



Ageing Well

National Ageing Research Institute

www.nari.unimelb.edu.au

September 2007
Newsletter Issue 43

34 – 54 Poplar Road, Parkville Victoria 3052 (Postal address: PO Box 31, Parkville Victoria 3052)
Telephone: 03 8387 2305 Fax: 03 9387 4030 Email: info@nari.unimelb.edu.au

Print post approved PP341 403000444

Keith Hill appointed as inaugural Professor of Allied Health

Associate Professor Keith Hill is quietly modest about his impressive achievements at NARI and strong professional reputation among colleagues and in the health and aged care sectors.

He has been instrumental in creating NARI's high profile in falls prevention research in Australia. He helped to set up the first Falls and Balance Clinic, a concept that has been replicated nationally. He was also involved in developing two tools that are widely used clinically – a fear of falling scale and a simple step test to assess balance.

During his five years as Director of Preventive and Public Health, the division's size and budget have increased by over 50 per cent. Its research agenda has also broadened.

Associate Professor Hill was recently appointed as the inaugural Professor of Allied Health at La Trobe University and Northern Health. He will continue to maintain a small ongoing funded role at NARI.

His first link with the Institute was in 1988 when the then director, Professor Rob Helme, asked him to set up the physiotherapy component of the first multidisciplinary Falls and Balance Clinic in Australia. At the time, he was the senior physiotherapist at Mount Royal Hospital, with a passion for stroke rehabilitation. His focus was soon to change.



Balance in older people was the theme for his PhD, which he completed in 1998. The same year, he began working as a part-time researcher at NARI, and this gradually evolved to a full-time position.

Among the many research highlights, he cites the world-first study by PhD student Terry Haines that showed falls could be prevented in hospitals, and the Well for Life program with the Dieticians Association of Australia that was promoted to all residential care facilities in Victoria. The program was later modified to assist frail older people living at home.

- Two years ago, he was delighted to receive three NHMRC grants, with one being for a NARI project into preventing falls in people who have had a stroke and are returning home.
- Reflecting on his career, he is keen to acknowledge the mentoring roles of Professor Helme, Robyn Smith (NARI's previous director of public health), Jenny Schwarz (through the Falls and Balance Clinic and research), and his PhD supervisors Professor Leon Flicker and Sara Carroll.
- "Preventive and Public Health has an extremely good team and a great group of volunteers," he says.
- "One of the most pleasing things for me is knowing that NARI has a strong research base to continue its work. I am very happy with what has been achieved. Now, it's time for a change."

Dr Dow's new role



Dr Briony Dow is delighted by her appointment as the Acting Director of the Preventive and Public Health Division, at a time when NARI is exploring new directions under the leadership of Professor David Ames.

Dr Dow, who has a background in social work, came to NARI in 2003 after stints in local government and mental health. She had also established a

home-based rehabilitation program in Ballarat. For the past 12 months, she has been on secondment at the Department of Human Services, involved in developing a planning framework for Victoria's sub-acute services – rehabilitation and also geriatric evaluation and management – for inpatient and community-based settings.

"I see my new role as identifying how each researcher's talents and interests fits within the Preventive and Public Health focus, and how this reflects NARI's overall direction," she says.

"I enjoy working in the aged care and ageing sector, particularly in developing services and interventions for older people. Quality of life in later years is just as important as at other times of life."

Inside:

Phantom limb research published internationally ... [page 2](#)
\$200,000 grant focuses on vision ... [page 3](#)

Phantom limb research published internationally



NARI PhD student Melita Giummarra's review of the parts of the brain involved in perceiving the body and 'self' was recently published in the prestigious international journal *Neuroscience and Biobehavioral Reviews*.

She explored the complex processes involved in bodily perception, phenomena like phantom pain and limb illusions, and how embodiment (the perception of a sense of self) can be modified or manipulated

through visual illusions (using mirrors, fake limbs or prostheses).

Melita reports that a person retains instinctive representations of his or her body (body schema and body image) throughout life that probably provide the template from which phantom limbs are perceived, whether limb loss is evident at birth or occurs later.

Her review identified that:

- The phantom limb can be such a real part of an amputee's body that the person will forget it is not real and attempt to use it; for example, in self-defence or to rub a sore spot.
- Activity in the region of the brain where the missing limb is represented can induce the perception of a phantom limb that is non-painful and occupies a normal bodily position.
- 'Mirror neuron systems' in the brain – these are systems active during both the personal perception and observation of an action – may be involved in phantom limb sensations. For example, when amputees viewed limb movements, they regained the ability to do the same actions with the phantom limb.
- Regions of the brain that process pain also display mirror neuron properties. In a recently published book chapter, Melita describes amputees experiencing pain in their stump and/or phantom limb when they observe others in pain.

Melita's PhD supervisors are NARI Deputy Director, Associate Professor Stephen Gibson, Professor John Bradshaw and Dr Nellie Georgiou-Karistianis from Monash University, and Associate Professor Mike Nicholls from the University of Melbourne.

Conference scene

VASCOG Conference: Texas

NARI Acting Director, Professor David Ames, presented a paper on rating scales for use after stroke at the third VASCOG congress in San Antonio in Texas, in July. He also hosted a discussion of poster presentations on the topic of challenging behaviours in people with dementia.

Professor Ames is a member of VASCOG, an organisation dedicated to researching aspects of vascular disease, cognition and psychiatric symptoms.

Association of Independent Retirees: Swan Hill

Bringing health to old age was the theme of a talk by NARI Deputy Director Dr John Barlow to members of the Swan Hill branch of the Association of Independent Retirees.

Expert advice for ICARUSS

Internationally-renowned social academic Professor Irwin Epstein, from New York, discussed strategies for analysing data for NARI's innovative ICARUSS project.

ICARUSS aims to reduce the incidence of a stroke recurring in older people, by having stroke coordinators as the link between a patient's GP (the primary medical carer) and specialist stroke services.

Professor Epstein (pictured right) met with Dr Lynette Joubert from the University of Melbourne, Department of Social Work, and Dr John Barlow, NARI Deputy Director (Operations and Development). Also at the meeting was Dr Melissa Petrakis from the University of Melbourne, Department of Social Work.



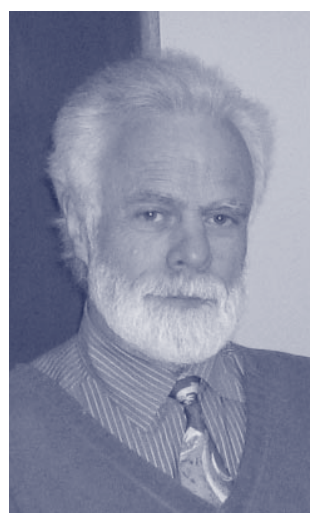
Music makes a difference

People with dementia in residential care showed improved cognition and memory after a three-week pilot study involving music therapy.

Nursing staff also reported a reduction in these residents' disruptive behaviours and depression.

"This was one of the first randomised controlled trials to evaluate the benefits of music therapy for people with dementia," says NARI researcher Dr Bruce Barber (pictured). Music therapy encompasses singing, reminiscing about music, and instrument playing and improvisation.

The collaborative study also involved Dr Samia Toukhsati from Monash University and student Chrissy Hammond.



"While the data so far is not absolutely conclusive, the results in relation to improved cognition are significant. A key message is that engaging people with dementia in stimulating tasks and giving them opportunities to socialise is beneficial," says Dr Barber.

In August, Drs Barber and Toukhsati reported the study at the 7th Annual Conference of The Society of Music Perception and Cognition, in Montreal, Canada.

I think my memory is failing – what can I do?

We may get wiser with age, but we don't necessarily remember better.

Some decline in memory function with age is normal, but if it starts to interfere with everyday tasks – missing appointments, repeatedly forgetting names of close family members or getting lost in familiar places – an assessment by a doctor is required.

General practitioners can do basic memory testing and rule out some reversible causes of memory failure, like depression, the side-effects of prescribed medication and an underactive thyroid gland.

If dementia – a decline in higher mental functions caused by brain diseases such as Alzheimer's disease, stroke or other degenerative conditions – is suspected, an appointment with a publicly-funded cognitive and dementia management service (CADMS) clinic, or a private specialist such as a psychiatrist, neurologist or geriatrician with expertise in dementia can be arranged.

Although most dementias cannot be cured, a lot of help is available, and drug treatment for Alzheimer's disease with cholinesterase inhibitors such as donepezil (aricept), galantamine (reminyl) and rivastigmine (exelon) is of modest benefit to some patients.

Volunteers needed for Alzheimer's studies

The biggest challenges for researchers are to diagnose Alzheimer's disease more reliably and to find better treatments that can help to slow down or halt the progress of this condition. Exploring these concepts is the CSIRO-funded Australian Imaging Biomarkers and Lifestyle (AIBL) Study of Ageing, which I lead.

The study is seeking volunteers who have been diagnosed with Alzheimer's disease or mild cognitive impairment (a milder form of memory difficulty that sometimes has a tendency to develop into Alzheimer's disease).

Volunteers will have memory tests, complete questionnaires and give a blood sample. A quarter of the participants will have a new form of brain scan that can pick up the abnormal protein in the brain in Alzheimer's disease. These tests will be repeated 18 months later.

**For more information, contact Dr Kathryn Ellis
kellis@unimelb.edu.au or phone 9816 0418**



In addition, people with mild Alzheimer's disease who are being treated with aricept, reminyl or exelon may be eligible to take part in trials of new add-on treatments.

**For more information,
contact Liz Ronsisvalle
emr@unimelb.edu.au
or phone 9816 8482**
PROFESSOR DAVID AMES
Acting Director NARI

\$200,000 grant focuses on vision

NARI is focusing on the vision of older people in residential care after receiving a \$200,000 Eye Health Demonstration Grant from the Australian Government Department of Health and Ageing.

This collaborative project with the Centre for Eye Research Australia (CERA) involves improving the safety and wellbeing of residents in three aged care facilities.

An environmental audit tool, which was initially developed by NARI to help older people feel safer and more comfortable in hospitals, will be adapted for use in residential care. Participants will also receive vision checks and corrective lenses if required.

A large Chinese audience

More than 1000 doctors and nurses at Xuan Wu Hospital in Beijing attended a lecture by Associate Professor Stephen Gibson about setting up a multidisciplinary pain clinic. He also presented a workshop about pain in older people at Capital University.

"With this being the Year Against Pain in Older People, the hospital was interested in improving its health service," says Associate Professor Gibson, NARI's Deputy Director.

"The hospital houses the municipal geriatric research centre which is one of the biggest in the world and the outpatient service sees 4000 patients daily."

NARI needs your help

We are a self-funding research institution committed to healthy ageing. We rely solely on donations and research grants to continue our work.

You can help enhance the quality of life for older people.

I would like to donate \$

Name

Address

Postcode Telephone

I enclose a cheque payable to the National Ageing Research Institute

OR Please charge this amount to my credit card

Type of card Visa Mastercard Bankcard

Card number

Expiry date Signature

Please post this coupon with your donation to:

National Ageing Research Institute
PO Box 31 Parkville, Victoria 3052

Thank you

Donations of \$2 and over are fully tax deductible AW 43

NARI news

In profile: Dr Jaya Pinikahana



For Dr Jaya Pinikahana, the year 1996 was definitely a time of change.

He swapped life in Sri Lanka as a senior university lecturer in sociology to being a researcher in Western Australia, investigating chronic fatigue syndrome.

"As a health sociologist, I feel that there is a much closer fit between my qualifications and skills, and the psycho-social research that I am doing at NARI," he says. He has been at NARI since August last year.

Since completing his PhD in 1990, he has gained research experience in numerous areas including mental health, chronic illness and substance abuse. He was the chief investigator for a WHO-funded study on malaria transmission in Sri Lanka.

In Australia, he has been a research fellow at the Institute for Behavioural Research in Health at the Curtin University in Perth, and a senior research fellow at Monash University's School of Nursing.

Prior to coming to NARI, he headed a project that developed assessment and management tools to assist with incontinence for people in residential aged care.

Currently, he is the chief investigator for two NARI projects – evaluating changes to Villa Maria's approach in providing community services to clients, and working in collaboration with the Council on the Ageing in assessing the health benefits for participants in the Living Longer and Living Stronger strength-training program.

From one student to another

NARI PhD students provided 20 American students from the International Scholar Laureate Program with an interesting insight into NARI's work and the diversity of a research career.

Leonie Cole, Sandra Petty, Frances Batchelor, Xiao Jing Yang and Chathushka Fonseka discussed their projects that ranged from detecting pain sensitivity in dementia to falls risk after stroke.



NARI PhD student Frances Batchelor chats with Clinical Associate Professor Leonard Kleinman from the International Scholar Laureate Program.

PhD success for Natalie



"I am relieved and happy that my PhD has been passed," says former NARI student Natalie El Haber, who juggled the demands of completing the thesis with organising her wedding and working fulltime.

Her research focused on identifying the genetic and environmental influences of balance in 176 sets of identical and non-identical twins,

aged 21 to 82 years. The main finding was that balance has an underlying heritable component, with its influence ranging from 30 to 40 per cent, depending on the type of balance test.

"My aim was to finish my PhD no matter how long it took. There were challenges every step of the way but I learnt a lot about research and also myself."

Now, Natalie is pursuing her dream career – working as a clinical research associate with Servier Laboratories to ensure research adheres to good clinical practice. Part of her training involves five weeks at the company's headquarters in Paris.

Working with the RSL



"With World War II soldiers well into their 80s and Vietnam veterans nudging 60, NARI's work has the potential to make a significant difference to RSL members," says NARI Board President, the Hon Michael MacKellar.

At the opening of the Victorian RSL Conference are (from left) former NARI Board president Mr Alan Castleman, Mr MacKellar and RSL Victorian President, Major General David McLachlan AO. NARI Deputy Director, Dr John Barlow, also attended the conference.

Welcome back



While a Masters student in the Netherlands, Christel Lemmon spent a year at NARI doing dementia research. When she left, she was determined to return.

Third time around, she has come back to collate a resources kit for health professionals and patients involved with the Cognitive Dementia and Memory Service (CDAMS) and is analysing CDAMS clinic data.