



The **PATH Through Life** Project

Being undertaken by the Centre for Research on Ageing Health and Wellbeing (CRAHW)

“Science to improve mental health and wellbeing across the lifespan”

2015 Newsletter

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You can now **update your contact details** via our website at <http://crahw.anu.edu.au/change-address>

We have moved! The Centre for Research on Ageing, Health and Wellbeing has finally moved into a new building that we can call our home. We are now located at Wing B, Florey Building 54, Mills Rd, which was formerly part of the John Curtin School of Medical Research. Built in 1957, the building has been beautifully refurbished while retaining original features.



Progress and events in 2015

Earlier this year we completed the interviewing of our 60+ cohort, concluding the fourth ‘Wave’ of the study. We have interviewed 1644 participants from our 60+ age group, bringing the total number of participants across all three age groups, interviewed at the fourth wave to 4736. This is 63% of the original group interviewed at the first wave in 1999-2001. We would like to thank all of you for completing the PATH interview and various substudies involved.

PATH 20+ cohort funding for Wave 5!

Associate Professor Peter Butterworth, a chief researcher on the PATH Project, has successfully led a team of researchers in obtaining a NHMRC project grant. This project grant will extend the study into the fifth wave of interviews for the **20+ cohort** that will start in **2016 / 2017**, and aims to understand the patterns of anxiety and depression from early to mid-adulthood and identify the personal, social and economic consequences. Other chief investigators include Professor Kaarin Anstey, Associate Professor Nicolas Cherbuin, Associate Professor Rebecca McKetin, Dr Richard Burns and Dr Liana Leach.

More funding for researchers

In the months of October and November, the National Health and Medical Research Council (NHMRC) announced the outcomes of research funding. Professor Kaarin Anstey, the Chief Investigator on the PATH Project was awarded NHMRC Principal Research Fellowship. Professor Anstey has also successfully led a team of researchers in winning \$2.5 million in the latest NHMRC funding round to host a new Centre of Research Excellence on Cognitive Health at the ANU. Information from PATH will be used to develop programs to improve cognitive health in the community.

Dr Moyra Mortby was awarded the NHMRC-ARC Research Development Dementia Fellowship, and is the only ACT recipient to have received funding from the Federal Government's \$43 million fund for dementia research development. Dr Mortby undertakes research on data from the PATH MRI and informant substudy conducted with the 60+ cohort.

Some Recent Research Highlights

Examining the mental health correlates of bullying and ill-treatment at work – Researchers Peter Butterworth, Liana Leach and Kim Kiely analysed data from the 40+ cohort to investigate the prevalence of workplace bullying, and its association with depression and anxiety. The research showed that 7% of respondents in PATH were currently being bullied at work, and in total, 46.4% of respondents reported that they had been bullied at some point in their working life. Workplace bullying was significantly associated with 2-3 times greater odds of depression and anxiety for those currently bullied, even after accounting for other risk factors within and outside of the workplace. The research shows that more needs to be done in the Australian context to identify effective interventions to reduce workplace bullying and the associated negative impacts on mental health.

The effect of Health Behavior Change on Self-Rated Health Across the Adult Life Course: A Longitudinal Cohort Study – Dr Kerry Sargent-Cox and Professor Kaarin Anstey examined the association between self-rated health (SRH) and health behaviors in three cohorts over an 8-year period to understand possible age and gender effects on SRH evaluations. They found that SRH became poorer over time across the sample, and sedentary males in their 20s have steeper decline than females. Self-rated health was found to be better on average for non-smokers, exercisers, and moderate drinker, and increasing physical activity protects SRH decline across age-groups. These findings highlight the benefits of positive health behaviors, particularly performing regular physical activity over time, for reducing the risk of subjective health becoming poorer across the adult life course and improving the process of healthy aging.

Visitors and PhD Students

Ross Andel, a Visiting Fellow at CRAHW, received his Ph.D. in Gerontology from the University of Southern California in Los Angeles in 2003. He is an Associate Professor in the School of Aging Studies at the University of South Florida, and is affiliated with the USF Health Byrd Alzheimer's Institute, the International Clinical Research Center at the St. Anne's University Hospital in Brno, Czech Republic (Senior Scientist), and the 2nd Medical Faculty of Charles University in Prague, Czech Republic (Visiting Professor). He is currently undertaking research with PATH data to examine work environment (e.g., work stress, complexity of work,) in relation to cognitive aging. Ross is also mentoring a number of PhD students in how to analyse longitudinal data.



Lara Morris, a PATH PhD student, is studying whether the experience of childhood adversities increases the number of lifestyle risk factors for chronic disease in later life and if so, is this independent of later life socioeconomic, behavioural and psychosocial factors. Preliminary results suggest persons who experienced a greater number of adverse childhood experiences are more likely to have a greater number of lifestyle risk factors for chronic disease in adulthood, even after accounting for gender, age, relationship status, education and household income. Modelling estimates conducted on the 20s cohort found that 11% of the prevalence of smoking is related to high levels of adverse childhood experiences. While causality cannot be established in this study and the impact of childhood adversity on the number of lifestyle risk factors appears to be more pronounced among the younger cohorts, results highlight the continued impact of childhood adversity across the lifespan.

Collaborations

The Cohort Studies of Memory in an International Consortium (COSMIC) (<http://cheba.unsw.edu.au/group/cosmic>) COSMIC aims to bring together cohort studies of cognitive ageing internationally in order to facilitate a better understanding of the determinants of cognitive ageing and neurocognitive disorders. The two main objectives of this project are to

1. Harmonise shared, non-identifiable data from cohort studies that longitudinally examine change in cognitive function and the development of dementia in older individuals (60+ years).
2. Perform joint or mega-analyses using combined, harmonised data sets that yield collated results with enhanced statistical power, in addition to comparisons across geographical regions.

Some average results from Wave 4 (Wave 3 results in brackets)

20+ age group

	Men		Women	
Blood pressure	134 / 79 (131 / 76)		119 / 76 (116 / 73)	
Pulse	71 (68)		75 (72)	
Handgrip	52 (52)		30 (31)	
Height	FEV*	FVC**	FEV	FVC
Less than 160 cms	-	-	2.8 (2.8)	3.3 (3.2)
160-169 cms	3.8 (3.5)	4.4 (4.2)	3.0 (3.0)	3.6 (3.5)
170-179 cms	4.2 (4.1)	4.9 (4.7)	3.3 (3.3)	4.0 (3.9)
180-189 cms	4.5 (4.4)	5.4 (5.2)	3.7 (3.7)	4.4 (4.2)
190cms or taller	4.8 (4.8)	5.9 (5.7)	-	-

40+ age group

	Men		Women	
Blood pressure	134 / 82 (135 / 83)		126 / 78 (128 / 79)	
Pulse	71 (70)		72 (71)	
Handgrip	47 (48)		28 (28)	
Height	FEV*	FVC**	FEV	FVC
Less than 160 cms	3.1 (3.2)	3.8 (3.9)	2.3 (2.3)	2.7 (2.8)
160-169 cms	3.1 (3.1)	3.8 (3.8)	2.5 (2.6)	3.1 (3.2)
170-179 cms	3.4 (3.5)	4.2 (4.2)	2.8 (2.9)	3.5 (3.5)
180-189 cms	3.7 (3.8)	4.6 (4.7)	3.0 (3.1)	3.8 (3.7)
190cms or taller	4.2 (4.2)	5.4 (5.2)	-	-

60+ age group

	Men		Women	
Blood pressure	141 / 76 (147 / 81)		140 / 74 (144 / 78)	
Pulse	65 (67)		69 (71)	
Handgrip	36 (40)		22 (22)	
Height	FEV*	FVC**	FEV	FVC
Less than 160 cms	2.6 (2.1)	3.0 (2.7)	1.6 (1.8)	2.1 (2.3)
160-169 cms	2.3 (2.5)	3.0 (3.2)	1.8 (2.0)	2.4 (2.5)
170-179 cms	2.6 (2.7)	3.3 (3.5)	2.0 (2.1)	2.6 (2.7)
180-189 cms	2.8 (3.0)	3.7 (3.9)	2.3 (2.5)	3.0 (3.1)
190cms or taller	3.0 (3.2)	4.1 (4.3)	-	-

*FEV: Forced expired volume in 1 second (litres) ** FVC: Full lung volume (litres) - volume of air that can forcibly be blown out after full inspiration

60+ Cohort, Fourth Wave - Exercise, Energy, Expenditure and Healthy Ageing Substudy

	Females	Males
Total energy expenditure (kJ)	8462 ± 1709	10728 ± 1653
Physical Activity		
Steps per day	4566 ± 2263	5500 ± 2568
Moderate to Vigorous Physical Activity (MVPA) (minutes)	49 ± 82	73 ± 55
MVPA recommendation met (≥ 30 mins; days)	3.0 ± 2.4	4.6 ± 2.0
Sedentary behaviour		
Sedentary time per day (min)	666 ± 107	638 ± 82
Length sedentary time (min)	24.7 ± 14.6	19.4 ± 5.0
Sleep		
Sleep time per day (min)	428 ± 64	426 ± 63

Participant characteristics in which 182 individuals (76 females, 106 males) provided useable SenseWear Armband™ data. Mean wear-time was 6.8 ± 0.5 days.

	Females	Males
Age (y)	75 ± 1	76 ± 1
Height (cm)	160.9 ± 7.1	173.0 ± 7.3
Mass (kg)	71.6 ± 12.2	84.8 ± 14.8
BMI (kg.m⁻²)	27.6 ± 4.1	28.3 ± 4.6
Overweight or obese (BMI ≥ 25)	67.9 %	76.1 %



Professor Kaarin Anstey



Associate Professor
Peter Butterworth



Professor
Simon Easteal



Associate Professor
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Associate Professor
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Dr Liana Leach



Dr Richard Burns