



The Prince of Wales Hospital &  
The University of New South Wales



## Memory and Ageing Study Newsletter – September 2010

This is a newsletter to update you on the progress of the study and advise you of some interesting news and coming events. We hope that this newsletter finds you all well.

The Sydney Memory and Ageing Study is an epidemiological survey. Epidemiology is the study of health and disease in populations. A familiar example is the study of epidemics such as swine flu. Epidemiology can also be used to study other conditions such as heart disease and cancer to see if there patterns which provide clues to causes and treatments, for example linking high blood pressure to salt consumption in the population or cancer to exposure to toxins.

We are interested to learn about such links with brain health and decline. What predicts maintenance or decline of memory and other cognitive or thinking abilities? Is it diet, exercise, blood pressure or life-time patterns of activity? We are also examining risk factors for falls, cardiac disease and respiratory disease.

Epidemiological studies are very labour intensive, expensive and slow. We needed to contact thousands of people to find the 1037 of you who agreed to participate. It took two years and many research assistants to collect your initial or baseline data. This first interview is called Wave 1. We then repeated the exercise, over another two years; this is Wave 2. About half of you have already agreed to participate in the much briefer Wave 3, which is four years since your first visit.

Once the data are “cleaned”, checked for errors, we analyse the pooled information and can start answering questions. How common is impairment in thinking abilities (cognition) in 70 – 90 year olds? How many people decline in their cognitive abilities? And which ones? What predicts change in cognition?

Some of the papers published in academic journal now emanating from the Wave 1 information that you provided; are described in this newsletter. We can send you summaries of articles or if you particularly interested make a copy of the article available for individual study.

We are eager now to examine changes from Wave 1 to Wave 2. This is the really valuable part of your contribution – following how you progress over time. We are also examining the effects of ageing on people who live with you.

Thank you for continued support. We are always pleased to receive any comments or questions. Of course if we find any abnormal results of concern in our regular examinations we let you and your local doctor know. One request, if your circumstances change e.g. address, living arrangements, please let us know.

On behalf of all of us at the Sydney Memory and Ageing Study, our very best wishes,

Yours,

Professor Henry Brodaty, AO

## Project News

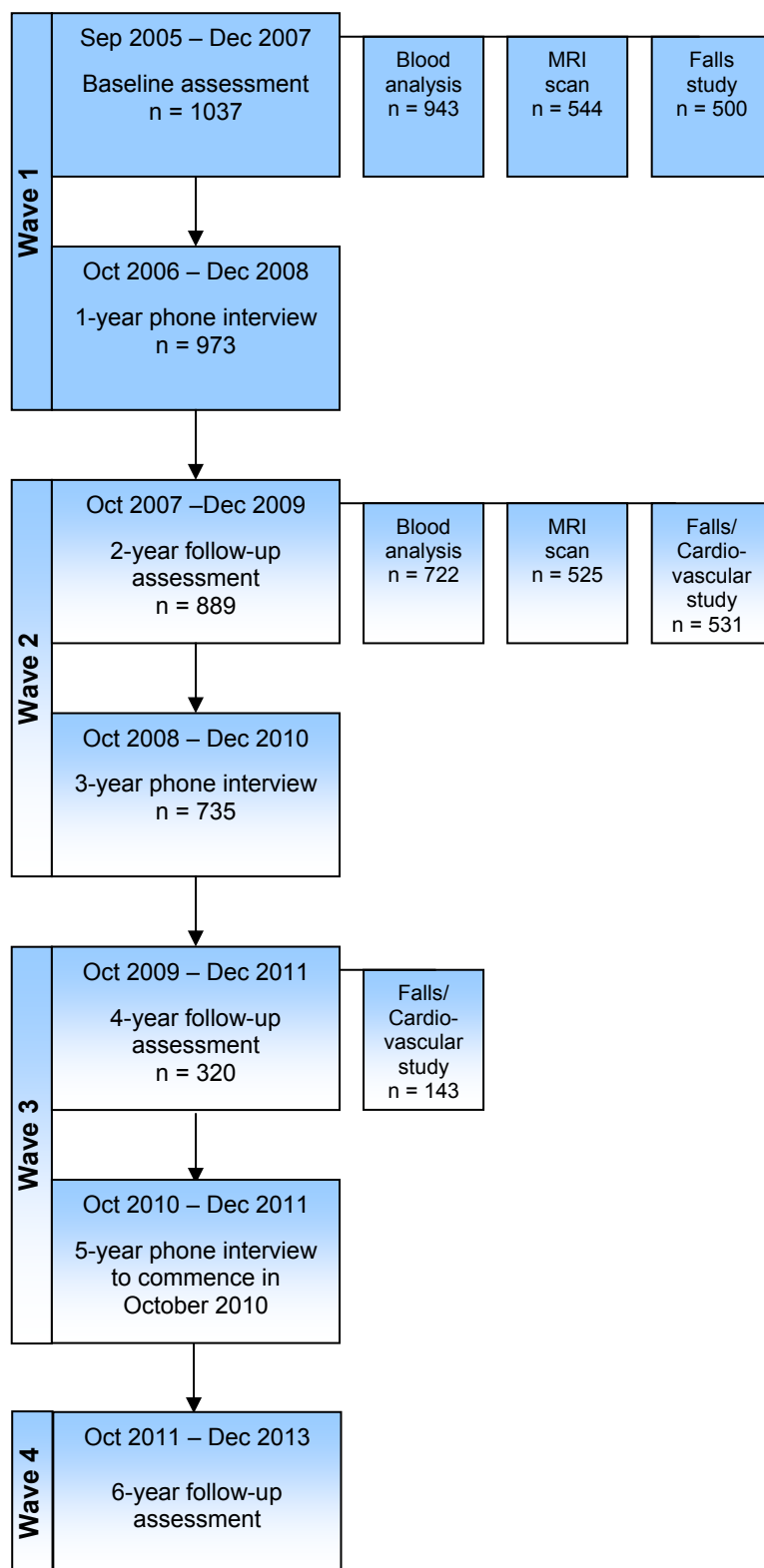
Over 300 participants and 260 informants have been re-interviewed for the follow-up assessment four years after the initial interview.

Exciting findings from the Memory and Ageing Study have recently been published in scientific Journals. Professor Perminder Sachdev and colleagues have published the methodology of the study and the characteristics of the sample (a copy of this publication is attached). It is interesting that most participants in the study rated their health as being better than average, although vascular risk factors such as high blood pressure, diabetes and heart disease were common. Most (95.5%) participants or their informants identified some difficulty with memory or other cognitive ability, and 43.5% had impairment on at least one neuropsychological test. About one in three participants could be said to have mild cognitive impairment. Rates of depression and anxiety were 7.1% and 6.9% respectively.

Tao Liu and colleagues found that as we grow older, our brains age too. The widths of sulci (the depressions or fissures on the surface of the brain) increase with age, with the largest increases seen in the superior frontal sulcus. Elderly women have been found to have more complex cortical surface than elderly men. (*Liu et al. (2010). The effects of age and sex on cortical sulci in the elderly. Neuroimage 51, 19-27.*)

Further articles about subjective complaints, activities of daily living, cognitive impairment and falls have also been published. We are happy to provide copies of any articles that you are interested in at your next visit.

## Flowchart of the Memory and Ageing study progress:



## 2010 Brain & Ageing Research Program Information Day

The Brain and Ageing information day was held on the 6th of February this year. We had a fantastic turnout of more than 400 participants. The information day aimed to provide an overview of results, news and objectives from the Brain and Ageing Research program. It was a great opportunity for interested participants and their relatives to find out more about our research, the progress and to meet other participants and study staff.



Prominent researchers including Professors Terry Campbell, Lesley Campbell, Perminder Sachdev, Henry Brodaty and Stephen Lord, gave a range of interesting and informative presentations covering topics including hypertension, falls prevention, diabetes and much more. Following the presentations, participants had the opportunity to ask questions and discuss relevant issues with the researchers. Slides of each talk can be downloaded from the Brain and Ageing Research Program website:

<http://psych.med.unsw.edu.au/psychweb.nsf/page/brainage>



*The next Brain and Ageing information day will be held in February 2011. An invitation with the exact date and venue will be posted to you closer to the event. We look*

*forward to seeing you all again next year to provide you with further results and interesting news about the Memory and Ageing Study.*

## Our new Research Assistant

Ms. Alexandra Aiken joined the Memory and Ageing Study as a new research assistant in March this year. Alex completed her Bachelor of Psychology (Honours) in 2008 and previously worked in the area of ageing and memory research at the Brain & Mind Institute at the University of Sydney. She is particularly interested in the relationships between our physical and psychological health.



Alex will be conducting many of the 4 year assessments and is looking forward to meeting many of you over the coming months.

## Research: The Mediterranean Diet



The Mediterranean diet is based on the traditional dietary patterns of the coastal regions of southern Italy, Crete and Greece. This way of eating includes high intake of fish, vegetables, fruits, legumes, cereals and unsaturated fatty acids (such as olive oil), moderate intake of dairy products (mainly cheese and yoghurt) and wine and low intake of meat and saturated fatty acids.

Large community-based studies in Europe and America have found that following a Mediterranean type diet can help to protect our cognitive functioning as we age. Better adherence to this type of diet was associated with slower cognitive decline<sup>1</sup> and a decreased risk of developing Mild Cognitive Impairment (MCI)<sup>2</sup> over an average of 5 years. Benefits were also observed in those who already had MCI; those adhering more strictly to the diet had a lower risk of conversion to Alzheimer's disease (AD)<sup>3</sup>.

<sup>1</sup>Féart et al. (2009). *JAMA*;302(6). <sup>2</sup>Scarmeas et al. (2009). *Arch Neurol.*; 66(2). <sup>3</sup>Scarmeas et al. (2009). *JAMA*; 302(6).

## Australasian Conference on Centenarians:



### Living to 100: the Science and the Art

The first Australasian conference on Centenarians will be held at the UNSW Campus, Kensington from 11<sup>th</sup> - 12<sup>th</sup> of November 2010. This multidisciplinary conference provides a platform for the latest research in the field of exceptional longevity. Renowned speakers will present a range of interesting and informative talks covering a variety of related topics including genetics, nutrition, risk factors and much more. This conference will bring together leading local and national experts and individuals with an interest in longevity, to further advance the Australian Studies of Centenarians.

See [www.med.unsw.edu.au/livingto100](http://www.med.unsw.edu.au/livingto100) or email Dr. Melissa Slavin [m.slavin@unsw.edu.au](mailto:m.slavin@unsw.edu.au) for further information.

### Call for participants: Carers/Supporters of older people

What are the effects over time of supporting an older family member or friend?

To address this question we have commenced the **Memory and Ageing Informant Add-on Study (MAIA)** earlier this year.

We would like to invite people who are participating as an **informant** in the *Memory and Ageing Study* to take part in this new project.

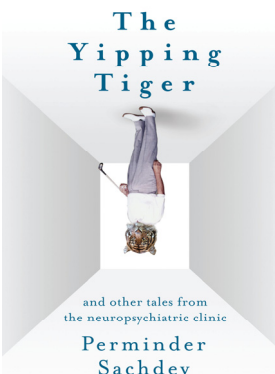
Participation will take about an hour of your time and involves completing questionnaires about your psychological well-being and health as well as a brief interview over the phone.

For further information please contact Ms Katrin Seeher (phone: 9385-2633 or email: [k.seeher@unsw.edu.au](mailto:k.seeher@unsw.edu.au) )

## Book Reviews

### *The Yipping Tiger*

Professor *Perminder Sachdev* (First chief investigator of the *Memory and Ageing Study*)



From Tourette's Syndrome and golfer's yip, to alien hand and frontal lobe brain injury, Professor Sachdev presents ten intriguing stories that explore the complexities of the human brain. A fascinating read for anyone interested in understanding more about the mysterious workings of the human brain.

### *It's Never Too Late to Change Your Mind*

Dr *Michael Valenzuela* (Research Fellow, *Brain & Ageing Program*, UNSW)



IT'S NEVER TOO LATE TO Change Your Mind

The Latest Medical Thinking on What You Can Do to Avoid Dementia

DR MICHAEL J. VALENZUELA

Many people see dementia as an inevitable part of growing old. The great news is that there are practical things that you can do to protect yourself against dementia. It's never too late! Dr Valenzuela outlines the latest thinking and research

around dementia and explains realistic things that we can all do to help protect ourselves against dementia.

### Contact

**Memory and Ageing Study**  
**Building R1f, Randwick Campus**  
**The University of New South Wales**  
**UNSW NSW 2052**  
**Phone: (02) 9385 0435**  
**Fax: (02) 9385 0436**  
[memory@unsw.edu.au](mailto:memory@unsw.edu.au)  
[www.brainage.med.unsw.edu.au](http://www.brainage.med.unsw.edu.au)