risk for developing Alzheimer's disease but also in determining the impact that environmental factors have. Areas of focus include:

- Identifying the combination of genes that may modify the "rate of change" in cognitive decline. This knowledge is fundamental to understanding the origins of the disease and its outcomes can translate to the implementation of more efficient clinical trials and secondary prevention studies.

- Investigating the interaction between genetic and lifestyle factors and the risk for developing Alzheimer's.

  We have recently reported, for the first time, that variation in a particular gene called Aquaporin-4 (AQP4) impacts the relationship between sleep and the accumulation of beta-amyloid in the brain. While more research is required, these new findings could lead to individualised treatments for people with poor sleep quality.

## KARVIAH Study

The primary aim of the **KARVIAH study** is to determine if curcumin can positively alter Alzheimer's disease biomarkers compared with placebo. This is a collaborative study between the Foundation and the Anglican Retirement Villages in NSW. The study includes a two stage design to evaluate the health and risk factors of older people (65-90yrs) living in independent living units within a retirement complex and then to assess the impact of curcumin on cognitive function.

The KARVIAH Study finished in June 2017. 270 Anglicare retirement village residents volunteered to be in the initial 12-month study, of which 105 were found medically healthy and eligible to participate. The participants, aged 65–90 underwent three types of brain scans, retinal imaging, blood analysis, intensive cognitive testing and completed lifestyle questionnaires. All 105 participants completed their 12 month follow up assessment, including cognitive testing, brain and retinal imaging.

A further assessment was also undertaken to examine the effect of acute intake of curcumin, with cognitive function and mood as primary outcome measures. The 12 month treatment period was not enough to reduce amyloid uptake in the brain or improve cognition and potentially a longer period is required.

Findings from the study where published in 2017 which identified two blood markers that may point to the onset of Alzheimer's disease before clinical systems occur.

## TOMMORROW Study

The Australian Alzheimer's Research Foundation is one of 59 study centres involved in the exciting international collaboration – the **TOMMORROW study**. Sites are situated in North America, Europe, Queensland, Victoria and at the Foundation's Stirling Highway site in Western Australia. This clinical trial commenced in 2013 and is conducted in collaboration with the largest pharmaceutical company in Japan, Takeda and alliance partner for the study, Zinfandel Pharmaceuticals.

The trial has two main goals. It aims to evaluate whether an investigational test can predict the genetic risk for developing mild cognitive impairment due to Alzheimer's disease in the next five years. The second goal is to explore whether the drug, pioglitazone, often used in type two diabetes treatment, will delay the first symptoms of mild cognitive impairment due to Alzheimer's disease in people who are cognitively normal but at genetic risk for Alzheimer's.

At the completion of the fourth year of the study, the Foundation's Perth site was the most successful and best performing site in keeping the early termination rate of participants very low and had the largest number of active subjects in the study, which was 260. This is a tremendous achievement by the research team, and together with the Foundation are very appreciative to the participants and their support persons for making the site so successful.

Sadly, Takeda recently announced that the Tommorrow trial will be terminated. The decision to discontinue the trial was based on an interim analysis which showed an inadequate treatment affect with the study drug pioglitazone in delaying the onset of mild cognitive impairment due to Alzheimer's disease. This decision was not related to safety of the study drug or study procedures.

At the completion of the fourth year of the study, the Foundation's Perth site was the most successful and best performing site and had the largest number of active subjects in the study.

Georgia Martins & Shaun Markovic

# EDITH COWAN UNIVERSITY AND THE SARICH BUILDING

Professor Ralph Martins

The Foundation values its strong partnership with ECU. This is centred on providing support for Professor Ralph Martins, ECU's Foundation Professor of Ageing and Alzheimer's and the Foundation's Director of Research.

The partnership with ECU includes the Foundation providing facilities for the clinical component of the work of Professor Martins' team. In 2017, the Foundation moved to the ground floor of the new **Ralph and Patricia Sarich Neuroscience Research Institute (SNRI)** building, on the QEII campus. These new facilities enable the Foundation to provide world class clinical research facilities. These facilities include consulting rooms for medical and memory assessments, retinal imaging testing rooms, a phlebotomy room for blood taking, a well resources blood processing facility, cryogenic and freezer storage facilities, a participant lounge, a spacious seminar room and researcher workspace.

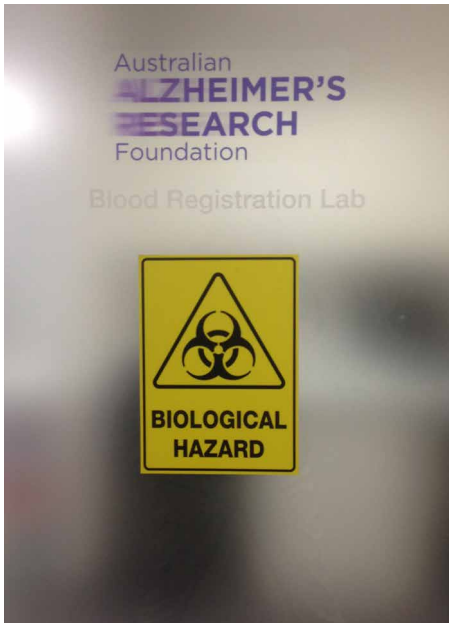
In early 2018, the Edith Cowan University Centre of Excellence for Alzheimer's Disease Research and Care moved from their location in Joondalup to join the Foundation and other neuroscience research organisations in the new Neuroscience Research Institute building enabling an opportunity to work more closely and collaboratively with each other.

Our illustrious neighbours include the Ear Science Institute Australia, the Perron Institute and the Curtin University Neuroscience Research Laboratory.

The Foundation's researchers, who are striving to unlock the complexities of Alzheimer's disease, are able to work with their Edith Cowan peers and other internationally recognised researchers in an environment which fosters collaboration, complementary expertise and shared facilities.

The detailed laboratory based research work that has to date been undertaken at ECU's Joondalup campus has now been relocated to level 2 of the SNRI building. Some of this work is funded through the Foundation's contribution to the CRC for Mental Health, with Professor Martins leading the CRC's Perth neurodegeneration program.

The Foundation values this partnership which is of vital importance to the exploration of the disease, finding causes, decelerators and investigating mitigating strategies and possible treatments.



# THE PERSONAL IMPACT

## Caroline's story

Caroline is a clinical trial participant at the Australian Alzheimer's Research Foundation. A former nurse who, during her career, used to take care of people with Alzheimer's disease.

Caroline

About 5 years ago Caroline knew she was having trouble with her memory but was in denial. Whilst working at an immunisation clinic at PMH, a psychologist spoke to Caroline and gently advised her to look into what might be wrong.

One day her nephew came home from a trip and whilst visiting advised Caroline said that he thought something was not quite right with her. Caroline was once again angry but, persuaded by her brother, finally went for a brain scan.

The Alzheimer's diagnosis was a bit of a relief but hard, she was still in her 50s. She felt inferior. She felt devalued by society. She said 'people try to be helpful but talk down to me and make me feel stupid.'

'Each day I am reminded of my condition when I lose things and I cannot remember to put them in their special place so I will remember!' Here she laughs and her humour is infectious. She says her partner is a saint, patient and understanding and she could not be without him.

Her advice to those living with someone with Alzheimer's is to be patient and accepting of the changed behaviour. 'Don't be critical – let them do what works best for them. Help when asked - but don't be condescending.'

What frightens Caroline the most is the future – not knowing what is going to happen. Not knowing if her sons will develop Alzheimer's. But she is grateful for having lots of supportive friends and she is thrilled at still being able to dance. Dancing brings Caroline great joy. 'It is easy because the man leads and all I have to do is follow – and I love it! She says she eats well and take all the recommended supplements and is hopeful that one day the Foundation will come up with a solution.

She says that the Foundation has been most supportive of her and her partner. They have been compassionate, attentive, understanding, given her time, explained things thoroughly, provided coping strategies and given her inspiration and hope.

# RESEARCHER PROFILE

## Sherilyn Tan

### The Australian Alzheimer's Research Foundation is supporting Sherilyn Tan to complete her PhD in Alzheimer's disease

Sherilyn Tan

After completing my undergraduate degrees in Music and Psychology at the University of Western Australia, my growing interest in ageing and Alzheimer's disease research led me to the Australian Alzheimer's Research Foundation.

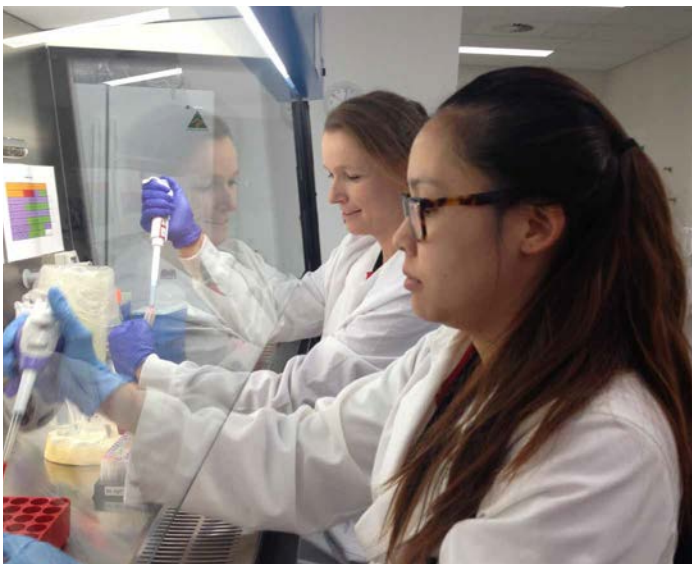
My work as a research assistant gave me access to ground breaking research in this field, insight into the joys and difficulties of research and many valuable opportunities to interact with research participants. These experiences were crucial in forging my decision to undertake a combined PhD and Masters in Clinical Neuropsychology at UWA in 2016.

My PhD thesis will examine the relationship between the body's free testosterone levels and executive functioning in older men, as part of a clinical trial conducted at the Australian Alzheimer's Research Foundation.

Executive functions are higher order cognitive processes that allow us to plan, manage multiple tasks and engage in abstract thought.

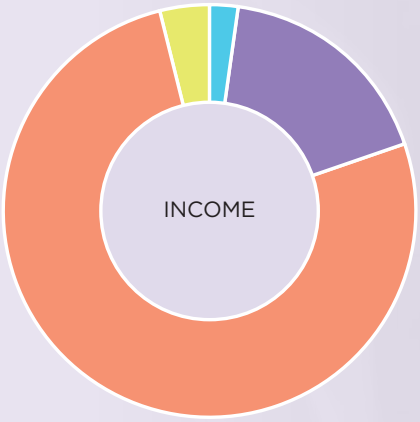
With age, executive functioning can decline and impact on quality of life. By looking at physiological changes that affect executive functioning, we can hopefully develop preventative strategies to stop or delay this decline.

The Foundation attracts individuals with diverse scientific backgrounds, all of whom are passionate about advancing knowledge on Alzheimer's disease. Working alongside these great minds, they've exemplified the qualities of team work, humility, resilience and dedication. It is a supportive environment that I feel deeply privileged and proud to be part of.



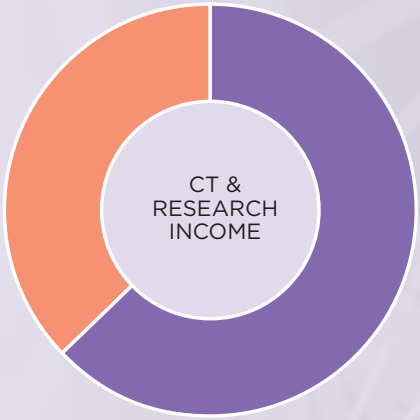
Sabine Bird & Lucy Lim

# FINANCIALS AT A GLANCE



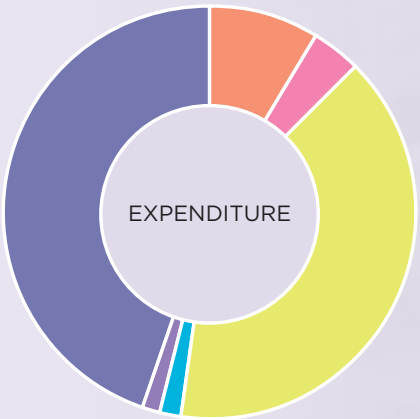

### Income 2017

| | |
|---|---|
| Grants | 104,700 |
| Donations | 751,204 |
| Clinical Trials/Research Income | 3,266,194 |
| Other Income | 166,672 |
| Total Income | 4,288,770 |




### Clinical Trials/Research Income 2017

| | |
|---|---|
| Clinical Trial Income | 63% |
| Funded Research | 37% |




### Expenditure 2017

| | |
|---|---|
| Facility Expenses | 333,904 |
| Administration | 140,294 |
| Employee Costs | 1,496,297 |
| Insurance | 68,231 |
| Marketing & Communication | 51,590 |
| Research Expenses | 1,682,550 |
| Total Expenditure | 3,772,866 |

# COMMUNITY ENGAGEMENT

Staying connected and visible in the community is of vital importance for the Foundation. A number of events were held in 2017 by the Foundation, and also by a number of external groups and individuals to educate the community about Alzheimer's disease, thank supporters and raise much needed funds. Here is a snapshot of some of the events.

At both the **Rottnest Swim and HBF Run for a Reason** teams of supporters did their bit for the Foundation using the Everyday Hero fundraising platform. Several thousand dollars was raised by athletic and committed members of the public and in 2017 some of the Foundation staff members joined this event to raise funds and give the organisation profile. Our thanks to staff and fundraisers alike!

**Barry Green** and a dedicated and fit group of the **Stadium Masters Swimmers** held a fund raising event for the Foundation in May 2017. They are certainly on top of the exercise regime - thought to delay the onset of Alzheimer's! Thank you team!

For the last two years the **Palm Beach Rotary Club** in Rockingham has nominated the Foundation as one of their not-for-profit benefactors, sharing the profits of this popular and exciting Rockingham Beach Cup weekend with the Foundation. We appreciate that the Foundation is at the forefront of the Palm Beach Rotary Club fundraising efforts. Thank you.

**Nathan turned 30 in November** and because he had just lost his Grandmother to Alzheimer's disease he decided to ask his guests to donate to the Foundation instead of bringing presents to his party.

A sincere thank you to Nathan and his sister Sarah for making this happen and for the generous donations from party-goers!

Once again the annual **Maurizio fund raising dinner** was held and we're very thankful to all the loyal supporters of this event who enjoyed a fun night with fine food and a lively auction raising further funds for our researchers work.

In September the annual **Public Lectures** were held at the State Library and in the Perkins Building. The lectures are designed to update participants in our clinical trials and the interested public on the latest research by a team from the Foundation. In 2017 over 150 people attended to be briefed by our skilled and dedicated researchers.

The Foundation also held two **research updates** for supporters in 2017. The events were informal with short presentations delivered by researchers. Guests were able to mingle with the Board, researchers and staff and ask questions in a relaxed atmosphere.

Thank you to everyone who supported the Foundation in 2017. Your assistance provides impetus which propels our researchers to find a breakthrough.

Stadium Masters Swimmers

# SPECIAL PURPOSE FINANCIAL REPORT

Australian Alzheimer's Research Foundation

For the year ended 31 December 2017

INDEX

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

## STATEMENT BY MEMBERS OF THE COMMITTEE

The Committee has determined that the Fund is not a reporting entity and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the Committee, the financial report as set out on the attached pages is in accordance with the Australian Charities and Not-For-Profits Commission Act 2012 and:

1. Presents a true and fair view of the financial position of Australian Alzheimer's Research Foundation Inc as at 31 December 2017 and its performance for the year ended on that date.

2. At the date of this statement, there are reasonable grounds to believe that Australian Alzheimer's Research Foundation Inc will be able to pay its debts as and when they fall due.

This statement is made in accordance with a resolution of the Committee and is signed for and on behalf of the Committee by:

**ENZO SIRNA**
*Chairman*

**MS LIZA DUNNE**
*Chief Executive Officer*

Dated: 20 March 2018

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC

## REPORT ON THE AUDIT OF THE FINANCIAL REPORT

### Opinion

We have audited the financial report of Australian Alzheimer's Research Foundation Inc (the Foundation), which comprises the Statement of Financial Position as at 31 December 2017, the Statement of Profit or Loss and Other Comprehensive Income, the Statement of Changes in Equity and Statement of Cash Flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the Statement by Members of the Committee.

In our opinion, the accompanying financial report of Australian Alzheimer's Research Foundation Inc has been prepared in accordance with Div 60 of the Australian Charities and Not-for-Profits Commission Act 2012, including:

(i) giving a true and fair view of the Foundation's financial position as at 31 December 2017 and of its financial performance for the year then ended; and,

(ii) complying with Australian Accounting Standards and the Australian Charities and Not For-Profits Commission Regulation 2013.

### Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Foundation in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Emphasis of Matter

We draw attention to Note 1 to the financial report, which described the basis of accounting. The financial report has been prepared for the purpose of fulfilling the Committees' financial reporting responsibilities under the Australian Charities and Not-For-Profits Commission Act 2012. As a result, the financial report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC

**Information Other than the Financial Report and Auditor's Report Thereon**

The Committee are responsible for the other information. The other information comprises the information included in the Foundation's annual review for the year ended 31 December 2017, but does not include the financial report and our Auditor's Report thereon. Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon. In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially mis-stated. If, based on the work we have performed, we conclude that there is a material mis statement of this other information, we are required to report that fact. We have nothing to report in this regard.

**Responsibilities of the Committee for the Financial Report**

The Committee of the Foundation are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the Australian Charities and Not-For-Profits Commission Act 2012 and for such internal control as the Committee determines is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material mis-statement, whether due to fraud or error

In preparing the financial report, the Committee are responsible for assessing the Foundation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Committee either intends to liquidate the Foundation or to cease operations, or have no realistic alternative but to do so.

The Committee are responsible for overseeing the Foundation's financial reporting process.

**Auditor's Responsibilities for the Audit of the Financial Report**

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material mis-statement, whether due to fraud or error, and to issue an Auditor's Report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material mis-statement when it exists. Mis-statements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian. Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit.

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

## INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC

**WE ALSO:**

- Identify and assess the risks of material mis-statement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks: and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material mis-statement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, mis-representations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Foundation's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Committee.

- Conclude on the appropriateness of the Committee's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Foundation's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our Auditor's Report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our Auditor's Report. However, future events or conditions may cause the Foundation to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

**ACCRU+ PERTH**
**Chartered Accountants**

**G R JENNINGS**
**Partner**

Date: 23 March 2018
West Perth, WA

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

## STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2017

| | Note | 2017 $ | 2016 $ |
|---|---|---|---|
| Grants | | 104,700 | 2,524,239 |
| Donations | | 737,899 | 550,984 |
| Fundraising and Events | | 13,305 | 23,545 |
| Lions Club of Australia | | - | 80,751 |
| Interest | | 35,255 | 60,589 |
| Investment Income | | 73,597 | 88,817 |
| Profit/(Loss) on Disposal of Assets | | - | 60,143 |
| Rental Income | | 33,920 | 14,000 |
| Sundry Income | | 23,900 | 25,449 |
| Research Income | | 3,266,194 | 2,880,642 |
| Total Income | | 4,288,770 | 6,309,159 |
| Accommodation Expenses | | 333,904 | 285,716 |
| Administration | | 140,294 | 392,689 |
| Employee Costs | | 1,496,297 | 1,711,467 |
| Insurance Expenses | | 68,231 | 72,914 |
| Marketing and Communications | | 51,590 | 94,067 |
| Research Expenses | | 1,682,550 | 1,783,461 |
| Total Expenditure | | 3,772,866 | 4,340,314 |
| Current Year Surplus Before Income Tax | | 515,904 | 1,968,845 |
| Income Tax Expense | 1(d) | - | - |
| Net Current Year Surplus | | 515,904 | 1,968,845 |
| Other Comprehensive Income | | | |
| Items that may be reclassified subsequently to profit or loss when specific conditions are met | | | |
| Gain on Revaluation of Land and Buildings | | 154,893 | - |
| Gain on Revaluation of Financial Assets | | 74,419 | 35,419 |
| Total Other Comprehensive Income for the Year | | 229,312 | 35,419 |
| **Total Comprehensive Income for the Year** | | 745,216 | 2,004,264 |

Please refer to the Statement of Changes in Equity for allocation of net current year surplus and comprehensive income to equity accounts(including retained earnings).

This Statement of Profit or Loss and Other Comprehensive Income is to be read in conjunction with the attached notes.

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

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*ABN: 34 575 647 667*

## STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

| | Note | 2017 $ | 2016 $ |
|---|---|---|---|
| **CURRENT ASSETS** | | | |
| Cash and Cash Equivalents | 2 | 2,359,011 | 2,489,631 |
| Trade Receivables | | 305,165 | 598,451 |
| Other Assets | 3 | 187,200 | 139,598 |
| **TOTAL CURRENT ASSETS** | | 2,851,376 | 3,227,680 |
| **NON-CURRENT ASSETS** | | | |
| Property, Plant and Equipment | 4 | 6,032,791 | 5,184,131 |
| Investments | 5 | 1,555,183 | 1,302,973 |
| **TOTAL NON-CURRENT ASSETS** | | 7,587,974 | 6,487,104 |
| **TOTAL ASSETS** | | 10,439,350 | 9,714,784 |
| **CURRENT LIABILITIES** | | | |
| Trade and Other Payables | 6 | 413,054 | 195,978 |
| Unexpended Funds | | 1,148,096 | 1,295,444 |
| Provision for Employee Leave Entitlements | 7 | 48,081 | 73,385 |
| **TOTAL CURRENT LIABILITIES** | | 1,609,231 | 1,564,807 |
| **NON-CURRENT LIABILITIES** | | | |
| Provision for Employee Leave Entitlements | 7 | 38,751 | 53,825 |
| Borrowings | 8 | — | 50,000 |
| **TOTAL NON-CURRENT LIABILITIES** | | 38,751 | 103,825 |
| **TOTAL LIABILITIES** | | 1,647,982 | 1,668,632 |
| **NET ASSETS** | | 8,791,368 | 8,046,152 |
| **EQUITY** | | | |
| Reserves | 9 | 7,958,041 | 7,690,760 |
| Retained Earnings | | 833,327 | 355,392 |
| **TOTAL EQUITY** | | 8,791,368 | 8,046,152 |

This Statement of Financial Position is to be read in conjunction with the attached notes.

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

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*ABN: 34 575 647 667*

## STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31 DECEMBER 2017

| | Retained Earnings | Endowment Reserve | Capital Reserve | Property Revaluation Reserve | Share Revaluation Reserve | Unexpended Funds Reserve | Pet Scanner Donation Reserve | NRI Reserve Building | Total |
|---|---|---|---|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ | $ | $ | $ | $ |
| **Balance at 31 December 2015** | **544,635** | **2,000,000** | **2,404,842** | **(465,720)** | **129,885** | **1,238,663** | **189,583** | **—** | **6,041,888** |
| Comprehensive Income | | | | | | | | | |
| Profit for the Year | 1,968,845 | - | - | - | - | - | - | - | 1,968,845 |
| Other Comprehensive Income for the Year | - | - | - | - | 35,419 | - | - | - | 35,419 |
| Total Comprehensive Income for the Year | 1,968,845 | - | - | - | 35,419 | - | - | - | 2,004,264 |
| Transfers from Retained Earnings to: | | | | | | | | | |
| - Unexpended Funds | 252,329 | - | - | - | - | (252,329) | - | | - |
| - PET Scanner | (10,417) | - | - | - | - | - | 10,417 | - | - |
| - NRI Building | (2,400,000) | - | - | - | - | - | - | 2,400,000 | - |
| | (2,158,088) | - | - | - | - | (252,329) | 10,417 | 2,400,000 | - |
| **Balance at 31 December 2016** | **355,392** | **2,000,000** | **2,404,842** | **(465,720)** | **165,304** | **986,334** | **200,000** | **2,400,000** | **8,046,152** |
| **Balance at 31 December 2016** | **355,392** | **2,000,000** | **2,404,842** | **(465,720)** | **165,304** | **986,334** | **200,000** | **2,400,000** | **8,046,152** |
| Comprehensive Income | | | | | | | | | |
| Profit for the Year | 515,904 | - | - | - | - | - | - | - | 515,904 |
| Other Comprehensive Income for the Year | - | - | - | 154,893 | 74,419 | - | - | - | 229,312 |
| Total Comprehensive Income for the Year | 515,904 | - | - | 154,893 | 74,419 | - | - | - | 745,216 |
| Transfers from Retained Earnings to: | | | | | | | | | |
| - Unexpended Funds | (106,015) | - | - | - | - | 106,015 | - | | - |
| - NRI Building | 68,046 | - | - | - | - | - | - | (68,046) | - |
| | (37,969) | - | - | - | - | 106,015 | | (68,046) | - |
| **Balance at 31 December 2017** | **833,327** | **2,000,000** | **2,404,842** | **(310,827)** | **239,723** | **1,092,349** | **200,000** | **2,331,954** | **8,791,368** |

This Statement of Changes in Equity is to be read in conjunction with the attached notes.

**AUSTRALIAN ALZHEIMER'S RESEARCH FOUNDATION INC**

*ABN: 34 575 647 667*

## STATEMENT OF CASH FLOWS
## FOR THE YEAR ENDED 31 DECEMBER 2017

| | Note | 2017 $ | 2016 $ |
|---|---|---|---|
| **CASH FLOW FROM OPERATING ACTIVITIES** | | | |
| Receipts from Donations and Fundraising | | 701,867 | 655,854 |
| Receipts from Research, Grants and Other Income | | 3,509,970 | 6,057,956 |
| Receipts from Investment Income (including Interest and Dividends) | | 93,575 | 162,821 |
| Payments to Suppliers and Employees | | (3,475,275) | (4,570,909) |
| *Net Cash Generated by/(Used In) Operating Activities* | 10 | 830,137 | 2,305,722 |
| **CASH FLOW FROM INVESTING ACTIVITIES** | | | |
| Payment for Property, Plant and Equipment | | (800,337) | (2,742,589) |
| Disposal Proceeds from Property, Plant and Equipment | | - | 200,000 |
| Payment for Investments | | (391,853) | (777,228) |
| Disposal Proceeds from Investments | | 231,433 | 960,284 |
| *Net Cash Generated by/(Used In) Investing Activities* | | (960,757) | (2,359,533) |
| **NET INCREASE/(DECREASE) IN CASH HELD** | | (130,620) | (53,811) |
| Cash on Hand at the Beginning of the Financial Year | | 2,489,631 | 2,543,442 |
| **CASH ON HAND AT THE END OF THE FINANCIAL YEAR** | | 2,359,011 | 2,489,631 |

This Statement of Cash Flows is to be read in conjunction with the attached notes.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Board has prepared the financial statements on the basis that the Australian Alzheimer's Research Foundation Inc ("the Foundation") is a non-reporting entity because there are no users who are dependent on its general purpose financial reports. This is a special purpose financial report prepared in order to satisfy the financial reporting requirements of the Australian Charities and Not-For-Profits Commission Act 2012. The Foundation is a not-for-profit entity for financial reporting purposes under Australian Accounting Standards

The financial statements have been prepared in accordance with the mandatory Australian Accounting Standards applicable to entities reporting under the Australian Charities and Not For-Profits Commission Act 2012 and the significant accounting policies disclosed below. Such accounting policies are consistent with the previous period unless stated otherwise.

The financial statements have been prepared on an accruals basis and are based on historic costs unless otherwise stated in the notes. Material accounting policies adopted in the preparation of the financial statements are presented below and have been consistently applied unless otherwise stated.

#### (a) Incorporation and Constitution

The Foundation was incorporated in accordance with the provisions of the Associations Incorporation Act (1987) [Section 91(1)] on 27 January 2000 – Registration No: A1005460A. The Constitution was finalised by way of special resolution and came into effect as from 21 November 2001 – Document No: 954353/15962552.

The Foundation changed its name from McCusker Alzheimer's Research Foundation to Australian Alzheimer's Research Foundation on 5 October 2016.

#### (b) Revenue

Donations and fundraising monies received, by their nature can be recognised only when they are recorded in the books. Such items as donations are brought to account on a cash basis, or, when they are received other than in cash, when ownership passes to the Foundation.

Revenue from services provided is recognised when that service has been provided.

Investment income (interest and dividends) is recognised when received.

Grant income is recognised when the program has incurred costs associated with the relevant activities of the program.

#### (c) Cash

Cash for the purposes of the Statement of Financial Position and Statement of Cash Flows includes cash on hand, at bank and deposit.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### (d) Taxation

The Foundation is registered with the Australian Taxation Office for both Australian Business Number (ABN) and Goods and Services Tax (GST). Registration ABN: 34 575 647 667.

The Foundation is exempt from income tax under the provisions of Sub-Division 50B of the Income Tax Assessment Act 1997 as amended.

As the Foundation is for public benevolent and non-profit making, the Australian Taxation Office allows any donations over $2 as tax deductible. This was by way of endorsement as a Deductible Gift Recipient under Sub-Division 30BA of the Income Tax Assessment Act 1997.

#### (e) Property, Plant and Equipment

Research equipment, office and computer equipment, furniture and fittings and property improvements are carried at cost, less, where applicable, any accumulated depreciation. The depreciable amount of all fixed assets is depreciated over the useful lives of the assets to the Foundation commencing from the time the asset is held ready for use. Depreciation is calculated on a straight-line basis.

The depreciation rates used for each class of depreciable assets are:

| | | |
|---|---|---|
| Research Equipment | 20% | - 37.5% |
| Office and Computer Equipment | 13.5% | - 40% |
| Furniture and Fittings | 12.5% | - 30% |
| Property Improvements | 2.5% | - 20% |

The assets residual values and useful lives are reviewed, and adjusted, if appropriate, at the end of each reporting period.

Freehold land and buildings are carried at their fair value (being the amount for which an asset could be exchanged between knowledgeable willing parties in an arms length transaction) based on periodic valuations by external independent valuers.

Increases in the carrying amount arising on revaluation of land and buildings are taken to a revaluation reserve in equity. A decrease is charged to the revaluation reserve unless the decrease in considered an impairment (impairment is deemed to be a permanent decrease). If the decrease is considered an impairment, the decrease is charged to the Statement of Profit or Loss and Other Comprehensive Income.

#### (f) Impairment of Assets

At each reporting date, the Board reviews the carrying values of the Foundation assets to determine whether there is any indication that those assets have been impaired. Impairment losses are recognised in the Income Statement.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

#### (g) Provision for Employee Leave Entitlements

Provision is made for the Foundation's liability for employee benefits arising from services rendered by employees up to balance date. Provisions have been measured at the amounts expected to be paid when the liability is settled including on costs.

Employee benefits expected to be settled within one year (annual leave and long service leave) are recognised as current. All other employee benefits (long service leave) are recognised as non current.

Long service leave is recognised in the accounts for all employees who have been employed by the Foundation for more than two years at year end. The benefits are undiscounted. Long service leave is considered a current liability where the Foundation does not have an unconditional right to defer settlement for at least 12 months after the end of the reporting period.

#### (h) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset, or as a part of an item of expense. Receivables and payables in the Balance Sheet are shown inclusive of GST.

#### (i) Going Concern

The financial statements have been prepared on a going concern basis. The Foundation is dependent upon continuation of donations, fundraising income and research income, for the pursuit of its objectives.

#### (j) Receivables

Receivables are amounts due from external organisations. All receivables are expected to be collected within 12 months and are classified as current assets.

#### (k) Accrued Income

Accrued income includes amounts due from external organisations for services provided to year end but for which no invoice has been raised. All accrued income is expected to be invoiced and collected within 12 months.

#### (l) Investments

Listed investments in corporations and trusts are initially recognised at cost which includes transaction costs, and are subsequently measured at fair value, which is equivalent to their market bid price at the end of the reporting period. Movements in fair value are recognised through an equity reserve.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

**(m) Trade and Other Payables**

Trade and other payables represent the liability outstanding at the end of the reporting period for goods and services received by the Foundation during the reporting period that remain unpaid. All liabilities are expected to be settled within 12 months.

**(n) Unexpended Funds**

Unexpended funds represents money repayable to the relevant funding body if the funds are not expended in accordance with the specific funding purpose.

During the year all balances not meeting the above criteria were transferred to the Statement of Profit or Loss and Other Comprehensive Income and then to the Unexpended Funds Reserve, if applicable.

| | 2017 $ | 2016 $ |
|---|---|---|
| **2. CASH AND CASH EQUIVALENTS** | | |
| General Accounts | 1,208,302 | 1,283,760 |
| Term Deposits | 1,150,000 | 1,205,000 |
| Petty Cash | 709 | 871 |
| | 2,359,011 | 2,489,631 |
| **3. OTHER ASSETS** | | |
| Prepayments | 69,628 | 60,708 |
| Accrued Income | 89,141 | 65,586 |
| Sundry Receivable | 28,431 | 13,304 |
| | 187,200 | 139,598 |

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

| | | Note | 2017 $ | 2016 $ |
|---|---|---|---|---|
| **4.** | **PROPERTY, PLANT AND EQUIPMENT** | | | |
| | Land and Buildings | | | |
| | – Suite 22, Hollywood Medical Centre | (a) | 1,170,000 | 1,015,107 |
| | – Unit 2, 142 Stirling Highway | (b) | 1,400,000 | 1,400,000 |
| | | | 2,570,000 | 2,415,107 |
| | Research Equipment (at Cost) | | 1,161,692 | 1,161,692 |
| | Less: Accumulated Depreciation | | (1,149,637) | (1,140,338) |
| | | | 12,055 | 21,354 |
| | Office and Computer Equipment (at Cost) | | 176,544 | 116,177 |
| | Less: Accumulated Depreciation | | (112,224) | (106,715) |
| | | | 64,320 | 9,462 |
| | Furniture and Fittings (at Cost) | | 92,449 | 59,663 |
| | Less: Accumulated Depreciation | | (51,961) | (46,490) |
| | | | 40,488 | 13,173 |
| | Property Improvements (at Cost) | (c) | 3,434,255 | 2,727,070 |
| | Less: Accumulated Depreciation | | (88,327) | (2,035) |
| | | | 3,345,928 | 2,725,035 |
| | Total Property, Plant and Equipment | | 6,032,791 | 5,184,131 |

(a) Suite 22, Hollywood Medical Centre was valued at 7/12/2017 by an independent valuer.

(b) Unit 2, 142 Stirling Highway was valued at 31/12/2015 by an independent valuer.

(c) This is the fitout of the areas leased in the Neuroscience Research Institute Building and will be amortised over the lease term of 20 years.

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

| | | 2017 $ | 2016 $ |
|---|---|---|---|
| **5.** | **INVESTMENTS** | | |
| | Morgan Stanley Portfolio Account | | |
| | – Investments in Listed Corporations and Trusts | 1,555,182 | 1,302,972 |
| | Investments in Unlisted Corporation (at Cost) | 1 | 1 |
| | | 1,555,183 | 1,302,973 |
| **6.** | **TRADE AND OTHER PAYABLES** | | |
| | Trade Payables | 69,801 | 56,333 |
| | Other Payables (Including Accruals) | 343,253 | 139,645 |
| | | 413,054 | 195,978 |
| **7.** | **PROVISION FOR EMPLOYEE ENTITLEMENTS** | | |
| | *Current* | | |
| | Annual Leave | 48,081 | 62,890 |
| | Long Service Leave | — | 10,495 |
| | | 48,081 | 73,385 |
| | *Non-Current* | | |
| | Long Service Leave | 38,751 | 53,825 |
| **8.** | **BORROWINGS** | | |
| | Loan (Unsecured) – Non-Interest Bearing | — | 50,000 |

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

### 9. RESERVES

**Endowment Reserve**

The Endowment Reserve records specific significant donations received in the formative years of the Foundation.

**Capital Reserve**

The Capital Reserve records specific significant donations received for the purchase of land and buildings.

**Property Revaluation Reserve**

The Property Revaluation Reserve records the revaluation of the land and buildings.

**Share Revaluation Reserve**

The Share Revaluation Reserve records the revaluation of investments.

**Unexpended Funds Reserve**

The Unexpended Funds Reserve records unspent funds that will be spent on specific projects in the future.

**PET Scanner Donation Reserve**

The PET Scanner Donation Reserve records the donation received for the PET Scanner jointly purchased by the Foundation and the subsequent proceeds received on disposal of the PET Scanner.

**Reserve – NRI Building**

$2,400,000 grant from Lotterywest to fund the fitout for the areas to be leased in the Neuroscience Research Institute (NRI) building at QEII Medical Centre. The reserve will be amortised over the lease Term of 20 years.

## 9. RESERVES (Continued)

| | Endowment Reserve | Capital Reserve | Property Revaluation Reserve | Share Revaluation Reserve | Unexpended Funds Reserve | Pet Scanner Donation Reserve | NRI Reserve Building | Total |
|---|---|---|---|---|---|---|---|---|
| | $ | $ | $ | $ | $ | $ | $ | $ |
| **Balance at 31 December 2015** | **2,000,000** | **2,404,842** | **(465,720)** | **129,885** | **1,238,663** | **189,583** | **-** | **5,497,253** |
| Gain on Revaluation of Investments | - | - | - | 35,419 | - | - | - | 35,419 |
| Transfer from Retained Earnings | - | - | - | - | (252,329) | 10,417 | 2,400,000 | 2,158,088 |
| Movement for the Year | - | - | - | 35,419 | (252,329) | 10,417 | 2,400,000 | 2,193,507 |
| **Balance at 31 December 2016** | **2,000,000** | **2,404,842** | **(465,720)** | **165,304** | **986,334** | **200,000** | **2,400,000** | **7,690,760** |
| **Balance at 31 December 2016** | **2,000,000** | **2,404,842** | **(465,720)** | **165,304** | **986,334** | **200,000** | **2,400,000** | **7,690,760** |
| Gain on Revaluation of Land and Buildings | - | - | 154,893 | - | - | - | - | 154,893 |
| Gain on Revaluation of Investments | - | - | - | 74,419 | - | - | - | 74,419 |
| Transfer from Retained Earnings | - | - | - | - | 106,015 | - | (68,046) | 37,969 |
| Movement for the Year | - | - | 154,893 | 74,419 | 106,015 | - | (68,046) | 267,281 |
| **Balance at 31 December 2017** | **2,000,000** | **2,404,842** | **(310,827)** | **239,723** | **1,092,349** | **200,000** | **2,331,954** | **7,958,041** |

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

| | | 2017 $ | 2016 $ |
|---|---|---|---|
| **10.** | **RECONCILIATION OF CASH FLOW FROM OPERATIONS TO NET CURRENT YEAR SURPLUS** | | |
| | Net Current Year Surplus | 515,904 | 1,968,845 |
| | Non-Cash Flow in Surplus | | |
| | Profit on Sale of Investments | (17,371) | (5,462) |
| | Depreciation | 106,570 | 103,269 |
| | (Profit)/Loss on Disposal of Plant and Equipment | — | (60,143) |
| | Changes in Assets and Liabilities | | |
| | (Increase)/Decrease in Trade Receivables | 293,286 | 80,780 |
| | (Increase)/Decrease in Other Assets | (47,602) | 149,722 |
| | Increase/(Decrease) in Trade and Other Payables | 217,076 | (145,420) |
| | Increase/(Decrease) in Unexpended Funds | (147,348) | 201,231 |
| | Increase/(Decrease) in Employee Entitlements | (40,378) | 12,900 |
| | Increase/(Decrease) in Borrowings | (50,000) | — |
| | | 830,137 | 2,305,722 |

### 11. CONTINGENCIES

The Foundation has no known contingent liabilities or capital commitments at reporting date.

### 12. EVENTS OCCURRING AFTER BALANCE DATE

There has been no material or significant events subsequent to 31 December 2017 which have materially affected the operations of the financial position of the Foundation.

### 13. FOUNDATION DETAILS

The principal place of business of the Foundation is:

Ralph & Patricia Sarich Neuroscience Research Institute
8 Verdun Street
Nedlands WA 6009

# THANK YOU TO OUR PARTNERS











And a heartfelt thanks to all our generous donors and fundraisers. Your support is invaluable and very much appreciated.

Australian
ALZHEIMER'S
RESEARCH
Foundation

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