



IAGG Global Research Network on Health & Ageing Questionnaire for selection process

Name of the Centre: **Ageing Research Group, Musculoskeletal Division, The George Institute**
Key Investigator / Head of Department: **A/Prof Catherine Sherrington**
Phone:
E-mail: **csherrington@george.org.au**

Description of the Centre:

a) Type of investigations:

- Basic Science / Fundamental
- Clinical Research
- Health Services Research
- Epidemiologic/Public Health Research
- Other

b) Themes investigated (please specify):

- Dementia
- Frailty
- Sarcopenia
- Other Neurodegenerative Disorders
- Geriatric Disorders
- Cardiovascular Risk Factors
- Metabolism
- Ageing research
- Genetics
- Gerontechnology
- Other

c) Number of investigators in ongoing positions:

- Less than 5
- to 10
- More than 10

d) Number of investigators funded by specific projects:

- 1 to 3
- 4 to 5
- More than 5

e) Does your Centre have a:

- Clinical affiliation
- Academic affiliation

f) Does your Centre have a basic sciences program? (Please specify topic)

- Yes
- No

If your Centre is affiliated to a Geriatric Department, please provide the following information:

a) Types of units:

- Acute Ward - **Number of beds: 0**
- Outpatient Ward - **Number of patients/year: 0**
- Community Care Unit - **Number of visits/year: 0**

- Day Hospital - **Number of places/day: 0**
- Geriatric Rehabilitation Unit - **Number of beds: 0**
- Long-Term Care - **Number of beds: 0**
- Special Units (stroke, memory, ortho-geriatric, psycho-geriatric) - **Number of beds: 0**

b) Number of staff in the Department:

Geriatric: **0**
Gerontology: **0**
Other: **0**

c) Does the Day Hospital have specialist services?

- Dementia / Memory
- Cardiovascular clinic
- Rehabilitation
- Falls assessment clinic
- Parkinson's disease clinic
- Other

d) Does your Geriatric Department already cooperate with supervising clinical trials?

- Yes
- No

Management of the Centre:

a) Is your Centre an existing national or government recognized medical research Centre?

- Yes
- No

b) Does the Centre receive funded grants? (Please specify source)

- Yes **Australian National Health and Medical Research Council**
- No

c) Does the Centre collaborate with trials funded by pharmaceutical companies?

- Yes
- No

d) Will the Centre shortly begin investigation projects?

- Yes
- No

Indicate the three main publications over the last 2 years:

1/ Name of Journal: **Journal of Clinical Epidemiology**

Title of article: **1. Sherrington C, Lord SR, Close JCT, Barraclough E, Taylor M, O'Rourke S, Kurrle S, Tiedemann A, Cumming RG, Herbert RD. A simple tool predicted probability of falling after aged care inpatient rehabilitation. , 64:779-86 (2011).**

2/ Name of Journal: **BMC Medicine**

Title of article: **91 Fairhall N, Sherrington C, Kurrle SE, Lord SR, Lockwood K, Cameron ID. Effect of a multifactorial interdisciplinary intervention on mobility-related disability in frail older people: randomised controlled trial. In press, accepted 27 June 2012.**

3/ Name of Journal: **NSW Public Health Bulletin**

Title of article: **73 Sherrington C, Tiedemann A, Fairhall N, Close JCT, Lord SR. Exercise to prevent falls in older adults: an updated meta-analysis and best practice recommendations. 22 (3-4);78-83 (2011).**

Please add short biographies (maximum 1 page) of the Key Investigators and Head of Department

A/Prof Sherrington is an NHMRC Senior Research Fellow at the George Institute for Global Health and Sydney Medical School, The University of Sydney. She leads the 18-person Ageing Research Group within

the Institute's Musculoskeletal Division. Her research focuses on the prevention and prediction of falls and disability in older people. Her publications have been cited over 3000 times and her h-index is 27. She has been a Chief Investigator on NHMRC grants totalling over \$9.5 million. A/Prof Sherrington has made a significant contribution to the understanding and application of exercise for older people and use of evidence to guide clinical and policy decisions. She has conducted or is currently conducting studies that aim to evaluate interventions designed to minimise falls and disability, predict falls in older adults and understand causes for falls and disability in older adults. In order to answer such questions she has used or is currently using, cohort studies, case-control studies, single case experimental designs, randomised controlled trials and meta-analyses including meta-regression. The major focus of her research has been the development and evaluation of exercise interventions. She led the development of novel functionally-relevant exercise protocols for older people, which have been demonstrated in 5 clinical trials to have greater benefits on balance and functional ability than traditional programs. Her clinical trial which was the first to show benefits of a home exercise program after hip fracture has been cited 91 times. Her work has shown that balance and mobility can be enhanced by well-designed exercise programs, but it is not clear to what extent exercise can reduce disability or prevent falls after fall-related fracture. The Cochrane review of interventions to improve mobility after hip fracture which she authored (cited 92 times) found that the overall effect of exercise interventions on mobility after hip fracture remains unclear. To attempt to have a greater impact on outcomes after hip fracture, she now leads an NHMRC-funded (ID 570886) trial among people after lower limb fracture, which will use a longer program than all previously published studies. This new program has an emphasis on self management and home exercise. Some achievements Research outcomes ? Chief Investigator on NHMRC grants totalling over 9.5 million dollars. This includes an NHMRC Senior Research Fellowship, 2 NHMRC Project grants and an NHMRC Partnership Grant as lead Chief Investigator and 6 other NHMRC grants as a Chief Investigator. ? An additional \$1.9 million in competitive funding from the NSW Health Department, the Motor Accident Authority of NSW, the University of Sydney, the Health Research Foundation Sydney South West, the Arthritis Foundation, and the Physiotherapy Research Foundation ? Invited to speak at conferences in the USA (2011), Brazil (2010, 2011, 2012), the Philippines (2011), Singapore (2010) and Canada (2009). ? Publications cited 3014 times, h-index of 27 (Google Scholar March 2012) include 84 articles in refereed journals. ? Author of a major book which has been cited 420 times: Lord SR, Sherrington C, Menz, H. Falls in Older People: Risk factors and Strategies for Prevention. Cambridge University Press, Ed 2, 2007), as well as five book chapters and a Cochrane systematic review which has been cited 92 times (Handoll HHG, Sherrington C. Mobilisation strategies after hip fracture surgery in adults). ? One of the establishers of the Physiotherapy Evidence Database (freely available online database of over 20,000 systematic reviews and randomised controlled trials) and developer of the widely-used PEDro Scale. The paper describing the scale's reliability has been cited 489 times: Maher CG, Sherrington C, Herbert RD, Moseley A, Elkins M. Reliability of the PEDro scale for rating methodological quality of randomized controlled trials. Physical Therapy 83:713-21 (2003). ? Commitment to translating research results into practice: in recent years 20 conference presentations and 70 invited presentations (including 4 full-day workshops) for physiotherapists, other health professionals, fitness leaders and health promotion officers in Sydney, Lismore, Orange, Port Kembla, Ballina and Wagga Wagga. Research Leadership ? A/Prof Sherrington currently leads a research team of two competitively-funded post-doctoral fellows, 10 research higher degree students and 6 research staff. ? Associate Editor for the British Journal of Sports Medicine and an editorial board member of the international (US-based) Journal of Geriatric Physical Therapy. ? Methodological Editor for the Cochrane Bone Joint and Muscle Trauma Group. ? Reviewed manuscripts for 26 journals including: The Lancet, Age and Ageing, Journal of the American Geriatrics Society ? Scientific Convenor of the National Gerontology Physiotherapy Conference in Sydney 2009 Dr Anne Tiedemann is an NHMRC Postdoctoral Research Fellow at the George Institute for Global Health and Sydney Medical School, The University of Sydney. She is part of the Ageing Research Group within the Institute's Musculoskeletal Division. Her research focuses on risk factors for falls in older people and the implementation and evaluation of evidence-based prevention strategies. Research contributions relevant to this research proposal Dr Tiedemann has made a contribution to the understanding of risk factors for falls in community-dwelling older people and the use of evidence to guide clinical decisions. She has recently conducted studies which aim to develop and validate screening tools and risk assessments which can accurately predict falls in older adults. The major focus of Dr Tiedemann's research has been identification of risk factors for falls and the use of screening and assessment tools in "real world" settings. Her work has shown that simple measures of balance and mobility can be used to predict risk of future falls and thus can be utilized by health professionals to identify people most likely to benefit from interventions to prevent falls. She led the development of a validated clinical falls risk assessment for use with community dwelling older people -QuickScreen. The QuickScreen is one of a few validated multifactorial assessments which has been rigorously developed and is suitable for use in busy clinical settings. It has been endorsed by national falls prevention guidelines, adopted as a standard assessment by NSW Area Health Services and implemented into clinical practice by more than 500 allied health professionals nationally and internationally. Furthermore, Dr Tiedemann is a co-author of a 2003 publication describing a physiological risk factor assessment (Fallscreen), on which some of the QuickScreen measures were based, which has been cited 296 times. Her commitment to the implementation of research findings into policy and practice is also evidenced by a current NHMRC-funded Partnership Project (ID 568975) on which she is a chief investigator. This project is specifically focused on filling research gaps, dissemination and implementation of findings into practice and translation of research into policy and involves collaboration across several university institutions and government departments. Dr Tiedemann has a strong commitment to improving the knowledge and skills of health professionals, which is demonstrated by her involvement in developing and teaching a falls

prevention curriculum to university undergraduates and allied health professionals. She currently teaches full-day workshops for exercise scientists and physiotherapists on the topic of exercise prescription for the prevention of falls in older people. **RESEARCH CONTRIBUTIONS TO RESEARCH IN GENERAL**

Additional to her falls prevention research, Dr Tiedemann has made contributions to research training and knowledge translation. ? Supervisor to 2 current PhD students at University of Sydney and University of NSW ? More than 20 invited lectures in past 5 years on falls, fall risk assessment and exercise prescription for falls prevention for undergraduate and postgraduate medical, nursing, public health and exercise science students from the University of NSW, University of Sydney, University of Wollongong and Royal College of Nursing and Exercise and Sports Science Australia exercise physiologists. ? Dr Tiedemann's commitment to the translation of research findings into policy and practice is demonstrated by the more than 25 invited presentations since 2005 to community groups and health professionals including the Royal Australian College of Physicians, the NSW Falls Coordinators, the Australian Association of Rural Nurses, Extended Care Paramedics at the Ambulance Service of NSW and the MBF Health Research grants. Some achievements Research outcomes ? Career funding as a Chief Investigator of more than \$2.4 million from NHMRC and others ? 28 peer-reviewed publications and 2 book chapters ? 1191 citations with a h-index of 12 (as at Feb 2012, source: Google Scholar) ? Invited speaker at International conferences in Italy (2011), South Africa (2006) and International workshop in India (2010) ? Commitment to dissemination of research results-11 conference presentations since 2007 Research Leadership ? Australian and New Zealand Falls Prevention Society (ANZFPS) Executive Committee member, 2006-2010. ? Scientific committee, ANZFPS Conference, 2006, 2008, 2010 ? Abstract reviewer, 16th International World Congress on Physiotherapy, October 2010 ? NSW Falls Prevention Network Advisory Committee member, 2002-present ? Peer reviewer for 14 international scientific journals, including Journal of Science and Medicine in Sport, Age and Ageing, Australian and New Zealand Journal of Public Health, Gait and Posture, Physiotherapy Canada and BMC Public Health. ? Invited expert reviewer for NSW Health web-based directory of exercise programs- June 2010 ? Invited expert reviewer for National Falls Prevention Guidelines being reviewed by the Australian Commission on Safety and Quality in Health Care- July 2009