



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

Ageing Mind Initiative

Issue 22 November 2014 Newsletter
www.uq.edu.au/ami

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We hope you enjoy reading final Ageing Mind Initiative for the year 2014. It has been another full year of events, research projects and exciting developments in the field of Ageing-related research.

We hope that this year you have been able to participate in projects of interest. If you are unable to participate in any research projects, you can always recommend a study to an interested friend or family member. We cannot thank you enough for your generous contributions of time and experience. We would not be able to promote and advance discoveries and technologies in Ageing-related research without your assistance.

If you are interested in any of the advertised research projects, contact the researcher on the advertisement directly and they will give details that you need to know about participating.

If you have any questions for the Ageing Mind Initiative team, please email them through to: ami@uq.edu.au



ISSUE QUOTE:

"Age is an issue of mind over matter. If you don't mind, it doesn't matter " ` Mark Twain

Learn about Dementia at Awareness Month

~ Dr Sofia Robleda Gomez

September was Dementia awareness month. I work for Alzheimer's Australia, an organisation that provides support through various ways to people with dementia and their families and carers. There are a lot of misconceptions and myths about dementia, and I feel it is important that more people have a better understanding of the disease. So here are some important facts about dementia.

What is dementia?

Dementia is an overall, overarching term for a range of illnesses that lead to a decline in cognitive abilities (i.e., memory, thinking, learning, comprehension, perception, language). The most common form/illness that leads to dementia is Alzheimer's Disease, but there are over 100 types of illnesses that can lead to dementia.

Over forty-four million people have dementia worldwide, and this is expected to increase to over 75 million in 15 years. The top four most common types of dementia are Alzheimer's Disease, Vascular Dementia, Frontotemporal Lobar Degeneration, and Lewy Body Dementia.

Dementia and ageing

Dementia is NOT a natural/normal part of ageing. Dementia is a disease. Age is a risk factor only, so, just because you are "old" doesn't mean that you will get dementia, and vice-versa. There are young people who also have dementia, some as young as 30 years!

Alzheimer's Disease

Alzheimer's Disease is the most common form of dementia, and it accounts for approximately

50 to 70% of all diagnoses. The "classic" short-term memory loss is a key symptom of this disease, particularly in the early stages. However, as with all dementias, Alzheimer's Disease is progressive - meaning that it continues to worsen over time, and there is no cure.

What happens, is that a sticky protein called Beta Amyloid forms PLAQUES outside the neurons' synapses (the small gap between neurons where signals pass through). This means that signals are not able to pass through the neurons, and the cells die. In addition, another protein called Tau builds up into TANGLES inside the neurons, which also means that nutrients and other essential supplies can no longer move through the cells, which also leads to cell death.

Neurons are the building blocks of our brain. With all this cell death, the volume of the brain shrinks. And as you know, our brain is very important - it controls everything we do! As you can imagine, as the person's neurons die, all aspects of that person's life is affected.

Everyone's journey with is different - people's symptoms and the time it takes for the disease to progress vary. What we know though, is that the person is still in there - their emotions and feelings remain, and time and time again we are shown that people with any type of dementia still need love, understanding, and support.



Story continued...

Vascular Dementia

Vascular Dementia is the second most common type of dementia (accounting for up to 40% of all cases), and one that frequently co-occurs with Alzheimer's Disease (leading them to be called a Mixed Dementia).

Vascular Dementia is usually caused by a severe stroke or a number of small strokes. Strokes reduce the blood supply to the brain, and so brain cells are deprived of vital oxygen and nutrients, causing damage that can be irreparable. However, for strokes to lead to dementia, they need to happen in key areas responsible for cognitive functions. For example, if someone has a stroke in their hippocampus - the area of the brain that "turns" short-term memories into long-term memories - then this person would have difficulty forming or retaining new memories, which is one of the many symptoms of dementia.

Seeing as Vascular Dementia is related very strongly to the heart and blood vessel systems. It is one of the types of dementia that you have the most control over in terms of prevention! Remember this: What is good for your heart, is good for your brain! Lifestyle factors - things like eating a nutritious diet, regularly exercising, not smoking, keeping your blood pressure in healthy levels - have ALL been shown to reduce the risk of cardiovascular problems, and therefore, vascular dementia.

Lewy Body Dementia (LBD)

Lewy Body Dementia (LBD), the third most common cause of dementia. LBD is somewhat of a mixture between Alzheimer's Disease and Parkinson's Disease. People with LBD will often exhibit symptoms like Parkinsonian tremors and shuffled gait, and will also have short-term memory issues, as with Alzheimer's Disease. However, one of the really key indicators of LBD are visual hallucinations.

People with LBD will often "see" things (like little children or animals) that are not there, and these hallucinations can be very frightening to them. They can also have fluctuations in mental state, whereby sometimes they will be lucid and aware, and then decline again. Once more, there is no cure for this disease, which is degenerative. Unfortunately, we don't know much about what causes Lewy Body Dementia. It seems that proteins (called lewy bodies), are unable to be broken down and grow inside the cell body of the neurone - causing the cell body to deform, interfering with important cellular processes, and eventually causing the neurones to die.

A diagnosis of LBD is crucial because people who have LBD will often have very poor reactions to certain medications, particularly neuroleptics (i.e., antipsychotics) - which, ironically, are often used to treat hallucinations. As with all dementias, a greater understanding of the disease is needed, not just for the people who suffer from it, and their families - but also for the public. Knowledge begets empathy.



Feature Project

Can Brain Stimulation Improve Learning in Older Adults?

Even healthy older people frequently struggle to remember the names of people they have met for the first time or report problems remembering new information. We are currently conducting a study to find out if those age-associated problems can be alleviated using a new brain stimulation technique (transcranial Direct Current Stimulation, tDCS).

We are looking for **healthy older adults over 55 years of age**, who are right-handed, have English as a primary language, with no history of neurological diseases, mental illness or head trauma.

Participation in the study will involve an initial assessment during which memory, language and other functions will be tested (2-3 hours), **a series of word learning sessions held over 5 consecutive days** (approx. 1.5 hours each), and two additional follow-up sessions 1 week and 3 months after the learning period (2-3 hours/each).

During the learning sessions, we will attach 2 electrodes to your scalp using a rubber band and apply a very weak constant current to your head (tDCS). This technique is a safe procedure with no

known adverse side effects except for a mild tingling sensation or itching when the machine is turned on for about 30 seconds.

You will receive \$250 as reimbursement for your time and travel for the entire duration of the study. The research will take place at the UQ Centre for Clinical Research (UQCCR) which is at the Royal Brisbane & Women's Hospital.

If you have any further questions about this study or would be interested in participation please contact:

Garon Perceval

email: g.perceval@uq.edu.au
phone 0421235651



News from the Community

Sunshine Coast Positive Ageing Strategy 2011-2016

Council adopted the Sunshine Coast Positive Ageing Strategy 2011-2016 at its Ordinary Meeting on 29 June 2011. The Positive Ageing Strategy contributes to council's vision by building a strong, connected and vibrant older population on the Sunshine Coast.

This strategy was developed to address the changing needs of older people on the Sunshine Coast. Council will work with its partner agencies to implement the strategy over the next five years. It promotes collaboration between council and other agencies to meet the needs of older people and maximise the benefits of an ageing population.

The Positive Ageing Community Survey 2010 was conducted between October and November 2010. This engagement led to a better understanding of the issues, needs and aspirations of older people on the Coast. In total, 785 people responded to the survey, providing information about what positive ageing means to them, what positive impacts affect their lives, what challenges they currently face and what are their hopes for the future of the Sunshine Coast.

The community engagement outcomes can be viewed in the Sunshine Coast Positive Ageing Survey Report 2011 available on their website: www.sunshinecoast.qld.gov.au

Cutting Edge Research in Ageing Queensland

The Australian Association of Gerontology (AAG) QLD Division is committed to showcasing the research projects of our top researchers. In this conference styled event, seven top PhD students will present their research.

Please join us as we:

- Explore the significant and wide ranging research areas under investigations by our bright and talent students in Ageing and Gerontology
- Engage with likeminded researchers
- Support and encourage the ongoing research of our wonderful students, the future of ageing research in Australia and worldwide.

Date: Monday, 3 November 2014

Time: 6:00pm - 8:00pm

Location: QUT Gardens Point Campus, 2 George Street, Brisbane, QLD

Venue: Rm106, Ground Floor, D Block

Cost: Members (free), Non-Members: \$20.00, Student/Concession \$5.00 (please enter the code 'CUTTING' for this discount).



You are invited to join the Communication Research Registry

What is the Registry?

A list of people who would like to be involved in research that aims to improve services for people affected by a communication difficulty.

People with communication difficulties may find it hard to hear, speak, understand, read, write and/or sign. A communication difficulty can be caused by: hearing loss, stroke, head injury, Parkinson's disease, dementia, multiple sclerosis, cerebral palsy, cancer and many other factors. A communication difficulty can have a profound impact on a person's life making it difficult to do activities that many take for granted.

Research is needed to find the best ways to help people affected by a communication difficulty. To do this research **we need your help!**

Who can join the Registry?

1. People who have a communication difficulty. For example, people who have communication difficulties as a result of hearing loss, stroke, head injury, dementia or Parkinson's disease.
2. Family members and friends of people with a communication difficulty.
3. Members of the public who are interested in communication research.

People from all over Australia are invited to join the Registry.

What will happen if you join the Registry?

- You will be invited to do research.
- You will be invited to tell us about research that is important to you.
- You will receive a free newsletter each year.
- You may meet others who are affected by a communication difficulty.

How can I find out more information or join the Registry?

Visit our website: www.crregistry.org.au

Contact us: Telephone: (07) 3365 2089

Email: crregistry@uq.edu.au

The Communication Research Registry is proudly supported by:



Current Ageing Research

The following projects are looking for participants. Make a difference in Ageing Research today. Sign up now!

Understanding the links between health and emotion

People 65 years and older needed for University of Queensland research!

Researchers from the School of Psychology at UQ are looking for people 65 years and older to participate in a study examining how your emotions are linked to your health as you get older.

The study involves four sessions: 2 sessions now, and 2 sessions in a year. The first session will take about 1.5 hours, and can be completed at your home or at UQ. It involves answering some questions about yourself and your emotions, and completing some problems. The second session will take no more than half an hour, and involves

providing a small blood sample. A year from these first 2 sessions, you'll complete two more similar sessions.

Your participation will help us understand the important links between health and emotion, and you'll receive \$20 for each session. With an ageing population in Australia, scientific ageing studies are essential, and we would be very grateful for your help with this important research.

To find out more, or set up a time to participate, please contact us:

Fiona Porter: 0415 741 896

or Anne-Louise Bint: 0439 041 755

Email: ageingandemotion@gmail.com

Thank you for your time!

RESEARCH PROJECTS

Exploring New Measures in Psychology

PhD candidate Leander Mitchell is exploring a range of new measures and how well they resonate with Australian's aged 50 years and over.

The accurate measurement in psychology of various qualities and aspects of people plays an important role in both research and clinical practice, helping to guide treatment and rehabilitation processes.

This research project involves participation in focus groups, in which the participants will be asked to discuss and offer feedback on three new measures: a measure of wisdom, a measure of naming, and a measure of anxiety.

If you would like more information about this project, please contact:

Leander Mitchell Tel.: (07) 3040 8464

Email: leander.mitchell@uqconnect.edu.au



How our brains respond to emotions across life span?

When people get older, they might notice challenges in their ability in remembering things or in their movement abilities. It is fascinating, however, that the way emotions are being processed remains pretty much intact or sometimes it may even improve. With age, people process positive emotions quickly and, in general, prefer happy memories over sad memories.

During my postgraduate studies, I am looking at how the process of emotions from faces change as a function of age. Faces are very important components in our social interactions. Recognizing emotions from the faces have a huge impact in many aspects of our lives, in daily social communications for instance. Therefore, throughout my PhD I am looking at how the brain process emotions. My study can inform society about the process of aging and what the concerns are for senior people to have healthy and happy lives.

In my recent study along the abovementioned lines, I am seeking volunteers between 65 - 80 years of age to take part in two sessions study. The first session will be held in MRI scan where you are lying down in the scanner and watch some emotional faces.

In the second part, which will be held in school of psychology, you will play some games and fill out some questionnaires. It is great contribution to the science and also you will be helping me to finish up my studies as soon as possible.

At the end of the second session, you will receive \$60 reimbursement as a thank you for your time and effort and also you get to keep a picture of your BRAIN.

If you are interested please feel free to call Maryam on 0422916362 or email at maryamziae@gmail.com

RESEARCH PROJECTS

HOPE study: Physiotherapy and education for people with persistent hip pain

The Centre for Health, Exercise and Sports Medicine in the Department of Physiotherapy is conducting a study which will compare two different treatments for people over 50 years of age suffering from persistent hip pain.

The treatments will involve online education in addition to 5 Physiotherapy based exercise sessions, delivered in the Physiotherapists clinic. There are project physiotherapists throughout metropolitan and regional Victoria and Queensland.

All participants in this study will receive the in-clinic physiotherapy sessions at no cost.

Participants may be eligible if they:

- Are aged 50 years or over.
- Have had pain in their hip for more than 3 months and for most days of the past month.
- Are able to commit approximately 12 months to the study and willing to do regular home exercises as prescribed by the physiotherapist
- Have an active e-mail account and home broadband access to the internet.
- Are not currently receiving physical treatment for their hip.
- Do not have systemic arthritis such as rheumatoid arthritis.
- Are not on a waiting list for knee or hip surgery or hip joint replacement surgery.

Contact: Rachel Nelligan on
Ph 03 8344 9411 or
rachel.nelligan@unimelb.edu.au
To complete an online application please go to the website below:

<https://www.surveymoz.com/s3/1461334/HOPE-Internet-Screening>



THE UNIVERSITY OF
MELBOURNE

RESEARCH PROJECTS

IMPACT study: for Persistent Knee Pain

The Centre for Health, Exercise and Sports Medicine in the Department of Physiotherapy is conducting a study comparing two different treatment options for people over 50 years of age with persistent knee pain to find out which one works best.

What the interventions involve:

The first intervention will have access to online material about living with persistent knee pain and knee osteoarthritis.

The second intervention will have access to online material and receive seven physiotherapy exercise sessions via the internet (e.g. Skype) that includes a home exercise program, and access to an online pain coping skills training program. All treatment is offered at no charge.

Participants may be eligible if they:

Are aged 50 years or over.

- Have had pain in their knee for more than 3 months and for most days of the past month.
- Are able to commit approximately 9 months to the study
- Have an active e-mail account and home broadband access to the internet.
- Are not currently receiving physical treatment for their knee.
- Do not have systemic arthritis such as rheumatoid arthritis.
- Are not on a waiting list for knee surgery or joint replacement surgery, or have had a joint replacement on their painful side.

Contact Rachel Nelligan on
Ph 03 8344 9411 or visit the website below.
rachel.nelligan@unimelb.edu.au
To complete an online application, go to

<http://www.surveygizmo.com/s3/1254195/IMPACT-web-screening>



THE UNIVERSITY OF
MELBOURNE



RESEARCH PROJECTS

Mild hearing loss and hearing difficulties

Did you know that adults with even a mild hearing loss can experience significant hearing difficulties in everyday life? Barbra Timmer, an audiologist and PhD student at the University of Queensland is conducting a research project to deeply explore these hearing difficulties.

Therefore if you currently do not use a hearing aid, have a mild hearing loss and sometimes have hearing difficulty, you are invited to take part in the research project.

What is involved?

Two appointments (in your home, or at the University) for a hearing test, questionnaires and training on how to use the equipment. Over the space of two weeks, you will fill in daily quick 5-minute questionnaires, answered on a Smartphone.

You will receive a **\$50 Coles/Myer voucher** for participating.

If you can help or would like more information please contact Barbra Timmer:

Mobile: 0415 902 258

Email: b.timmer@uq.edu.au

ARC National Project: Making and challenging wills in contemporary Australia.

Do you have substantial international assets? Do you have a mixture of assets such as multiple properties and shares valued over \$3 million? Have you made a conscious choice not to make a will and are aged over 45 years? If **ANY** of these questions apply to you we are seeking your participation in a study aiming to enhance understanding of the processes involved in will making, the basis of inheritance, principles behind asset

distribution in wills and knowledge of intestacy (dying without a valid will).

Participation involves completing a face to face or telephone interview (up to an hour), at a time and location convenient for you.

Details: Cheryl Tilse (3365 3341 c.tilse@uq.edu.au) or Rachel Feeney (3346 9090 r.feeney@uq.edu.au).



For additional information or to be added to the AMI mailing list and Listserve, please contact us via email at ami@uq.edu.au.

Alternatively you may contact Dr Nancy Pachana at
School of Psychology, The University of Queensland
ST LUCIA QLD 4072 or Tel. 07-3365-6832