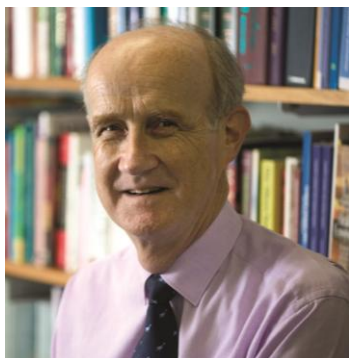


## Speaker Profiles

### Professor Tony McMichael

*National Centre for Epidemiology and Population Health, Australian National University*



Tony McMichael, medical graduate (Adelaide University) and epidemiologist, holds a 5-year NHMRC Australia Fellowship at the Australian National University, Canberra. He was previously Professor of Epidemiology at the London School of Hygiene and Tropical Medicine, 1994-2001, and subsequently was Director of the National Centre for Epidemiology and Population Health at the Australian National University. In 2008 he was appointed Honorary Professor of Climate Change and Health at the University of Copenhagen. In 2009 he was elected an Honorary Fellow of the London School of Hygiene and Tropical Medicine. He was President of the International Society for Environmental Epidemiology during 2008-2009.

During the ten years that he headed the Epidemiology Research Group within the CSIRO Division of Human Nutrition, in Adelaide, Tony McMichael (TMcM) developed a wide-ranging interest and research engagement in relation to dietary and metabolic influences on disease processes and risks. He has had a longstanding academic and research interest in the dietary and other influences on biological evolution - and how these relate to risks of disease in contemporary settings. This has included work on the genetic modulation of cancer risk associated with meat consumption, on the phenotypic differences (and their origins) that influence the occurrence of Type 2 diabetes,<sup>4,5</sup> and on the role and use of molecular genetic measures in epidemiological research. In recent years TMcM has continued his active interest and writing in relation to the inter-relations between food systems, environmental sustainability, human biology and risks to health<sup>6</sup> - including further interests in aspects of meat consumption and dietary-hormonal influences on cancer risk.

TMcM has been a pioneer in, and remains central to, the development and implementation of research into the health risks and impacts due to global climate change and other large-scale environmental changes. During 1993-2006 he played a leading role in health risk assessment for the UN's Intergovernmental Panel on Climate Change. During 2001-2004 he led the (WHO-based) international project estimating the burden of disease and premature death attributable to climate change, both current and to 2030. He co-edited the first methods-based textbook on this topic (Martens & McMichael, Cambridge UP, 2001).

Prof McMichael leads the program of environmental health research at NCEPH, ANU. In 2002 he initiated a program of innovative studies on the interplay of solar ultraviolet, infectious agents, genes and immune-system biology in the aetiology and progression of autoimmune disease (esp. multiple sclerosis). This research interest built on his co-authored paper (McMichael and Hall, *Epidemiology*1997) hypothesising a role for immuno-suppressive UV radiation in autoimmune disease aetiology.

His ANU team's rapidly-expanding research on climate change and health includes, in particular, a set of multidisciplinary studies on 'Drought, Drying and Rural Health Impacts'. Other research activities on climate change and health include climatic influences on Ross River Virus disease, the health impacts of heat-waves, and scenario-based modeling of future (selected) climate-related health risks in Australia. Working with WHO's Tropical Diseases Research Program, he chairs an expert Reference Group on Environment, Climate, Agriculture and the Diseases of Poverty.

## **Dr Karen Campbell**

*Centre for Physical Activity and Nutrition Research, Deakin University*



Karen Campbell is a Senior Researcher in the Centre for Physical Activity and Nutrition Research at Deakin University in Melbourne, Australia. With a background in dietetics and health promotion Dr Campbell undertook her Masters in Public Health and then a PhD which focussed on home environment correlates of young children's eating behaviours. Karen conducted the first Cochrane systematic review of obesity prevention in children in 2002 to better understand what worked in obesity prevention but also to highlight how underserved this important area was. She continues to update this review biannually. Her intervention research focuses on the continuum of opportunities for obesity prevention between pre-pregnancy and early childhood. She has just completed the intervention phase of The Melbourne Infant Feeding Activity and Nutrition Trial (InFANT) Program, an obesity prevention intervention targeting first time parents in their existing social groups, from child age 3-18 months. This cluster RCT has involved around 550 families in 62 first-time parent groups across Melbourne, Victoria.

## **Dr Alison Hill**

*Nutritional Physiology Research Centre, University of South Australia*



Alison Hill is a newly appointed nutrition lecturer at the University of South Australia with a joint research appointment in the Nutritional Physiology Research Centre. With first class honours in Human Movement from the University of South Australia, Alison undertook her PhD at the University of Adelaide, evaluating the combined and independent effects of exercise and omega-3 supplementation on cardiovascular risk factors, which led to further investigation of the anti-obesity potential of omega-3. She commenced her postdoctoral research in 2007 at the prestigious Nutrition Dept of Pennsylvania State University, where she conducted numerous controlled clinical interventions primarily in the area of cardiovascular nutrition.

## **A/Professor Vicki Flood**

*School of Health Sciences, University of Wollongong*



Vicki Flood is an Associate Professor in Public Health, from the School of Health Sciences, University of Wollongong. Vicki has a background in nutrition and epidemiology and currently conducts research on a wide range of population-based projects, including cohorts and intervention studies. Areas of particular interest include: lifestyle factors associated with healthier outcomes among older people, including eye disease; food access, availability and food security; interventions to reduce chronic disease among children and adults; and supporting indigenous health research. Vicki has published over 60 peer-reviewed journal articles and reviews grant submissions for government and non-government organisations.

## **Dr Lisa Wood**

*School of Biomedical Sciences and Pharmacy, University of Newcastle*



Lisa leads the Nutrition programme within the Centre for Asthma and Respiratory Diseases, University of Newcastle. She is a nutritional biochemist, who has been working in the area of nutrition and inflammation for over 10 years. Her PhD studied the relationship between antioxidants and oxidative stress in respiratory disease, in particular cystic fibrosis (CF). This work has led to significant progress being made in understanding oxidative stress in CF, with dietary fat being identified as an important factor determining the extent of oxidative damage. From 2002-2006, she undertook a postdoctoral fellowship (NHMRC Australian Training Research Fellowship), in the Respiratory Research Group, Hunter Medical Research Institute, Newcastle. Throughout this fellowship, she continued her research on dietary factors influencing respiratory diseases, in particular asthma. She undertook a comprehensive evaluation of antioxidant defences in asthma and identification of imbalances in the oxidant/ antioxidant system in asthma. The status of tocopherols, carotenoids and glutathione were determined to be disturbed in asthma. This led to the filing of a provisional patent and the development of an intervention strategy, which has been supported by the award of an NHMRC project grant (2005-2008) studying the effects of lycopene supplementation in asthma. In 2007, she was awarded a Brawn postdoctoral fellowship at the University of Newcastle and during this time, she has extended her work to investigate the roles of dietary fat and obesity as promoters of airway inflammation. She was awarded an NHMRC grant (2008-2010) to develop this area. In 2010, Dr Wood took up an academic position in the School of Biomedical Sciences, University of Newcastle, in which she combines both research and teaching responsibilities.

## Dr Nathan O'Callaghan

CSIRO Division of Food and Nutritional Sciences



Nathan O'Callaghan currently works at CSIRO in the Division of Food and Nutritional Sciences in Adelaide. Our group, Nutritional Genomics, is working on Diagnostics and dietary prevention of genome damage in an effort to reduce developmental and degenerative disease within the Australian population. I specifically work on telomere shortening and telomere dysfunction and aim to: 1. develop novel and better techniques for measuring damage to telomeres on chromosomes in accessible human tissue; 2. identify which nutrients and dietary patterns are essential for telomere length maintenance *in vivo*. This research will contribute to the discovery of biomarkers of health and disease and enhance prospects of indentifying which nutrients, dietary patterns and lifestyle factors are essential for telomere maintenance to maximise health outcomes.

## Professor Andrew Scholey

Brain Sciences Institute, Swinburne University



Andrew Scholey is a leading international researcher into the neurocognitive effects of natural products, supplements and food components, with over 100 peer-reviewed journal articles and book chapters. He is Professor of Brain and Behavioural Sciences at the Brain Sciences Institute (BSI), Swinburne University, Melbourne and is director of their Herbal and Nutritional Medicine Research Unit and co-director of the NICM Collaborative Centre for the Study of Natural Medicines and Neurocognition. In 1998, he established the Human Cognitive Neuroscience Unit at Northumbria University, UK and was the Unit's director until joining the BSI in 2007. Professor Scholey was also co-director of the UK's Medicinal Plant Research Centre and remains as honorary director of Neurocognitive trials. Andrew has been lead investigator in a series of landmark studies into the human biobehavioural effects of natural products, and their neurocognition-enhancing and anti-stress/anxiolytic properties. These include first-into-human, placebo-controlled trials evaluating *Panax ginseng*, *Panax quinquefolius*, *Melissa officinalis*, *Salvia officinalis*, *Salvia lavandulaefolia* and guaraná. These were sufficiently rigorous to merit publication in high impact mainstream psychopharmacology journals and have been widely cited. He has attracted millions of dollars in research funding, including as Chief Investigator on national competitive grants from the UK, Europe and Australia as well as from many industry bodies in Europe, North America, Asia and Australia.

## Dr Rosemary Stanton OAM

School of Medical Sciences (Visiting Fellow), University of New South Wales



Dr Rosemary Stanton OAM has been involved in public health nutrition, education and consumer issues relating to nutrition for 45 years. She is a Visiting Fellow in the School of Medical Sciences at the University of New South Wales and is involved with the Institute for Sustainable Futures at the University of Technology (Sydney) in their international work on sustainable use of resources in food production, the University of Adelaide's Food Futures program and is an invited member of the Scientific Committee for Doctors for the Environment. Rosemary has authored many scientific papers, 32 books on food and nutrition and writes for newspapers and magazines for the public and the medical profession. Her current interests focus on the interrelationships between healthy diets and environmental factors related to climate change

## Professor Peter Clifton

Baker IDI Heart and Diabetes Institute



Peter Clifton worked for CSIRO for 22 years before moving to Baker IDI in July 2009. He has a strong interest in obesity, type 2 DM, cardiovascular disease and hyperlipidemia. He is a physician looking after patients with these conditions and is co author of the CSIRO Total Well Being diet Books 1 and 2, The Healthy Heart Book and the CSIRO Baker IDI Diabetes Book.

## **Professor Nick Costa**

*School of Environmental Science, Murdoch University*



Nick Costa was appointed to the inaugural Chair in Sustainable Agriculture and Dean of the School of Environmental Science at Murdoch University in 2005. Professor Costa graduated with first class Honours in Agricultural Science in 1973 and PhD in 1977 from The University of Adelaide. Professor Costa has held appointments in biochemistry and nutrition at Murdoch University's School of Veterinary and Biomedical Science from 1977 - 2005. He was also Honorary Editor of the Nutrition Society of Australia (NSA) from 1989 - 1993 and Vice-President of the NSA from 1997-1999. He was the Australian representative on the International Parent Committee for Trace Elements in Man and Animals from 1992 - 2002. Since 2007, Professor Costa has been the Chair of Meat & Livestock Australia's National Environment Advisory Panel. He is the author or co-author of more than 130 scientific publications including 2 books on mineral metabolism in animals.

## **Professor Jonathan Hodgson**

*School of Medicine and Pharmacology, University of Western Australia*



Jonathan Hodgson is currently an NH&MRC Senior Research Fellow at University of Western Australia in the School of Medicine and Pharmacology. He has a range of research interests including understanding how dietary polyphenols can reduce the risk of cardiovascular disease, and investigating the effects of dietary macronutrients on measurements related to heart health. He has more than 80 peer-reviewed publications, many of which have direct relevance to strategies employed by the food industry for the development of functional "heart healthy" foods. Recent research has involved exploring the potential for grain legumes (pulses) to have positive effects on obesity, diabetes, blood pressure and other cardiovascular disease risk factors. Much of this research has involved conducting randomised controlled trials to exploring the potential health benefits of incorporating lupin flour into the diet. Lupin flour is a novel food ingredient rich in

protein and fibre which contains almost no starch. The lupin trials were conducted within the Centre for Food and Genomic Medicine, a Western Australian Government funded centre.

## **A/Professor Jon Buckley**

*Nutritional Physiology Research Centre, University of South Australia*



Jon Buckley is Director of the Nutritional Physiology Research Centre at the University of South Australia. His research addresses the effects of nutrition and exercise on cardiometabolic and mental health. His research findings have contributed to the development of patents for a number of new nutritional products and he has worked with government to influence nutrition policy in Australia to improve the health of the food supply. Jon also has an interest in nutrition and exercise strategies for improving the performance of elite athletes, and has been working with industry and the Institute of Sport to develop sports nutrition products that can improve athletic performance and to refine testing and training programs for some of Australia's best athletes.

## **Dr Peter Nichols**

*Food Futures Flagship, CSIRO Division of Marine and Atmospheric Research*



Peter D. Nichols is a senior principal research scientist and leads Omega-3 and Signature Lipids research projects at CSIRO Division of Marine and Atmospheric Research; Food Futures Flagship. He has 30 years experience in lipid (fats and oils) and other analyses of biological and environmental samples, and has worked towards the development of an Australian marine oils industry, and more recently in a cross-CSIRO project that is developing novel land plant sources of health-benefitting long-chain omega 3 oils. He has participated 3 expeditions to Antarctica and 9 research cruises, with 5 as cruise leader. He actively trains young scientists, with over 40 PhD and other students co-supervised. He has published 260 papers and prepared 400 reports for industry, government agencies and other clients. He received the AMSA Silver Jubilee Award in 2009, and was a co-recipient of the 2010 CSIRO Research Achievement Award (to the Omega 3 team).

## **Professor Peter Howe**

*Nutritional Physiology Research Centre, University of South Australia*



Peter Howe is a research Professor in the School of Health Sciences at the University of South Australia. Peter is a recognised authority on cardiovascular and metabolic health benefits of bioactive nutrients, in particular omega-3 fatty acids. A former scientist at CSIRO's Division of Human Nutrition in Adelaide, he built strategic alliances with the food industry to develop functional foods and contributed to regulatory policy development. He established the Smart Foods Centre at Wollongong University in 1999 and, since returning to Adelaide in 2002, the Nutritional Physiology Research Centre and the ATN Centre for Metabolic Fitness, aimed at optimising physical and mental health through diet and lifestyle. He is a Fellow of the Nutrition Society of Australia and Editor-in-Chief of the on-line journal *Nutrients*.

## **Professor Robert Scragg**

*School of Population Health, University of Auckland*



Robert Scragg is Head of the Section of Epidemiology & Biostatistics, at the School of Population Health, University of Auckland. He is a graduate of Adelaide Medical School and trained in epidemiology in the late 1970s at the CSIRO Division of Human Nutrition, in Adelaide, where he became interested in vitamin D and cardiovascular disease. Since then he has carried out studies in New Zealand showing that low vitamin D status is associated with an increased risk of both coronary heart disease and diabetes. He has recently been awarded funds by the Health Research Council of New Zealand for a large randomised trial to determine if vitamin D supplementation prevents against cardiovascular disease.

## **Professor Tony Worsley**

*School of Exercise and Nutrition Sciences, Deakin University*



Tony Worsley is Professor of Behavioural Nutrition at Deakin University. Until recently he was Professor of Public Health at the University of Wollongong, NSW. His earlier positions include: Senior Research Advisor at the Victorian Health Promotion Foundation, Professor of Public Health Nutrition and Head of the School of Exercise and Nutrition Sciences, Deakin University, Professor of Public Health, University of Adelaide, and Senior Principal Research and Scientist, Division of Human Nutrition, CSIRO, among others. He has been a member of the Australian Academy of Sciences' Nutrition Committee; Co-Executive Editor of *Appetite*, and the *International Journal of Behavioral Nutrition and Physical Activity*.

He has wide experience in the evaluation of public health nutrition programs, and in the promotion and maintenance of food behaviour change. He has published widely in scientific and professional journals. He has authored several books including *Nutrition Promotion*, *Public Health Nutrition* (with M Lawrence), *Food People and Health*, *The Food System*, *The Use and Abuse of Vitamins and the Body Owner's Manual*. Recent research projects include: The development of dietary approaches to stop hypertension; examination of the adoption of plant based foods by consumers and industry; consumers' attitudes towards children's foods at school, examination of public support for fruit and vegetable policies, and, baby boomers' future food and health needs.