

Ageing Mind Initiative

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Welcome to the Christmas edition of the AMI Newsletter. As the year draws to a close, researchers are trying to tie up lose ends in preparation for another wonderful year of research in 2012. So if you are feeling generous, why not give the gift of participation. Helping out in ageing research today, improves knowledge and services for future generations of up-and-coming older adults.

In this months edition of the newsletter we have some fascinating outcomes from five of our previously advertised AMI research studies. There are also a range of intriguing research studies including new and ongoing research.

Have you ever wanted to write your own song? (pg 7) or maybe you would like to find out how stroke impacts on shoulder positioning? (pg 6) or maybe you would like a free free X-ray and MRI scan (pg8). We hope you all find something you'll enjoy.





ISSUE QUOTE:

It is possible at any age to discover a lifelong desire you never knew you had. ~ Robert Brault





Staying Connected through Domestic Soundscapes

Have you ever been alone at home, and you turn the radio on, not to listen to anything in particular, but to make your home less quiet? Anthropological studies show people use the radio not only for the content, but also to compensate for a lack of social interaction.

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A research in Interaction Design was done to find out how technology can help reduce social isolation for older people living alone. Inspired by how people use the radio, a new interactive technology called SonicAir was developed. It uses sound to connect people.

SonicAir is a device with speakers and attached to sensors that can detect domestic activity. When an elderly father, for example, uses his kettle, SonicAir detects his activity and send a signal through the internet. SonicAir at his daughther's house will detect the signal and play a five-second prerecorded boiling sound.

The father may also hear prerecorded sounds

that represent his daughter's activity via his SonicAir. The sounds heard from SonicAir are not live streaming of remote audio, but prerecorded environmental sounds that represents domestic activity.

Long term deployment of SonicAir was undertaken in the homes of older people living alone and in the homes of their friends and family members. The deployment shows that hearing sounds from SonicAir creates the sense of presence. This then lead to reassurance, companionship and connectedness to others.

This research demonstrates that as well as using sensor technology to monitor older people in their homes for health and safety reasons, the same technology can also be used in a novel way to connect them with their friends and family and increase their social contact and improve their wellbeing.

~ Hanif Baharin

Mapping the Brain Mechanisms of Naming Treatment Post-Stroke

Thank you to all the AMI volunteers who participated in this research. Because of your generosity we have been able to collect data on the brain activity associated with naming objects in healthy adults.

This data will be compared to people with naming impairments following a stroke and may help us understand the neural mechanisms underlying different treatment approaches in language rehabilitation (e.g. training words

using sounds versus word meanings).

Preliminary analysis has shown that different treatment approaches to naming impairments may recruit different brain regions, although this may vary depending on which brain structures are damaged and the type of language impairment.

Further analysis will be completed over the next few months and I look forward to sharing the results in future newsletters.

~ Sophie Van Hees







UQDRIVE groups for retired and retiring drivers

L. Gustafsson, J. Liddle, N. Pachana, G. Mitchell, M. Haynes, M. Hoyle, T. Aplin Schools of Health and Rehabilitation Sciences, Psychology and Medicine The University of Queensland

A study was undertaken at UQ investigating whether education and support groups would help older people who have retired from driving or who are planning to do so. One hundred and forty-nine people in South East Queensland were allocated to groups and provided information about their health, lifestyle and needs over a three year period. The group involved people identifying their needs and concerns related to life without driving, learning about alternative transport, gaining strategies to manage change, and giving and receiving support to others in the same situation. Group members attended one morning a week for six weeks and participated in discussions, planned and went on group outings and gave feedback to official bodies to improve transport opportunities locally.

The findings of the study indicate that people who participated in the study were highly satisfied with the groups – and indicated that they particularly found three areas beneficial: Finding alternative transport, Helping with planning and changing thinking about retiring from driving, and Being with peers in the same

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situation. Group members rated their performance in and satisfaction with areas of concern before and after the groups and a statistically significant improvement was found.

In addition, measures of health and lifestyle were undertaken before the groups, afterwards and three months later. The scores were compared with another group who had not yet received the groups. Analysis indicates that participation in the group significantly increased the number of times someone left the home each week after attending, the use of public transport and walking as transport. In addition, those who participated in the groups were significantly more likely to be satisfied with their transport situation three months after attending the groups. Two research papers have been accepted for publication and a number of conference presentations have occurred. Further analysis and writing is still occurring at the moment.



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Tennis Elbow Not just a pain in the elbow!

Tennis elbow, which commonly affects middle aged individuals, involves pain over the outer elbow and possibly forearm, made worse with gripping activities. With watchful waiting, the majority of sufferers experience recovery within 6-12 months but a small proportion (10-17%) report ongoing problems after 1 year. People with stronger pain are more likely to have worse outcomes in the long term.

Researchers including Coombes, Bisset and Vicenzino at the University of Queensland have recently found that people with severe tennis elbow are hypersensitive to hot and cold stimuli in addition to mechanical (pressure) stimuli. In addition, hypersensitivity is found at multiple sites around the body, not just at the painful site at the elbow.

These findings suggest changes in the processing of pain signals within the central nervous system (brain and spinal cord) and may represent an adaptive response by the body to help with healing. Findings of their research, to be published in The Clinical Journal of Pain, may help identify more targeted treatments for people with severe tennis elbow.



Driving experiences and needs of people with dementia and their families

J. Liddle, S. Bennett, N. Pachana, D. Lie

A study was undertaken exploring the experiences and needs around driving and retiring from driving for people with dementia, their family members and health professionals who work with them. The research was conducted by the University of Queensland and Princess Alexandra Hospital.

We interviewed five people with mild dementia, 12 family members of someone who has dementia and 15 health professionals including occupational therapists, medical specialists, GPs, and social workers.

The findings indicated that the process or route to retiring from driving can be complex, with times along the way where people need particular support. The system was also found to be complex, confusing and inconsistent for all people involved. Another important finding was that the meaning of driving for individuals and families, and their experiences with driving and stopping driving differed greatly and that an individual approach to support is warranted.

Suggestions for supporting people in this situation including – developing anindividualised approach where the meaning of and life history with driving, general health, geographic factors and potential supports are all considered. Areas of unmet need that were identified included suitable transport options and ways of meeting people's practical needs, planning, education and support for families so people know what to expect and can get help when they need it, and providing a cohesive, clear approach.

Creative, sensitive involvement that also allows a chance to grieve the driving role was recommended. Two conference presentations have been made, and a number of journal articles are currently being written.



Current Ageing Research

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

Language Recovery After Stroke

We are seeking healthy participants over 65 years of age who are right handed, have English as a primary language, no history of neurological disease, mental illness, or head trauma and have no metals present in the body which are not safe in an MRI scanner.

The aim of this study is to investigate how acute stroke patients with communication impairment recover language function following a stroke. We want to determine how brain activity differs between healthy adults and stroke patients during a basic language task. Participation in the research will involve two brain scanning (MRI) sessions, carried out six months apart at the Royal Brisbane and Women's Hospital, Herston. An additional assessment session will be carried out at the University of Queensland Centre for Clinical Research, Herston. Participants will be reimbursed \$30 for their time and effort.

If you live in Brisbane and would be interested in finding out more about the study (or know of anyone who may) please contact:

Tracy Roxbury on **33466110 or 0409652447** or **t.roxbury@uq.edu.au**

Attitudes towards Ageing among Older Adults

You are invited to take part in a research project being conducted by Edward Helmes from the Ageing Mind Initiative at James Cook University and the University of Queensland.

The study explores the attitudes of older adults towards other older adults and their own ageing. If you agree to be involved in the study, you will be invited to complete four short questionnaires

that should only take approximately one half hour of your time. These questions cover different features of older adults, the changes that occur with increasing age, and how people feel about being older and other older people.

The study is being conducted via mail, so the questionnaires can be completed at your convenience. Reply paid envelopes are provided with the surveys for their return. There is no attendance required at any university or institution.

If you would like to participate or have any questions in regards to this study, please feel free to contact us via email at: <u>Attitudes.to.ageing@gmail.com</u>





THE UNIVERSITY OF QUEENSLAND

We need your help with an exciting new project on STROKE!

Did you know that stroke, the leading cause of disability in Australia, can affect people of any age! In many cases this is associated with poor recovery of the arm and shoulder pain.

An exciting new joint project between Griffith University, the Royal Brisbane and Women's Hospital and Prince Charles is taking place, and you can help!

Researchers in the School of Physiotherapy and Exercise Science at Griffith University are currently studying how the position of the shoulder and shoulder blade may change over time in people who have suffered a recent stroke. They will be compared to a group of

healthy volunteers of similar age. Healthy volunteers are invited to participate in a study in which their shoulder girdle position will be measured using 3-dimensional technology.

If you are aged over 60 years with no history of shoulder pain or surgery, pacemakers or any metal implanted devices, you may be suitable. You would be required to come to the Geriatric Assessment and Rehabilitation Unit at the Royal Brisbane and Women's Hospital for a single measurement session lasting approximately 90 minutes. The unit is in Cartwright Street in Windsor and street parking is available.

For more information please contact: Praline Choolun (Researcher and Team Leader) Ph: 0438339854 or 07 33985432 Email: <u>praline_choolun@health.qld.gov.au</u> p.choolun@griffith.edu.au

Language in Neurological & Healthy Patients

Would you like to contribute to important research on neurological disease?

The goal of the current study is to explore how people with neurological disorders such as Parkinson's and Huntington's disease produce language compared to healthy adults. We are seeking healthy community dwelling participants:

- between 40-75 years of age
- who are preferably right handed
- have English as a first language
- have no history of any neurological disease, severe current mental illness or head trauma

During the research you will be asked to perform several tasks that look at your ability to think, understand and communicate. This will take approximately three to four hours to

complete. The research can be undertaken at the University of QLD St Lucia Campus or at your home and can be completed at a time and a pace that is comfortable and convenient for you.

If you are interested to find out more about the study or know of anyone who may be please contact Breanne Young on: Mobile: 0410 344 273 Email: breanne young@ugeonnest.edu.eu

Email: breanne.young@uqconnect.edu.au



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Do you have osteoarthritis in your knee?

We are looking for people aged over 50 years with osteoarthritis (OA) of the knee who have had knee pain on most days for the past month to participate in a clinical trial.

We are comparing the effectiveness of three treatments for knee OA delivered by physiotherapists:

1. Treatment involving a combination of exercise a pain coping skills training

2. Treatment involving exercise alone

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3. Treatment involving pain coping skills alone

All eligible volunteers will be randomly allocated to

Write a song about important moments in your life

The University of Queensland's Music Therapy Department is seeking retirees to take part in a study investigating the processes involved in collaborative songwriting. We are interested in participants' experiences of contributing to three different types of song creations in conjunction with a trained Music Therapist.

Sessions can occur at a location that is convenient for you. Please note: *no musical experience is necessary.*

After an initial interview, a trained Music Therapist will collaborate with you to produce three different types of song creations. We are interested in your perceptions of these processes, so we will ask you receive one of the three treatments under investigation from a trial physiotherapist located in your region. You will receive 10 physiotherapy sessions over 12 weeks at no personal cost. Participants must be willing to:

- Have a knee xray to ensure that you are eligible to participate (no cost)
- Attend the Division of Physiotherapy at the UQ for baseline and follow up testing (3 times over a 12 month period)
- Undertake a home based program for your knee OA over the trial period
- Keep a diary of activities and answer questionnaires at three time points

To obtain details and learn more about the trial please contact: Paul Connellan Senior Research Assistant Ph: (07) 3365 4691 Email: <u>p.connellan@uq.edu.au</u>

questions about your experiences. Six weeks later we will interview you again to find out how you feel about your song creations, and if you've done anything with them. At the conclusion of the follow up interview you will be given your choice of a \$50 Coles/Myer or iTunes voucher.

For an information sheet, please email Assoc Prof Felicity Baker: <u>f.baker1@uq.edu.au</u> or Research Assistant Wendy Chatterton: <u>w.chatterton@uq.edu.au.</u> Or you can phone Wendy on Ph 0438 788 599.

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Hip Osteoarthritis study Healthy adults AND adults with ongoing Hip pain needed!

We need people over the age of 45 years with either:

1. Ongoing hip pain (greater than 3 months) and/or suspected or known diagnosis of **Hip Joint Osteoarthritis** (and no previous lower limb joint surgery, major trauma or knee arthritis) are required for a research study looking at the effects of hip osteoarthritis on joint cartilage, bone health, muscle function and walking features and their relationship to progression of the condition.

2. No history of injuries, surgery or neurological conditions to their lower body are required Testing will take place at the Griffith University Biomechanics Laboratory, Gold Coast campus. Free Xrays will be taken at a local radiology clinic in Brisbane or Gold Coast. This project has ethical clearance from Griffith University Human Research Ethics Committee (PES/23/08/HREC).

What's involved:

- Tested twice, approximately 12 months apart and
- Have a free X-ray and MRI scan of their pelvis and hip joints
- Have free Bone Mineral Density (Dual-energy x-ray absorptiometry (DXA)) scans of the hips and to measure the amounts of bone, muscle and fat in the body.
- Have a free scan to measure bone and muscle shape and quality in the thigh
- Complete questionnaires on health, pain, mobility and quality-of-life
- Have a free blood test to assess the relationships between the hormones, proteins and fats that circulate in the blood, and the characteristics of the bone, cartilage, muscle and fat.
- Have their lower body strength tested
- Have their walking pattern analysed
- Have their ability to walk, climb stairs and rise from a chair assessed
- Wear a 'pedometer' for 1 week

To volunteer or receive more information, please contact: Maria Constantinou Mobile: 0412392062 Phone: (07) 5552 7716 Email: <u>m.constantinou@griffith.edu.au</u>

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



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