



April
2018

Dementia is the second leading cause of death of Australians

Alzheimer's disease accounts for around 70% of dementia suffers and there is currently no cure.

In 2016, dementia became the leading cause of death among Australian women, surpassing heart disease, which had been the leading cause of death for both males and females since the early twentieth century.

It does not discriminate: Anne Deveson, Ronald Regan, Margaret Thatcher, Rosa Parks, Robin Williams, Rita Hayworth, Charles Bronson, Malcolm Young, Iris Murdoch, Harold Wilson, Enid Blyton, Omar Sharif, Glen Campbell and Gene Wilder...

...and some of our dearest family and friends have developed this cruel condition.

Because of the severity and the prevalence of the disease it is urgent that better treatments be developed.

Thank you for your support in our quest to find the solution.

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.

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 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 we can make a significant contribution to achieving this goal.

A heartfelt thank you to our partners and generous donors and fundraisers. Your support is invaluable and very much appreciated.

Liza Dunne
CEO, Australian Alzheimer's
Research Foundation

Our Clinical Trials Division provides the opportunity for West Australians to gain access to clinical trials for potential new therapies into Alzheimer's disease.

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.

In 2018 the team continues 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.

Study Participants wanted

The Foundation is currently seeking study participants who have early memory problems or early stage Alzheimer's disease to participate in a number of clinical trials. If you are interested please phone 6457 0253 or email info@alzheimers.com.au and your details will be passed to the research team. This support is vital to our work and very much appreciated.

If you would like to participant in a clinical trial please call 6457 0253.

Our current clinical trials can also be viewed on our website: www.alzheimers.com.au, go to What We Do and Participate in a Clinical Trial.



Testosterone Trial

Recent studies have indicated that a decrease in testosterone is related to an increase in amyloid build up in the brain.

This information has guided the development of the Testosterone Trial, a ground breaking study to assess the effect of testosterone and the Omega-3 fatty acid found in fish supplementation on brain amyloid and cognition in men over 60 years of age.

The study will be conducted at 2 locations. The Foundation's clinical research facility on Stirling Highway, Nedlands and at Macquarie University in NSW. Each site will recruit 100 men between the ages of 60-80 years.

So, the Foundation is looking for males over the age of 60 years who are interested in participating in this study.

For further information please call the Foundation's clinical research facility on 6304 3966 or email Shane Fernandez at s.fernandez@ecu.edu.au. Additional information can be found on the our website www.alzheimers.com.au, go to What We Do and Participate in a Clinical Trial.

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.

Tommorrow Study

Since 2013 the Foundation has been participating in the *Tommorrow Study*. Over 260 people have been participating in this study in Perth.

The trial has two main goals:

- to evaluate whether an investigational test can predict the genetic risk for developing mild cognitive impairment due to Alzheimer's disease.
- 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 at genetic risk for Alzheimer's disease.

Sadly, Takeda recently announced that the *Tommorrow Trial* will be terminated. The decision to discontinue the trial was based on an analysis which showed an inadequate treatment affect 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.

As the trial will come to an end in 2018, the Foundation would like to thank all the participants and support persons for their tremendous contribution to the study and for giving up so much of their time.

Optimising your health

Exercise

Previous studies have established a link between higher physical activity levels and levels of Alzheimer's disease.

A new 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 ultimate aim is to pinpoint 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 provide some protection against Alzheimer's disease.

Researchers have 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 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

Sleep is an important contributor both to cognitive health and biological changes in the brain.

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 that intervention can positively affect cognition and is potentially protective through maintenance of brain activity (determined by PET brain imaging).



CAROLINE'S STORY



Caroline, now in her fifties, was diagnosed with Alzheimer's five years ago and is involved in a clinical trial at the Foundation.

'It was my brother who urged me to get tested, he was insistent something was wrong,' she said. At first the former nurse, who used to work extensively with dementia patients, was in denial.

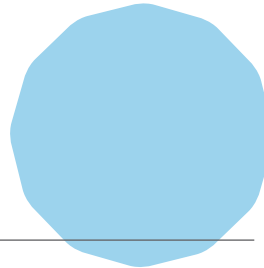
'The fear now is knowing what is ahead. I know what happens at the end. That is the worry for me and my children.'

Caroline asks people to be accepting of what those with Alzheimer's are experiencing and try not to be condescending.

'I truly believe exercise helps and I do a lot of ballroom dancing. It is easy because the man leads and all I have to do is follow - and I love it! I try to eat good food and probably go overboard on the fish oils and turmeric.'

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

She is hopeful that one day the Foundation will come up with a solution.



With thanks and appreciation to all our partners



Researcher Profile



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 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 welcomes Bryan Brown

In late 2017 Bryan Brown accepted an invitation to be an Ambassador for the Foundation.

Bryan came to Perth for a fundraising dinner in February and delivered a heart-warming talk mentioning the loss of his friend Richard Neville (of Oz magazine fame) to Alzheimer's disease and his fear of losing his memory – which is essential to his craft.

Guests enjoyed a rare glimpse into Bryan's film career with moving and hilarious stories from singing Zip-a-Dee-Doo-Dah with Paul McCartney in the loo at the BBC Studios in London, to tossing bottles with Tom Cruise in New York, dining at the White House, almost drowning in rapids in Canada, and receiving a standing ovation at

the Venice Film Festival with director Warwick Thornton for the film *Sweet Country*.

Bryan said he was only able to share his stories as he can re-live them in his mind, and at the end of life he wants to be able to remember them again and smile. If he cannot it will be as though he has not had a life – hence his support of the work of the Foundation who seek to put an end to this disease.

The event generated much needed funds for our research and a flurry of activity in the Perth media - raising the profile of the Foundation and highlighting the need for solutions to Alzheimer's disease.

Kokoda Challenge 2018

Are you up for the challenge? Memories are worth TREKKING and fighting for. Take up the KOKODA CHALLENGE!

Retrace the footsteps of our soldiers on this 96km trek. The Kokoda Trek links the south and north coast of Papua New Guinea through the most rugged terrain, tropical rainforests and villages.

In 1942 the Kokoda Trek was a scene of fighting between Australia and Japan during World War II. Today, the Kokoda Trek has become a pilgrimage for many Australians honouring the spirit of the ANZACS and raising funds for worthy causes. By making this trek you will be tackling one of the great treks in the world! This is truly, a once in a lifetime opportunity.

By taking part in the Kokoda Trek for the Australian Alzheimer's Research Foundation you will be raising funds to help research the causes, develop an early diagnosis and identify interventions and treatments for this disease.



TAKE PART IN THE 2018 CHALLENGE - REGISTER AT www.alzheimers.com.au go to How to Help, or contact Amanda Beardmore on 6457 0253 or amanda.beardmore@alzheimers.com.au

Our Fundraising Heros

Join David and many others on our **HERO** list!
Organise your own event and raise funds to help us create an Alzheimer's free world.

David's Cape to Cape Fundraiser

On the 13th March 2018, David and three of his friends - The Cape Crusaders - conquered the Cape to Cape walk (135km) in honour of his late sister Jean.

David told us that, 'Just before Christmas 2017 the brightness and joy of the season was dimmed considerably by a large dark cloud when my beloved sister Jean passed away. At just 66, and after suffering with dementia for too many years, her time had come. This is a cruel condition for those with it, their family and their friends. I wanted to do something positive by helping raise funds for Alzheimer's research.'

David decided to do this by walking the Cape to Cape Trail with three of his mates.



The Cape Crusaders raised over \$10,000 for the Australian Alzheimer's Research Foundation. That is just over \$74 per kilometre walked! Congratulations David and thank you for your support.

WHAT WILL YOU DO TO HELP ALZHEIMER'S RESEARCH IN 2018?

RAISE FUNDS FOR ALZHEIMER'S RESEARCH AT THESE EVENTS

MOTHER'S DAY - 13 May 2018 - consider a donation instead of flowers or presents. Or do both!

HBF RUN FOR A REASON - 27 May 2018.

KOKODA CHALLENGE - 28 September to 7 October 2018.

To raise funds for the Foundation in the HBF Run for a Reason go to www.hbfrun.com.au

To take on the Kokoda Challenge go to www.alzheimers.com.au

Yes I will join the fight for memories!

Make a donation by:

- Calling **08 6457 0253**
- Visiting our website: alzheimers.com.au
- Mailing the completed form to:
Australian Alzheimer's Research Foundation
PO Box 963, Nedlands WA 6909

Title _____ First Name _____
Surname _____
Address _____
Suburb _____ Post Code _____
Phone _____ Mobile _____
Email _____

I would like to make a donation of:

\$25 \$50 \$75 \$100 OR \$ _____

OR I would like to make an ongoing credit card donation of:

\$ _____ every _____ month/s

Credit Card (Visa/Mastercard) Cheque

Cheque made payable to Australian Alzheimer's Research Foundation

Card Number: _____

Card Holders Name: _____

Expiry: Signature: _____

Please send me more information on leaving a gift to Australian Alzheimer's Research Foundation in my Will.

Please unsubscribe me from your mailing list.

Thank you! A receipt will be sent to you. All donations over \$2 are tax deductible.