



The HOPE Foundation for Research on Ageing

Preparing New Zealand for an Ageing Future

THERE WERE lots of laughs for those who attended our recent fundraising event. Annabelle White, a celebrity chef, had everyone entertained.

Her message to “cook less, shop more” struck a cord with me! (She was really saying keep it simple and buy good quality ingredients.) Thank you to all our hard working Friends who put on the wonderful afternoon tea.

Research continues to need your support as Universities face budget and staffing cuts. The Health Reforms have the potential to disrupt research networks and I remain concerned that Older People’s Health is not mentioned as a priority area by Te Whatu Ora at the very time when the ageing population is bulging and Baby Boom-

ers are needing services. Dr Jill Waters, a retired Geriatrician and former HOPE Foundation executive officer has written a book for children to help with fund raising. This is a charming tale to change stereotypes about Grandmas and would be a good present for younger ones. If you would like to buy a copy or can assist with selling copies please let us know. We would value your support! Thank you Jill for your generosity in bringing this book to fruition and donating the proceeds to the HOPE Foundation. Perhaps it is the beginning of a new career.

– Dr Maree Todd,
Consultant Geriatrician Older People’s Health
Auckland District Health Board, Chair of the Foundation

FRIENDS OF THE HOPE FOUNDATION

Love is food and food is love says firecracker foodie

QUIPS AND tips abounded from firecracker foodie and self-proclaimed “crazy chef” Annabelle White at the recent HOPE Foundation High Tea at the Selwyn Library in Parnell on 9 July 2023.

“Kiwis seem to be taking themselves a bit more seriously and suffering some general malaise post pandemic,” declared White – the celebrity cook shook things up and reminded her audience how to have fun while entertaining.

Geriatrician Dr Maree Todd, who is Chair of the Board for The HOPE Foundation for Research on Ageing, kicked off proceedings by informing the packed venue that all proceeds from this Friends of HOPE fundraising event go towards scholarships to support New Zealand University students engaged in research into ageing.

Taking a moment out from caring for own older parents who are 90-plus, Annabelle shared her philosophy that “love is food and food is love” while giving her recipe for living a happy, contented life. She had the Friends of HOPE audience laughing and winning an array of “mad cap” spot prizes (like chocolate, prunes and tea towels) as she regaled them with a barrage of amusing tales from her long career in the kitchen.

Annabelle, who has a love of “great honest cooking” and eleven cookbooks under her belt, gave some top



Dr Maree Todd with Annabelle White

tips which ranged from how to “shop smarter” through to simplifying your dinner party menus. The crowd learnt how to “fake it, til you make it” and an acceptable “cheat” to take the stress out of Christmas Day.

Without wishing to give away all Annabelle’s best advice, we can share that even a squeeze of lemon juice can be a “secret weapon” when it comes to elevating a dish such as pumpkin soup.

The Friends of HOPE put their own culinary skills on display through a delectable afternoon tea and one lucky guest took home a wonderful “liquid refreshment” raffle prize.

The event was topped off by guests having a chance to chat to Annabelle as they lined up for a signed copy of her latest recipe book; and knowing that all present had helped contribute to an organisation dedicated to helping prepare New Zealand for an ageing future.

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HOPE Foundation Scholars

With the generosity of our sponsors, we have been able to award 10 University HOPE Foundation Scholarships in 2023. These are all very worthy and enthusiastic recipients and their work will make a difference to ageing in New Zealand. The breadth of their projects is broad - physical activity, memories, cancer, cognitive function, menopause and more. Enjoy reading about their interesting and inspiring projects.

Examining change in physical activity, sedentary behaviour, and trajectory of functional decline in response to the LifeCurve App in at risk community dwelling older adults



Khald Abdul Jabbar

PhD candidate, Population Health, University of Auckland

Ageing results in multi-system decline, including cognitive and motor deficits, associated with attenuation of functional ability, thus affecting independence.

Maintaining functional abilities is important for older adults to be physically and socially active and independent within their homes and communities. But our understanding of the drivers of physical activity and sedentary behaviour, its selective effect on functional status and

the trajectory of functional decline, and its integration into daily life is limited.

Application of a novel telehealth intervention via a phone App - the 'LifeCurve' App has been developed to help reverse this trajectory through self-enablement. The user self-assesses functional status and aims to improve this by implementing strategies that are prompted by the 'LifeCurve' App.

This PhD project aims to provide evidence of how activity changes when using a new health-promoting App. In addition, it seeks to provide a nuanced and comprehensive understanding of how the selective effect of physical activity and sedentary behaviour and their interaction impact the key health-related outcomes for older people - health-related quality of sleep, nutrition, social connectedness and oral health - in community-dwelling older adults to prevent or push-back the progression of disability.

Living in limbo: Perceptions of ageing and healthcare among older Chinese adults in NZ

Wen Jie (Jenny) Song

PhD candidate, Health Science, University of Waikato

I am a registered nurse and a third-year Ph D candidate at the University of Waikato with a background in nursing education in New Zealand.

Aotearoa-New Zealand has an ageing population and is becoming increasingly pluralistic in terms of cultural and ethnic identity due to the growing globalisation of international migration. Chinese migrants are among the fastest-growing ethnic group in Aotearoa-New Zealand and amongst this group, older people are growing at a

rapid rate. Although ageing can bring certain challenges to health and well-being, Chinese elders may adopt coping strategies to deal with age-related challenges.

The complex interplay of ageing, well-being, health service utilisation, and filial care support amongst older Chinese adults in an immigrant context is under-researched and not understood. This research project will provide a unique insight into the needs of Chinese older people in Aotearoa-New Zealand with an aim to improve the understanding of the Chinese elderly in relation to their healthcare, disability support, and ageing.



Autobiographical memories in older adults: age-related changes in the shape of our life stories

Eva Bonning

PhD candidate, Psychology, University of Waikato

How we talk about our personally experienced life events (our autobiographical memories) changes as we age. For example, older adults demonstrate a change in narrative style when describing their autobiographical memories that focusses less on specific details, and more on imparting meaning. Moreover, compared with younger adults, older adults often remember events more positively, and can report greater wellbeing. Our autobiographical memories also become the stories we tell ourselves to inform our ever-evolving sense of identity. Recent evidence suggests people can describe these

life stories using similar emotional trajectories as found in Western fiction. That is, fictional stories - and people's memory reports - can demonstrate the same changes in positive and negative emotion at specific points in the story, as they unfold from beginning to end. During the first year of my PhD, I used natural language processing softwares to analyse the content of people's reports for their autobiographical memories. However, so far we only know how these trajectories behave in younger adults.

If we can understand how older adults use emotional trajectories in their memory reports, we may be able to better understand the relationship between how we talk about our autobiographical memories, and the meaning we get from them, and how this relationship changes with age.



Investigating the positive metabolic potential and anti-ageing effects of DHED, a brain selective estrogen, in female mice

Celine Camon

PhD candidate, Physiology, University of Otago

Menopause is a natural phase of ageing for women and the transition can have significant life altering symptoms, including hot flushes, brain fog, night sweats and increased weight gain. Hormone replacement therapy (HRT) employs estrogens, such as 17 beta estradiol (17BE2), to alleviate these symptoms. Though HRT is commonly used it is not suitable for many women due to family histories of reproductive cancers or cardiovascular events. This can in part be due to undesirable activation of estrogen receptors in the periphery.

My PhD research explores the role of novel and under-researched estrogens in metabolism and ageing in females, and how estrogens can ameliorate weight

gain, insulin resistance and glucose tolerance. I am also intrigued by changes in the brain following estrogen exposure in ageing, particularly in the hypothalamus, a well-known regulator of food intake and metabolism.

I am currently investigating a novel estrogen called "DHED", an inactive form of 17BE2, in mouse models of metabolic dysfunction. When DHED reaches the brain, a central nervous system specific enzyme converts DHED to 17BE2 and critically, the estrogen remains within the brain.

Our hypothesis is DHED will reach the hypothalamus and cause positive changes in metabolism such as reducing body weight and improving insulin and glucose tolerance, without exposing the periphery to estrogen. Our ultimate goal is to improve our understanding of potential alternative forms of HRT in Aotearoa, improving healthcare for women in our ageing society.



Narrow-band optical methods for blood analyte measurement

Josie Dixon

PhD candidate, University of Canterbury

The prevalence of type 2 diabetes is increasing epidemically, and over 250,000 people in NZ live with this disease. Type 2 diabetes significantly increases with age and is expected to increase by 2040. Increased insulin resistance leads to high blood glucose, which, over time, leads to serious complications such as heart disease, blindness, limb amputations, and early death.

Poor blood glucose management is the primary culprit behind these complications and carries an estimated economic cost of 1% GDP/year and growing. The key to good control is easily accessed, low-cost, high adherence, and non-invasive/pain-free glucose measurement. To date, the pin-stick (painful, low adherence) and implanted glucose sensors (\$50-100/week) available do not meet these needs. The result is very poor compliance to regular blood glucose measurement and resulting poor



control. Thus, there is an urgent need to develop low-cost, non-invasive blood glucose monitoring methods to increase compliance, accessibility, and thus, health outcomes for people living with diabetes in NZ.

My research focuses on creating and validating optical methods for blood analyte sensing with a key focus on blood glucose. The technology utilises small, narrow-band, near-infrared light-emitting diodes to both emit and detect signals. I work within a diverse team of researchers to integrate the sensor into a Low-cost Equitable Artificial Pancreas System (LEAPS). The project will provide significant impact on health care and outcomes for the elderly.

Thanks to Our Sponsors . . .

The Douglas Goodfellow Charitable Trust

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- Bollard Charitable Trust
- Jorgia Charitable Trust
- Friends of the HOPE Foundation

Targeting malic enzymes in the war against cancer

Benjamin Krinkel PhD candidate, Biological Science, University of Auckland

Cancer is a leading cause of death both worldwide and in New Zealand. In 2020, NZ recorded 35,934 new cancer cases, with 10,508 cancer-related deaths, with over 50% being aged 60 or older. Consequently, the rapid development of highly selective anticancer treatments is paramount. One of the emerging hallmarks of cancer is that it alters its metabolism to facilitate rapid cell growth, changing how it breaks down glucose. Malic enzymes are thought to play a crucial role in allowing this



modified metabolic profile to function by converting malate into pyruvate in the mitochondria to maintain TCA cycle flux. This modified metabolic profile may be exploited to develop selective anti-cancer drugs. My research examines two known small molecule inhibitors of malic enzyme 2:NPD-389 and embonic acid. One of my research goals this year is to undertake protein-inhibitor crystallisation studies to determine the exact binding interactions between the inhibitors and the enzymes. This will tell us whether there is a potential for more extensive structural-based drug design to improve the binding affinity of these compounds.

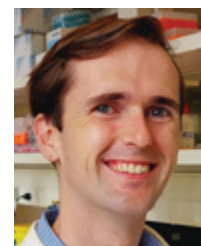
Anti-GluN1 antibodies as a therapeutic approach to treating cognitive decline in ageing

Conor Nelson PhD candidate, Biomedical Science, University of Auckland

As the aged population continues to grow, new therapies are needed to prevent the predicted escalation in the number of people affected by age-related neurodegenerative diseases. Our lab has developed an antibody-based immunotherapy targeting the GluN1 subunit of NMDA glutamate receptors.

These receptors are believed to be essential to the process of learning and memory, and we have previously demonstrated that treatment with these antibodies has neuroprotective and cognitive-enhancing properties in rodent models. This project takes the next step towards bringing a GluN1 antibody therapy to clinical trial.

My PhD aims to determine whether this therapy is effective at modifying disease progression in models of Huntington's disease through passive antibody delivery.



Additionally, I will be investigating the viability of a viral vector approach to treatment.

This would essentially be a vaccine using a modified non-pathogenic adeno-associated virus to cause the immune system to make these therapeutic anti-GluN1 antibodies internally. This system would be useful as a tool for rapidly screening models of additional age-related illnesses such as Alzheimer's disease or frontotemporal dementia with a much shorter lead time.

This style of vaccine could also be modified to be used as a therapeutic.

Integrating oral care into nursing practice from home to hospital

Keiko Oda PhD candidate, University of Auckland



The goal of my research is to integrate oral health assessment and care planning into daily nursing care for older adults. To achieve this, we first implemented a nursing oral health assessment training protocol (NOHAT) that was co-developed with an oral health therapist. We trained four

champion nurses in home care and an aged residential care facility using this protocol, which includes an oral health assessment care planning guideline, OHCAP, that

we also developed. We confirmed that NOHAT increased nurses' knowledge and confidence in using OHCAP. The next step, currently in progress, is trialling nurses' use of OHCAP for older adults to determine whether it is feasible and appropriate for nurses to employ in clinical settings. The final stage will evaluate whether oral health care practice, using OHCAP via NOHAT training, is translated into nurses' daily care and will measure its impact on clients' oral health outcomes following a four-week trial.

My overall goal is to normalise daily nursing oral health practice for older adults to support their independence and maintain overall health through the upskilling and empowering of nurses at the organisational level. In doing so, I hope to achieve sustainable healthcare change and contribute to older adults' wellbeing.

Fostering wellness: exploring companion animal fostering as a health promoting initiative for older adults

Christine Roseveare PhD candidate, Public Health, Massey University



Can caring for a companion animal be part of successful aging? Most but not all research supports the belief that pets are good for us and that animal companionship may benefit the mental and physical health of older adults specifically. But barriers to owning a

pet may be greater in older age. Cost or concerns about dying before a pet may interfere. Families or institutions may discourage pet ownership because of concerns about infection, or fears that adequate care for pets may become a challenge in the long term.

Ownership is the not the only way an older person can

benefit from human animal interaction. Regular contact may also benefit health, although fleeting contact may provide little benefit and direct involvement in caregiving appears to be important.

This is where animal fostering, which usually involves being a short-term animal guardian comes in. My research focuses on cat fostering programmes and will explore the health promoting potential of cat fostering for older adults. I hope that this research will lead to two things: a greater understanding of the benefits of the human animal bond for older people and more opportunities for those older people who wish to, to have companion animals in their lives.

If you would like to become a Friend of the HOPE Foundation, or contribute to the work it does, visit www.hopefoundation.org.nz and click on the FRIENDS button

Scholars 2023

Empowering dementia carers with iSupport Virtual Assistant (eDIVA)

Tara Sani PhD candidate, Psychological Medicine, University of Auckland

My PhD project is part of a cross-country project between Australia, Indonesia, New Zealand, and Vietnam. In this project, we aim to develop an online-based psychosocial intervention based on the WHO's iSupport for Dementia, a self-paced training manual for family carers of people with dementia. Our project will develop a website called the iSupport Virtual Assistant (iSupportVA) which will consist of seven versions across the four countries.

For my PhD, I am working to develop a culturally-relevant adaptation of the iSupport manual and the

iSupportVA website for use in New Zealand, by co-designing it with carers of people with dementia. I will also examine the usability, feasibility and possible effects of this website through a pilot randomised-controlled trial.

The iSupportVA will hopefully be an effective and accessible tool to improve the well-being and quality of life for carers and people with dementia across New Zealand. After the pilot randomised controlled trial, I hope to engage with national stakeholders in planning the national roll-out of this tool, to ensure it can benefit carers and people with dementia in New Zealand.



Other Projects

The HOPE Foundation for Research on Ageing Board has also sponsored other projects in 2023 . . .

The Ronnie Gardiner Method - a different path to rehabilitation

THE RONNIE Gardiner Method (RGM) is a cognitively challenging exercise programme designed to provide activation for those with Parkinson's disease, rehabilitation for those with stroke, possibly delay in cognitive decline and improvement in functional measures related to falls.

The RGM uses rhythm and movement in upright stance to challenge balance, memory and coordination. Of particular interest is an observed positive impact on late-stage stroke victims. Important components are the music, the social interaction, the challenging exercises, and the skilled instructor. There is also preliminary evidence that cognition and function are stimulated for those with mild cognitive impairment.

Learning the method entails a two-day initial training,

regular practice with groups of clients, and a two-day final training to reinforce development of exercise plans musical and rhythm, and progression of delivery skills. RGM is acceptable and fun for healthy older people and brings an extension to rehabilitation.

There are approximately 30 trained practitioners in New Zealand. Most of those trained are using the method within their usual employment e.g. as diversional therapists in aged care settings, or as part of their Aged Concern employment. There are not sufficient practitioners offering private classes to meet public demand.

Therefore, the HOPE Foundation supports training of more practitioners by funding two separate practitioners to deliver two sequential courses of 12 weekly RGM sessions for four groups of healthy older people and administrative support for the scheduling of classes, upkeep of websites, coordination of practitioner support meetings and organising training events.

More can be read about RGM on the HOPE Foundation website.

Driver decision-making

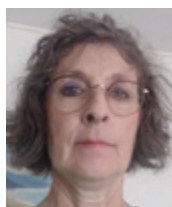
Jacqueline Beaton Independent researcher

Decision-making is a prime component of driving and safety on the road. The aim of my quantitative study is to evaluate the decision-making proficiency of older drivers when presented with five different New Zealand-based road-knowledge experiences:

- (i) local street intersections,
- (ii) intersections with lights,

- (iii) roundabouts,
- (iv) rural roads and
- (v) highways, therefore acquiring a greater understanding of processes used by drivers. Study design will include the development and piloting of a simulated route interface facility and a board game. The subject population group will incorporate older drivers, in addition to a general population age grouping and younger drivers.

Following the implementation of the Pilot Study the research programme is then intended to be conducted throughout New Zealand.



HOPE Foundation Research Findings

We often get asked about the outcomes from our scholar's research projects. Here are some summaries from the 2022 HOPE scholars and the 2022-23 Summer Student. Full reports can be found on our website [Research Findings » HOPE Foundation for Research on Ageing](#)

Environmental factors in the movement space of aged-care residents and their impact on falls and fall-related injuries in participants from Staying Upright study

Sonja Neef, University of Auckland

I would like to thank the HOPE Foundation for funding my summer research scholarship. I hope to continue my academic career with a focus on nursing homes.

As falls are one of the major causes of injury, rapid deterioration of health, and death, examining the impact of environmental factors on falls and fall risk are essential so facilities, such as nursing homes, are designed to protect and support our elderly members of society.

This research project, Staying Upright, examined the

relationships between environmental, life-space, physical, and cognitive variables and how they interact to impact falls and fall injuries in elderly living in residential care facilities. The primary research question was, "Are environmental indicators associated with falls and fall-injury risk?" The main outcomes were an understanding around falls and fall risk in elderly living in nursing homes, and how these risks may be modified by their surrounding environment, including the presence of hazards, the distances to the bathroom, and elevations across the facility. The project findings suggest different factors may increase or decrease the likelihood of falling and specific measures may help to predict these risks.



Envisaging a new model of care for complex multi-morbidity in primary care

Anna Askerud, University of Otago

This thesis presents a process evaluation of the Client Led Integrated Care (CLIC) model of primary care. Four case study practices are examined with interviews and participant observations. Additionally, results from a self-report survey (Partners in Health) are analysed to provide a longitudinal health consumer perspective.

CLIC was envisaged to be a holistic and patient centred model of care to support self-management and provided personalised care planning, acute care planning and advanced care plans. Integrated care and shared health records were other strategies to provide more joined up healthcare for patients in general practice. Although it was slow to gain traction, CLIC generally worked well for



those who were engaged in their general practice and had the capability and resources to take up the support that CLIC offered.

This research has revealed there was minimal consideration of the personal resources required for all people to engage in CLIC, or an understanding of the lack of funding in primary care to address poverty and those negatively affected by the social determinants of health.

Despite the increasing prevalence of multi-morbidity, the growing ageing population and the lack of success in addressing the negative impact of the socio and cultural determinants of health, the organisation of general practice, and how it connects with the rest of the health system, remains largely unchanged.

The thesis provides a framework for a successful model of long-term conditions primary which encompasses an understanding of complexity and capability and the importance of educating and supporting health professionals and patients to ensure there is a shared vision of care.

Development of NOHAT – Nursing Oral Health Assessment Training

Keiko Oda, University of Auckland

Thank you very much for awarding me a HOPE Foundation Research for Ageing Scholarship in 2022. This scholarship supported my research in oral care of nursing practice in the community and aged residential care facilities.

The first stage of my research was to determine the effect of oral care training for nursing staff in a primary health setting. However, COVID restriction prevented my research implementation in the community until October. Thus, I developed Nursing Oral Health Assessment Training (NOHAT) based on interprofessional collaboration

between nursing and oral health professionals. I piloted the efficacy of NOHAT with nursing students and nursing academics in University of Auckland in July.

As a result of NOHAT, nursing students significantly improved self-efficacy and confidence in oral health care provision and assessment. Based on the success of NOHAT in University of Auckland, I delivered NOHAT to community nursing staff and aged residential care nurses in Wellington region in November.

My research findings were disseminated based on the literature review, nursing oral care protocol development, and NOHAT pilot.



Exploring the contribution of built environments and mobility to older adults' positive ageing in place

Tessa Pocock, University of Auckland

I would like to thank the HOPE Foundation Board and Sponsors for supporting my research. I am grateful to receive this scholarship for a second year and to have the opportunity to pursue further research dissemination activities.

This final year of my PhD journey was filled with several challenges, but also numerous successes. Two of my key successes are:

- Publishing one of the major pieces of my thesis, which serves as the foundation for subsequent phases.
- Receiving ethics approval and completing the final piece of data collection for my thesis. This phase involved an online workshop with participants where creative communication approaches were used to prompt meaningful discussion on key evidence-based models from the two previous phases of my work. I am in the process of writing up this final piece of work for publication.

How does wet weather and surface flooding impact urban mobility for people with limited walking?

Emily Ward, University of Canterbury

This report details progress towards my Master of Urban Resilience and Renewal. Originally, my focus was about the barriers created by surface water. I have extended this to wet weather, as people often experience poor weather and surface flooding together.

My main research question has been iterated from Equitable access in the event of flooding for people who face mobility barriers to be: How does wet weather and surface flooding impact urban mobility for people with limited walking? I conducted nine interviews with 15 people, with varying age and physical impairments in the Christchurch district. Key findings have been identified.

1. Relationship of bus shelters to ridership on rainy days

In interviews, many participants commented on the lack of bus shelters and described they were more likely to use a route if they knew there was a shelter nearby. This analysis determines if similar patterns were observed in

Designing a protocol to fast-track research into a new cancer drug target

Victoria Gibbs, Massey University

I am grateful to the HOPE Foundation for Research on Ageing and its sponsors for the support to embark on this project.

My Masters project involved setting up a yeast two-hybrid system (Y2HS) whereby we can study GCN2 (a cellular protein exploited by cancer cells for growth) and supporting protein in yeast cells. During 2022, I upgraded my Masters research into a PhD, a more thorough



The Australian Association of Gerontology Conference, Adelaide, Australia (November 2022) was the first international conference I attended as a PhD student. I presented a poster (title: Prompting meaningful discussions on feeling good and living well for community-living older adults) and engaged in wonderful discussions with attendees. This was a fabulous opportunity to connect with researchers and PhD students from within Australia and NZ and hear about the variety of research that was occurring in different contexts.

- To complement the online workshop described above, an illustrator was present in the background of the Zoom call drawing participants' ideas and stories as they were presented. This illustration provided a wonderful reflection and validation tool for participants. As part of my analysis, this illustration was updated to reflect further connections between spoken words. Participants received a copy, and the illustration was also used in my poster presentation at the AAG conference.

bus patronage data. During July 2021 - September 2022, in the Heathcote and Sumner area (Christchurch), the difference between patronage on days with and without rain was compared for all bus stops in the adaptation area of Heathcote and Sumner. On average, stops without shelter had a greater reduction of ridership than stops with shelter, indicating the presence of shelter can help enable bus journeys on wet days.

2. Equitable availability of bus shelters across all of Christchurch district

Areas with bus shelters were reviewed with a lens of assessing if shelters were installed in areas with a greater dependence on the bus. Findings suggest areas with a higher deprivation index had more bus shelters per population. This is positive as people living in areas with higher deprivation may not own a car. Also, shelters in areas with a high deprivation index had higher ridership during the above time period than those in wealthier suburbs, meaning where there is greater number of shelters, those stops have a higher ridership.



investigation than initially outlined and will result in more informative results. Using the Y2HS I set up I will be able to express different peptides to see what parameters are able to block this interaction. This will provide a strong foundation for future drug design. During 2022, I became more proficient with lab techniques which allowed me to fine tune making several experimental fragments and improve production. I am in the process of acquiring

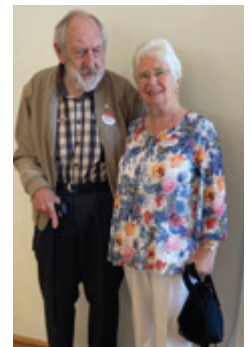


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Friends of the HOPE Foundation



Presenters Karen Mumme, Annabel Grant and Conor Nelson welcomed to the stage by Friends Chair Karen Yates and Sally Frengley. Above centre: enjoying tea and company. Right top: HOPE Foundation chair Maree Todd with Joan Mary Longcroft Right: Professor and Mrs Richmond



A cup of positive - research and tea

IT REALLY was a “Cup of Positive” when the Friends of The HOPE Foundation gathered on the last Sunday afternoon of March to meet three HOPE scholars, while sipping tea and enjoying delicious small cakes and savouries.

Karen Mumme was the first presenter. She was also the first recipient of HOPE’s Small Project Grant. It was after she received it, she became aware of the vacancy of the Executive Officer at HOPE and was later appointed. We welcome Karen to this position and look forward to working with her. Karen’s

presentation started with an object lesson, with vegetables, protein and grains etc illustrating the Ministry of Health’s dietary guidelines for older adults. She developed an index from the guidelines, which assesses the diet and can be used in research. Karen shared a research project using this tool.

In response to the question “what foods are important to maintain a healthy brain, as we age?” the message was very clear, “What is good for the heart is good for the brain”.

Annabel Grant’s research project focuses on declining cognition and social inclusion. Having social contact with others is important for the continued well being with dementia, at whatever stage. Annabel suggested being open about any memory loss, when in company or meeting new people in a social setting makes for better relationships. It will be good to hear her conclusions when the research is complete.

Conor Nelson was a summer student in 2019/20 and is in the second year of his PhD, focusing on immune therapy that could be used in arresting chronic destructive brain diseases, such as Huntington’s Chorea and dementia. He spoke enthusiastically of his lab work. For some of us it was perhaps somewhat beyond our framework of knowledge but the wonderful thing is that Conor is investing his abilities and passion mixed with ethics, in a field that will have impact in the future and assist people with conditions involving cognitive decline.

All of us in the room were stimulated and went home having been exposed to new knowledge and gained new learnings and perhaps new contacts. That is after all one way of defending against cognitive decline.

Thank you to all who supported this event. We look forward to seeing you at another Friends of The HOPE Foundation event.

*Karen Andersen Yates,
Chair, Friends of the Foundation*



My Crazy Grandma raises funds for ageing research

THIS IS not a story about your typical Grandma but one you will always want on your side!

Jill Stewart (aka Dr Jill Waters) has written a children’s story and is donating all profits to the HOPE Foundation to support students undertaking research on ageing. Jill shares the story, in over 16 colourful pages, of a Grandma with a pet orangutan and python; a Grandma who does not knit, sew, bake scones but follows motor racing, jousting and adventure. Thomas Hsieh visually portrays the personalities of the characters. Books can be purchased for \$20 plus \$6 pp.

Complete the order form on our website or email karen@hopefoundation.org.nz



Designing a protocol *Continued from previous page*

these constructs from a company to ensure they are of the highest quality while we continue to optimize our in-house methods for future production. I anticipate my first Y2H tests to be underway in a month. At the same time, I have been developing yeast strains with various protein deletions to limit background interference in our Y2H tests. This will increase the sensitivity of my Y2HS which

will make gauging the influence of binding factors in my PhD work more informative. Finally, I have conducted an in-depth analysis of the current literature and structures to fully appreciate the features of GCN2 and supporting proteins that may mediate this interaction. This work lays a strong foundation for later experiments which aim to narrow down the binding region and identify how we can increase binding strength, which will provide critical information for drug design.