



HE ORA TE WHAKAPIRI

Unleashing the potential
of New Zealand's life
course research

lifecourse.nz

National
SCIENCE
Challenges



Te Papa Tongarewa, Thursday, 18 October 2018

A Better Start – E Tipu e Rea

investing in the science to improve the potential for all tamariki to lead healthy and successful lives. **abetterstart.nz**



Healthier Lives – He Oranga Hauora

undertaking innovative research to reduce the burden of non-communicable diseases and achieve equitable health outcomes for all New Zealanders. **healthierlives.co.nz**



Ageing Well – Kia eke kairangi ki te taikaumātutanga

enabling all New Zealanders to reach their full potential into the later years of life **ageingwellchallenge.co.nz**



Funded by the Ministry of Business, Innovation and Employment

Tēnā koutou and welcome

‘He ora te whakapiri’ can be translated as ‘there is strength in unity’. We chose it as the conference title because life course research brings together researchers from diverse disciplines and also because this conference is the result of a partnership between the three health and wellbeing National Science Challenges: A Better Start, Healthier Lives and Ageing Well.

Each Challenge champions science to better support positive outcomes for New Zealanders from birth to their later years. He Ora te Whakapiri will explore how focussing across the life span can improve the outcomes from research, and ultimately the wellbeing of New Zealanders. Today you will hear case studies that exemplify how life course research has made a positive difference by identifying opportunities to prevent ill-health and support wellbeing at key stages of life. We also hope to generate a stronger understanding of how inter-generational and whānau ora approaches could benefit many communities.

We thank the Prime Minister’s Chief Science Advisor Professor Juliet Gerrard and the Children’s Commissioner Judge Andrew Becroft for taking leading roles and our presenters, but especially keynote speakers Professor Janeen Baxter and Professor Richie Poulton, for sharing their wisdom and expertise.

And we thank delegates for joining us in what will be a stimulating day of presentations and discussion, looking across the rich spectrum of life course research.

Ngā mihi nui



Professor Wayne Cutfield,
Director, A Better Start



Professor Jim Mann,
Director, Healthier Lives



Professor Dave Baxter,
Director, Ageing Well

He Ora te Whakapiri

Amokura Gallery, Te Papa Tongarewa,
85 Cable St, Wellington

8.30am **Registration**

Tea and coffee on arrival

8.45am **Mihi whakatau**

9.00am **Introduction**

Professor Wayne Cutfield, Director, A Better Start NSC

9.15am **Conference launch address**

Professor Juliet Gerrard, Prime Minister's Chief Science Adviser

9.30am **Conference keynote address**

Chair: Hilda Fa'asalele, Chief Advisor, Pacific Health, Ministry of Health

**Preventing Deep Disadvantage:
Insights from the Life Course Centre**

Professor Janeen Baxter

Professor Janeen Baxter is Professor of Sociology and Director of the Australian Research Council Centre of Excellence for Children and Families over the Life Course

10.30am Morning Tea (30mins)

11.00am

Big ideas: What we know and what we want to know

Chair: Professor Wayne Cutfield

The great divide: Mortality in Aotearoa

Professor Tony Blakely, Science leader, Healthier Lives, Department of Public Health, University of Otago

Tony Blakely is an epidemiologist. His research covers a range of topic areas intersecting with methodological advancements.

Modelling the future: Dynamic microsimulation

Dr Barry Milne, Lead researcher, A Better Start, Director of the Centre of Methods and Policy Application in the Social Science (COMPASS), University of Auckland.

Microsimulation allows ‘what-if’ scenarios to be tested in an artificial world that mimics the real world. A microsimulation model of the early life-course can test policy scenarios, with a particular focus on interventions for a healthy weight in children.

Improving ageing with Big Data

Dr Hamish Jamieson

Dr Hamish Jamieson has dual appointments as a Senior Lecturer with the University of Otago and a Geriatrician with the CDHB. His research spans both basic science and big data research in relation to ageing.

Session wrap

Professor Wayne Cutfield

12.30pm

Lunch

1.30pm

Conference keynote address

Chair: Judge Andrew Becroft, Children’s Commissioner

Staying ahead of the curve: lessons from the Dunedin Study

Professor Richie Poulton

Richie Poulton is the Director Dunedin Multidisciplinary Health and Research Unit and Co-Director National Centre of Life Course Research at the University of Otago, Dunedin.

2.15pm

Ka hao te rangatahi: Life course approaches in Aotearoa

Chair: Dr Moana Theodore

Dr Reremoana (Moana) Theodore (Ngā Puhī) is the Co-Director of the National Centre for Lifecourse Research. She is an inaugural HRC Māori Health Research Emerging Leader Fellow.

An interactive panel session examining key issues for a life course approach in Aotearoa/New Zealand. The panel will explore how Māori researchers undertake life course research, analyse longitudinal data, and apply a life course approach when working with families, whānau and community groups. The panel will discuss the opportunities and challenges of doing this work and why it is important for the future of Aotearoa

Dr Matire Harwood

Matire Harwood is a member of the Healthier Lives Science Leadership Team and principal investigator of the Healthier Lives project, *Mana Tū: A whānau ora approach to long term conditions*.

Mr Andrew Sporle

Andrew Sporle is a deputy director of the Healthier Lives National Science Challenge, as well as being a member of the Strategic Advisory Group for the Ageing Well Challenge and the Science Advisory Panel of the Better Start Challenge. He is a founding member of Te Mana Rauranga – the Māori data sovereignty network

Dr Will Edwards

Dr Will Edwards is a Director of Taumata Associates (a Māori public health and development consultancy) and Tuiora Ltd, a Taranaki-based health and social service provider. He sits on the Governance Group for Ageing Well.

Session wrap

Judge Andrew Becroft

3.45pm

Coffee break

4pm

The shape of things to come: What the future holds for New Zealand life course research

Chair: Professor Jim Mann

Longitudinal studies: Transforming ordinary into extraordinary

Assoc Professor Susan Morton

Susan Morton is an expert in life course epidemiology and has been the Director of the contemporary longitudinal study of NZ children and families *Growing Up in New Zealand* since its inception in 2005.

The counter-intuitive case for cardiovascular disease prevention in older rather than younger New Zealanders

Professor Rod Jackson

Professor Rod Jackson will argue that the likely benefits to be derived from investigating intra-uterine and early life determinants of cardiovascular disease (CVD) will be limited compared to the substantial and more immediate benefits likely from investigating how best to prevent CVD in late life.

Charting the life course of Pacific families: From early-life to adolescence and beyond

Dr El Shadan (Dan) Tautolo

Dan Tautolo will outline the benefits of a life course approach, using examples from the Pacific Islands Families Study, a longitudinal cohort study. He will discuss how future health and development research can benefit from a life course perspective.

5.15pm

Concluding remarks

NSC Challenge Directors: Wayne Cutfield, Jim Mann, Dave Baxter

5.30pm

Conference concludes

Keynote speakers



Janeen Baxter is Professor of Sociology and Director of the Australian Research Council Centre of Excellence for Children

and Families over the Life Course. She is also a Group Leader in the Institute for Social Science Research at The University of Queensland. Janeen has research interests in inequality, family, gender, child development and the life course and has published widely in these areas. She is currently leading the Evaluation of the Try, Test and Learn Fund for the Australian Government Department of Social Services. Janeen is an elected fellow of the Academy of Social Sciences in Australia, and a member of several government advisory committees and reference groups.



Richie Poulton is the Director Dunedin Multidisciplinary Health and Research Unit and Co-Director National Centre of Life Course

Research at the University of Otago, Dunedin. He was awarded a Personal Chair by the University of Otago in 2006 and in 2014, he was appointed part-time Chief Science Advisor to the NZ Ministry of Social Development. Richie has been listed in 2014 *World's Most Influential Scientific Minds*, Thomson-Reuters. Richie serves on many NZ government, public and academic statutory bodies, and is a consultant internationally.

Conference chairs



Juliet Gerrard is the Prime Minister's Chief Science Advisor, Kaitohutohu Mātanga Pūtaiao Matua ki te Pirimia, having taken up the role in July this

year. Prior to this she had a variety of governance roles, including as Chair of the Marsden Council and a Director of the New Zealand Institute of Plant & Food Research Limited. Her research interests as a biochemist have centred around protein science, both from a fundamental perspective and how these learnings might be translated into applications in material science, nanotechnology, food and health.



His Honour **Judge Andrew Becroft** is the Children's Commissioner. The Commissioner and his office have a statutory role to promote child-

centred thinking in government and non-government agencies, including advice about the UN Convention on the Rights of the Child. Children up to the age of 18 make up nearly a quarter of our population and yet, they often have little say in decisions and systems that affect them.



Hilda Fa'asalele is the Chief Advisor, Pacific Health for the Ministry of Health. Hilda has led Pacific health strategy at the Royal NZ Plunket

Society and at Auckland DHB.



Wayne Cutfield is the Director of A Better Start National Science Challenge and the Professor of Paediatric Endocrinology at the

Liggins Institute, University of Auckland. He is an expert on insulin sensitivity and action in children, and leads clinical research which shows how environmental influences early in life can affect childhood growth and development in ways that could lead to chronic conditions in adult life.



Jim Mann (CNZM) is an expert in human nutrition, diabetes and obesity and the Director of the Healthier Lives National Science Challenge. He

has been Professor in Human Nutrition and Medicine at the University of Otago and Consultant Physician (Endocrinology) in Dunedin Hospital for 25 years. He is Director of the WHO Collaborating Centre for Human Nutrition, the NZ-China Non-communicable Diseases Research Collaboration Centre, co-Director of the Edgar Diabetes and Obesity Research Centre and Principal Investigator for the Riddet Institute, a national Centre of Research Excellence.



Reremoana (Moana) Theodore (Ngā Puhī)

is the Co-Director of the National Centre for Lifecourse Research. She is an inaugural HRC Māori

Health Research Emerging Leader Fellow. Her fellowship work entitled Rangahau Ara Oranga uses life course research approaches that examine the impact of education on Māori health and wellbeing over time. She is an investigator in a number of longitudinal studies including Te Kura Mai i Tawhiti, Te Hao Nui, the Graduate Longitudinal Study New Zealand and the Dunedin Multidisciplinary Health and Development Study.



David Baxter is the Director of the Ageing Well National Science Challenge. His research

expertise is in the fields of rehabilitation, low back

pain, complementary and alternative medicine, as well as in laser medicine. David previously led the University of Otago's School of Physiotherapy as Dean (2010-2015), and was Director of the multidisciplinary Research Theme on Rehabilitation and Disability (2007-2011).

Presenters and panellists



Tony Blakely is an epidemiologist. Since 2010, he has directed the Burden of Disease Epidemiology, Equity and Cost-Effectiveness

Programme (BODE). This programme builds infrastructure (e.g. linked routine datasets) and capacity (e.g. epidemiological and economic decision modelling) to rapidly assess the health impact and cost effectiveness of a range of preventative and cancer control interventions – and examine their inequality impacts.



Dr Will Edwards is a Director of Taumata Associates (a Māori public health and development consultancy) and Tuiora

Ltd (a Taranaki based health and social service provider with over 40 services). He is a board member on a number of Taranaki community groups including Te Reo o Taranaki and Taranaki Futures and on the Governance Group for the Ageing Well National Science Challenge.



Matire Harwood is a member of the Healthier Lives Science Leadership Team and principal investigator of the Healthier Lives project,

Mana Tū: A whānau ora approach to long term conditions. Her background is in primary health care and Rangahau

hauora Māori. She is the Director for Tōmaiora, Māori Health Research, and Senior Lecturer at the Auckland Medical School; editor for the Māori Health Research Review; Clinical Advisor at National Hauora Coalition PHO, General Practitioner at Papakura Marae Health Clinic and is a member of the Board of Waitemata DHB.



Rod Jackson is Professor of epidemiology at the University of Auckland and Co-Principal Investigator of the Healthier Lives

research project looking at equitable risk prediction for cardiovascular disease (CVD) and diabetes. He is one of the architects of New Zealand risk-based clinical guidelines for managing CVD risk. His main research interest is the epidemiology of CVD, and his current research focus is on using web-based decision support tools linked to regional and national electronic health databases to implement, monitor and improve CVD risk management guidelines.



Hamish Jamieson has dual appointments as a Senior Lecturer with the University of Otago and a Geriatrician with the Capital Coast DHB. His

research spans basic science and big data research in relation to ageing. He has established a research programme based around New Zealand's world

leading dataset for older people – the international Residential Assessment Instrument (interRAI) - with the aim of deriving clinically useful information to predict a range of age-related conditions.



Barry Milne is Director of the Centre of Methods and Policy Application in the Social Sciences (COMPASS) at the University of Auckland.

He leads a team investigating the life-course development of health and social outcomes using the Integrated Data Infrastructure (IDI). Barry has also developed a micro-simulation model exploring the impact of modifiable factors on child outcomes.



Andrew Sporle is a social epidemiologist based part-time in the Statistics Department at the University of Auckland. He is a deputy

director of the Healthier Lives National Science Challenge, a member of the Strategic Advisory Group for Ageing Well and the Science Advisory Panel of the Better Start challenge. He also serves on the executive of the Virtual Health Information Network and is a founding member of Te Mana Rauranga – the Māori data sovereignty network.



Assoc Professor Susan Morton is an expert in life course epidemiology and a specialist in Public Health Medicine. She is the Director of the

University of Auckland cross-faculty Centre for Longitudinal Research – He Aka ki Mua, and has been the Director (PI) of the contemporary longitudinal study of NZ children and families (Growing Up in New Zealand) since its inception in 2005. Her team engages with 16 government agencies to provide evidence to inform cross-sectoral policies to improve population wellbeing and solutions to reduce inequities in life course outcomes.



El Shadan (Dan) Tautolo is a Senior Research Fellow at Auckland University of Technology and the Director of the Centre for Pacific Health

and Development Research and Pacific Islands Families Study. El Shadan Tautolo is of Cook Islands Maori and Samoan heritage, and is deeply passionate about being involved in research and activities to improve and enhance the health and wellbeing of Pacific communities in New Zealand.

