CEPAR INTERNATIONAL CONFERENCE

POPULATION AGEING:

CAUSES, CONSEQUENCES AND RESPONSES

Hosted by the ARC Centre of Excellence in Population Ageing Research (CEPAR)

3-5 July 2023, John Niland Scientia Building, UNSW Sydney

Enquiries: cepar@unsw.edu.au | +61 2 9931 9202 | cepar.edu.au

The **CEPAR INTERNATIONAL CONFERENCE** is hosted by the ARC Centre of Excellence in Population Ageing Research (CEPAR) on 3-5 July 2023 at the University of New South Wales (UNSW Sydney).

Themed *'Population Ageing: Causes, Consequences and Responses'*, the 3-day conference provides a unique platform for multidisciplinary discussions and insights into the challenges and opportunities presented by one of the major economic and social challenges of the 21st century. Leading experts, researchers, policymakers, and industry professionals share the latest research and policy and industry perspectives on the dynamics of an ageing demographic.

KEY CONFERENCE PROGRAM HIGHLIGHTS include:

- **Four keynote presentations** on various aspects of population ageing from the following international experts:
    - 'The Role of Private and Public Transfers to Sustain the Generational Economy: An Application of National Transfer Accounts (NTA) in an Ageing Europe', presented by Alexia Fürnkranz-Prskawetz (Vienna University of Technology, Austrian Academy of Sciences)
    - 'Financial Decision Making in Older Age', presented by Duke Han (University of Southern California)
    - 'Is Retirement a Curse or a Blessing? Work and Retirement Pathways Matter', presented by Mo Wang (University of Florida)
    - 'To Have or Not to Have Long-Term Care Insurance: The Economic Evidence', presented by Norma Coe (University of Pennsylvania)

- **Three interactive panel sessions featuring experts drawn from academe, government, industry, the community:**
    - Migration policy for Australia in the context of population ageing;
    - Macroeconomic risk and demographic change; and
    - Feminising and ageing workforce and the implications for research, policy and practice

- **A number of concurrent sessions** featuring over 60 papers on population ageing research from around the world

- **Networking opportunities** for participants to engage with fellow researchers, policymakers, and professionals

Add the tag #**ceparConference** to content posted on **social media** relating to the CEPAR International Conference, and tag CEPAR:
- **Twitter**: @CEPAR_research
- **LinkedIn**: linkedin.com/school/cepar-research

PROGRAM

To view the program online:

- scan the QR code with your phone camera

- or visit the conference website via your web browser at

cepar.edu.au/cepar-international-conference-2023

SCIENTIFIC ADVISORY CONFERENCE COMMITTEE:

Chair: Hazel Bateman, CEPAR, UNSW Business School

Kaarin Anstey, CEPAR, UNSW Science

Marian Baird, CEPAR, The University of Sydney

Saman Khalatbari-Soltani, CEPAR, The University of Sydney

Larry Weifeng Liu, CEPAR, ANU

Peter McDonald, CEPAR, The University of Melbourne

Timothy Neal, CEPAR, UNSW Business School

Sharon Parker, CEPAR, Curtin University

Michael Sherris, CEPAR, UNSW Business School

Alan Woodland, CEPAR, UNSW Business School

CONFERENCE VENUE

The conference is being held in the John Niland Scientia Building at the UNSW Kensington campus in Sydney.

Conference venue address:
John Niland Scientia Building
University New South Wales
Library Walk, UNSW Kensington Campus
Kensington, New South Wales, Australia, 2052

- **Panel and keynotes sessions** take place in the Leighton Hall.
- **Concurrent oral and poster presentation sessions** take place in Galleries 1 and 2, the Gonski Room, and/or the Leighton Hall.
- **The registration desk** is located in the Foyer of the John Niland Scientia Building, and is open in the mornings on all three days, as well as in the afternoon tea breaks.

CONFERENCE DINNER

The Conference Dinner is being held at The Lounge, UNSW Sydney, on 4 July 2023 from 5.30-8pm:

Conference Dinner Address:
Level 11, Library Building F21, UNSW Kensington Campus
Entry from rear of the building; take the lift to level 11

DIETARY REQUIREMENTS

During lunch, tea breaks, and dinner, please check for labels to match dietary requirements or ask a catering staff member.

VISITOR SAFETY INFORMATION

The health and safety of conference patrons is our top priority, and this event will abide by the Public Health Order and university guidance prevailing at the time. Please follow the conditions of entry. For the latest Coronavirus (Covid-19) update, please visit the UNSW website at https://www.covid-19.unsw.edu.au.

- The current university guidance is that it is strongly encouraged to wear masks in indoor settings on campus when not presenting or delivering content to a group and/or eating/drinking.
- Keep a safe distance from others and if you can't, the university recommends that you wear a good quality mask – N95, P2 or surgical mask.
- Wash or sanitise your hands regularly.

DIRECTIONS

Public Transport - The UNSW Kensington Campus is easily accessible via public transport. Call the Transport Infoline on 131 500 or visit transportnsw.info.

To travel on trains, buses and ferry services in Sydney, NSW, you will need an Opal card or contactless enabled credit or debit card. For further information visit opal.com.au.

Paid casual and visitor **parking** is offered via the CellOPark App and 'pay by plate meters' at various locations. Parking is free after 7.30 pm weekdays and on weekends and public holidays. Further information is available at www.estate.unsw.edu.au/getting-here/parking-campus.

There are two major carparks on UNSW Kensington Campus:

- Barker Street Carpark – Entry via Gate 14, Barker Street.
- Botany Street Carpark – Enter via Gate 11, Botany Street.

UNSW can be accessed by **taxis or ride-sharing apps**, with High Street and Anzac Parade attracting the greatest number of passing taxis.

INTERNET ACCESS

Visitors can access Wi-Fi across all UNSW campuses by connecting to the UNSW Guest Network.
Please note, Guest Wi-Fi is not intended for existing staff or students and will not allow access to UNSW internal systems. If you are an existing UNSW staff or student, please use the Wi-Fi for Staff and Students service.
In order to connect to the guest wi-fi network please follow the steps below:
Step 1 - Navigate to Wi-Fi settings and connect to the **'UNSW Guest' Network.**
Step 2 - You will be redirected to a registration screen and be asked to provide your name and e-mail details. You will also need to accept the T&Cs and Privacy Statement before proceeding.
For further information, please visit www.myit.unsw.edu.au/services/guests/wi-fi-guests or contact the IT Service Centre at (02)9385 1333 or ITServiceCentre@unsw.edu.au.

MEDIA

Media representatives may attend sessions.

ASSISTANCE

If you require on-site assistance at the conference:
- see a CEPAR staff member; or
- call +61 2 9385 7359; or
- email cepar@unsw.edu.au

INFORMATION FOR ORAL PRESENTERS IN CONCURRENT SESSIONS

Please check the program for your session details, date and time of your presentation well in advance.

- Please arrive at least 15-30 minutes prior to your session to meet with your session chairperson and familiarise yourself with the venue room.
- Check / upload your PowerPoint/PDF slides onto the lecture computer (onto the Desktop) in the session room and make sure that your file runs appropriately.
- Your session chairperson will briefly introduce you to the audience before your presentation starts.
- Your presentation talk will be 20 minutes, plus 10 minutes Q&A. Please check the order of presentations in the program: https://cepar.edu.au/cepar-international-conference-2023
- After each presentation, the session chair will facilitate the Q&A (10 min each)
- Session chairs will keep to these timings, so please prepare your presentations accordingly.

INFORMATION FOR POSTER PRESENTERS

Please check the program for your session details, date and time of your presentation well in advance.

- Bring your printed poster, and any printouts you may wish to bring with you, and put it up between 8.00 – 8.45 am on Day 1, i.e. before the formal program commences. CEPAR staff will be on hand at the venue to assist you.
- Velcro and pins for the poster boards will be supplied on the day.
- As a poster presenter you are responsible for your own material and the set up and pack down of your poster.
- The poster presentation session will be held on the first day of the conference (3 July) from 5.00-5.30pm for 30 minutes.
- During this time, you will need to stand next to your poster and all of the conference participants will be able to walk around and view the various posters on display.
- During this time you can engage in conversation about your poster with the participants. They may ask you questions about your research, about your methods and findings and about the content of the poster. At times you may have a small group of people gathered and at other times it may just be you and one other participant.
- This is an interactive poster session and you will be required to stay with your poster during this time so that you can interact with conference participants.

PROGRAM
3-5 July 2023, John Niland Scientia Building, UNSW Sydney, Australia
cepar.edu.au/cepar-international-conference-2023

DAY 1 (AEST)	3 JULY 2023			John Niland Scientia Building
8:00 - 9:00am	**Arrival & Registration** (tea and coffee available) The registration desk will also be open during afternoon tea breaks on Day 1 and Day 2, to accommodate those arriving for the afternoon panel sessions.			Foyer
9:00 - 9:30am	**Opening Remarks** • Scientia Professor John Piggott, CEPAR Director, UNSW Sydney • Professor Anika Gauja, Executive Director: Social, Behavioural and Economic Sciences, Australian Research Council • Professor Nicholas Fisk, Deputy Vice-Chancellor (Research), UNSW Sydney • Professor Tom Calma, Senior Australian of the Year 2023, Chancellor, University of Canberra			Leighton Hall
9:30 - 10:30am	**KEYNOTE 1: The Role of Private and Public Transfers to Sustain the Generational Economy: An Application of National Transfer Accounts (NTA) in an Ageing Europe** **Alexia Fürnkranz-Prskawetz** (Vienna University of Technology, Austrian Academy of Sciences) Chair: John Piggott (CEPAR, UNSW Sydney)			Leighton Hall
10:30 - 11:00am	**Morning Tea**			Foyer
11:00am - 12:30pm	**CONCURRENT SESSION 1**			
	Leighton Hall	Gallery 1	Gallery 2	Gonski Room
	Session 1A: **Intergenerational Aspects of Ageing** Chair: Jeromey Temple (CEPAR, University of Melbourne)	**Session 1B:** **Pension Systems in Asia** Chair: Philip O'Keefe (CEPAR, UNSW Sydney)	**Session 1C:** **Ageing and Mental Disorders** Chair: Robert Cumming (CEPAR)	**Session 1D:** **Attitudes to Older Workers** Chair: Saman Khalatbari-Soltani (CEPAR, University of Sydney)

11:00 - 11:30am	**Children's Education as a Predictor of Parents' Successful Ageing: Evidence from India** Akif Mustafa (International Institute for Population Sciences (IIPS))	**The Earned Income Tax Credit and the Tax-Benefit Link of Public Pensions** Dongmin Chun (Seoul National University)	**Comparing Apples with Oranges: Demonstrating the Challenges of Using Symptom Screens to Accurately Estimate Population Prevalence of Common Mental Disorders in the Ageing in Rural Indonesia Study** Aliza Hunt (Australian National University, University of Sydney)	**Exploring the Role of Fact-Based Information, or Imagined Intergenerational Teamwork to Improve Attitudes to Older Workers: An Online Psychological Intervention** Natasha Ginnivan (CEPAR, Neuroscience Australia (NeuRA), School of Psychology, Ageing Futures Institute, Australian Human Rights Institute, UNSW Sydney)
11:30am - 12:00pm	**Change in Care Provided to Grandchildren by Older Adults in Rural China: Associations with Shifting Demographics in the 21st Century** Merril Silverstein (Syracuse University)	**Informality and Pension Reform in Emerging Asia: A Life-Cycle Model Analysis for Ageing Vietnam** Huyen Hoang (CEPAR, UNSW Sydney)	**Childhood Adversity is Associated with Anxiety and Depression in Older Adults: A Cumulative Risk and Latent Class Analysis** James Lian (CEPAR, NeuRA, UNSW Sydney, and Department of Psychology, University of California)	**Determinants of Ageism Among Young Adults: A Cross-Cultural Investigation** Yvonne Leung (CEPAR, NeuRA, UNSW Sydney)
12:00 - 12:30pm	**Children's Education and Parents' Health Care Utilization in the Philippines** Jeofrey Abalos (National University of Singapore)	**Do Workers in Indonesia Become Retirement Insurance Members? A Sociodemographic Analysis Using The 2019 Labour Force Survey** Yulinda Nurul Aini (Research Center for Population, Indonesian National Research and Innovation Agency (BRIN))	**Aggregate Social Factors, Genetic Predispositions, and Lifestyle with Risk of Dementia: A Long-Term Cohort Study** Shu Chen (CEPAR, UNSW Sydney)	**Does Organisational Branding Impact Whether Mature Workers Self-Select out of the Job Application Process?** Serena Wee (CEPAR, University of Western Australia)
12:30 - 1:30pm	**Lunch**			Foyer
1:30 - 2:30pm	**KEYNOTE 2: Financial Decision Making in Older Age** **Duke Han** (University of Southern California) Chair: Kaarin Anstey (CEPAR, UNSW Sydney)			Leighton Hall
2:30 – 2:40	Short break			

2:40 - 3:40pm	**CONCURRENT SESSION 2**			
	Leighton Hall	Gallery 1	Gallery 2	
	Session 2A: Migration and Ageing Chair: Tom Wilson (CEPAR, University of Melbourne)	**Session 2B: Disability and Capacity in Later Life** Chair: Craig Sinclair (CEPAR, UNSW Sydney)	**Session 2C: Caring and Work** Chair: Natasha Ginnivan (CEPAR, UNSW Sydney)	
2:40 - 3:10pm	**Inequalities in Disability-Free Life Expectancy Between Migrant and Non-Migrant Populations in Australia** Mitiku Hambisa (CEPAR, NeuRA, UNSW Sydney)	**Inequalities in Disability-Free and Disabling Multimorbid Life Expectancy in Costa Rica, Mexico and the United States** Anastasia Lam (Max Planck Institute for Demographic Research, School of Geography and Sustainable Development, University of St Andrews)	**Understanding the Drivers and Outcomes of Carer Recognition among Working Carers of Ageing Relatives** Myra Hamilton (CEPAR, University of Sydney)	
3:10 - 3:40pm	**Understanding the Role of International Migration and Changing Religious Affiliation on Aged Care: Preparing for the Future** Jeromey Temple (CEPAR, University of Melbourne, Curtin University)	**70 Really is the New 60: Cohort Trends in Intrinsic Capacity in England and China** Katja Hanewald (CEPAR, School of Risk & Actuarial Studies, UNSW Sydney)	**Career Lifecycle Planning and the Impact on Employee Wellbeing and Residential Aged Care Organisations** Jennifer Pollock (Faculty of Health, Engineering and Sciences, University of Southern Queensland)	
3:40 - 4:00pm	**Afternoon Tea** The registration desk is open during the afternoon tea break, to accommodate those arriving for the panel session.			Foyer

4:00 - 5:00pm	**PANEL 1: Migration Policy for Australia in the Context of Population Ageing**	Leighton Hall
	Introductory remarks: Alan Woodland (CEPAR, UNSW Sydney)	
	Chair: Peter McDonald (CEPAR, University of Melbourne) Panellists: • Abul Rizvi (former Deputy Secretary of the Department of Immigration) • Liz Ritchie (CEO, Regional Australia Institute) • Trent Wiltshire (Immigration and Housing Expert, The Grattan Institute)	
5:00 - 5:30pm	**POSTER VIEWING** Chair: Alan Woodland (CEPAR, UNSW Sydney)	Leighton Hall

Poster No.	Title	Presenter	Affiliation
1	Are Older Colleagues More Trustable? The Interactive Effect of Employee Relational Age and Voice Behaviour on Coworker Trust and Task Performance	Sanjeewa Perera	University of South Australia
2	Forgotten in Crisis: Aged Care and COVID-19	Carolyn Morgan	University of New England
3	The Implicit Measure of Ageism: Eye-Tracking	Kimberly Min Xi Man	School of Psychology, University of Nottingham Malaysia
4	Financial Protection in Health for the Geriatric Population: Indian Context	Maya Vimal Pandey	Centre for Research Studies, Birla Institute of Management Technology
5	Intergenerational Caregiving in India: Evidence on its Impact and Implications for Caregivers	Sruthi Anilkumar Hemalatha	International Institute for Population Sciences
6	Social Ties and the Prevalence of Multimorbidity among the Elderly Population in Selected States of India	Sree Sanyal	Jawaharlal Nehru University
7	Fortune or Misfortune: Farming Population Aging and the Development of Agricultural Mechanization Services in China	Xinjie Shi	College of Public Affairs, Zhejiang University
8	Potential of Intergenerational Practices in Achieving Successful Ageing in Australia: A Literature Review	Yixuan Huang	Social Policy Research Centre, UNSW Sydney
9	Identifying Access Barriers to Care and Unmet Needs in Community-dwelling Older Australians	Yuchen Xie	CEPAR, NeuRA, School of Psychology, Ageing Futures Institute, UNSW Sydney

5:30 - 6:30pm	**Networking Reception** Welcome Remarks: Warwick McKibbin (CEPAR, CAMA, Australian National University)	Foyer

DAY 2 (AEST)	4 JULY 2023			John Niland Scientia Building
8:30 - 9:00am	**Arrival & Registration** (tea and coffee available) The registration desk will also be open during the afternoon tea break, to accommodate those arriving for the afternoon panel session.			Foyer
9:00 - 10:00am	**Opening remarks** Hazel Bateman (CEPAR, UNSW Sydney)			Leighton Hall
	KEYNOTE 3: Is Retirement a Curse or a Blessing? Work and Retirement Pathways Matter **Mo Wang** (University of Florida) Chair: Hazel Bateman (CEPAR, UNSW Sydney)			Leighton Hall
10:00 - 10:30am	**Morning Tea**			Foyer
10:30am - 12:00pm	**CONCURRENT SESSION 3**			
	Leighton Hall	Gallery 1	Gallery 2	Gonski Room
	Session 3A: **Long-Term Care Prevalence and Funding** Chair: Anthony Asher (UNSW Sydney)	**Session 3B:** **Age Diversity in the Workforce** Chair: Rafal Chomik (CEPAR, UNSW Sydney)	**Session 3C:** **Drivers of Population Ageing** Chair: Shu Chen (CEPAR, UNSW Sydney)	**Session 3D:** **Financial Decision Making** Chair: Gaoyun Sophie Yan (CEPAR, UNSW Sydney)
10:30 - 11:00am	**Air Pollution and Long-Term Care Burden: Evidence from China** Cheng Wan (CEPAR, ETH Zürich)	**Preventing a Knowledge Vortex from the Mature Workforce: Negative Effects of Age Discrimination on Older Employees' Knowledge Sharing** Fangfang Zhang (CEPAR, Centre for Transformative Work Design, Curtin University)	**Decomposing the Drivers of Population Ageing** Tabitha Thomas (Australian National University)	**Diverse Effects of Recurrent Communication Boosts and Nudges on Retirement Savings** Victoria Hoang (CEPAR, University of Sydney)

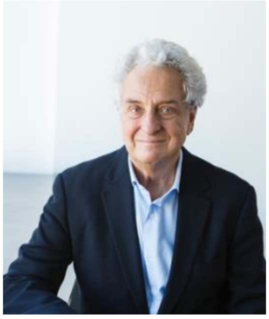
11:00 - 11:30am	**Pricing Long-Term Care Insurance for Healthy or Chronically Ill Australians** Kyu Park (CEPAR, UNSW Sydney)	**Organisational Meta-Strategies for an Age-Diverse Workforce: Scale Development and Test of Model** Jane Chong (CEPAR, Future of Work Institute, Curtin University)	**Projections of Population with Long-Term Health Conditions at the Local Area Scale in Australia** Tom Wilson (CEPAR, University of Melbourne)	**Feeling Comfortable with a Mortgage: The Impact of Framing, Financial Literacy and Advice** Susan Thorp (CEPAR, University of Sydney)
11:30am – 12:00pm	**Regional Variation in Lifetime Probability of Admission to Residential Aged Care in Australia** Mark Cooper-Stanbury (CEPAR, University of Melbourne)	**Older Workers' Safety in the Workplace** Isabella Caddy (Safe Work Australia)	**National Population Growth Rate, its Components, and Subnational Contributions** Vladimir Canudas-Romo (School of Demography, Australian National University)	**Home Equity Release Strategies in a Two-Generation Model** Katja Hanewald (CEPAR, School of Risk & Actuarial Studies, UNSW Sydney)
12:00 - 1:15pm	**Lunch**			Foyer
1:15 - 2:15pm	**KEYNOTE 4: To Have or Not to Have Long-Term Care Insurance: The Economic Evidence** **Norma Coe** (University of Pennsylvania) Chair: Michael Sherris (CEPAR, UNSW Sydney)			Leighton Hall
2:15 – 2:30pm	Short break			
2:30 - 3:30pm	**CONCURRENT SESSION 4**			
	Leighton Hall	Gallery 1	Gallery 2	Gonski Room
	Session 4A: **Inequalities in Healthy Life Expectancy** Chair: Anthony Asher (UNSW Sydney)	**Session 4B:** **Time Use and Wellbeing** Chair: Fangfang Zhang (CEPAR, Curtin University)	**Session 4C:** **Disability and Multimorbidity** Chair: Kyu Park (CEPAR, UNSW Sydney)	**Session 4D:** **Issues in Old Age Support** Chair: Cheng Wan (CEPAR, ETH Zürich)

2:30 - 3:00pm	**A Growing Divide: Trends in Social Inequalities in Healthy Longevity in Australia, 2001-2020** Collin Payne (CEPAR, School of Demography, Australian National University, Harvard Center for Population and Development Studies)	**Socio-Economic Determinants of Time Use of Older Population in India** Harchand Ram (International Institute for Population Sciences)	**Cohort Differences in Functional Limitation Trajectories after Age 50 in Indonesia: Findings from a 21-Year Longitudinal Study** Nur Cahyadi (CEPAR, Australian National University)	**Fertility and Human Capital Investment in Developing Countries: The Role of Intergenerational Old-Age Support Norm** Trang Le (CEPAR, UNSW Sydney)
3:00 - 3:30pm	**Trends in Health Expectancy Inequality in Australia: Is Morbidity Expanding or Compressing Uniformly?** Rafal Chomik (CEPAR, UNSW Sydney)	**Lifelong Learning and the Subjective Wellbeing of Older Adults in Singapore** Zheng Fang (Singapore University of Social Sciences)	**Childhood Socio-Economic and Behavioural Impacts on Multimorbidity in Older Adults in India: A Life Course Perspective** Bandita Boro (Centre for the Study of Regional Development, Jawaharlal Nehru University)	**Economics of Long-term Care Policy: Funding and Labour Force Participation** Bei Lu (CEPAR, UNSW Sydney)
3:30 - 4:00pm	**Afternoon Tea** (the registration desk is open during the afternoon tea break)			Foyer
4:00 - 5:00pm	**PANEL 2: Macroeconomic Risk and Demographic Change**			Leighton Hall
	Introductory remarks: Fiona Blyth (CEPAR, The University of Sydney)			
	<u>Chair:</u> Mike Keane (CEPAR, UNSW Sydney) <u>Panellists:</u> • Ayhan Kose (Vice President, World Bank) • Adam Triggs (Partner, Mandala, Non-resident Fellow, Brookings Institution and the ANU Crawford School) • Warwick McKibbin (CEPAR Chief Investigator, Centre for Applied Macroeconomic Analysis (CAMA), Australian National University)			
5:00pm	**Closing Remarks** Fiona Blyth (CEPAR, The University of Sydney)			
5:30 - 8:00pm	**Conference Dinner**			Venue: The Lounge
	Dinner speech: The Future of Work **Introductory remarks:** Marc de Cure (CEPAR Advisory Board Chair, Adjunct Professor, CEPAR, UNSW Business School) **Dinner speaker:** Sharon Parker (CEPAR, Curtin University)			

DAY 3 (AEST)	5 JULY 2023		John Niland Scientia Building
8:30 - 9:00am	**Arrival & Registration** (tea and coffee available)		Foyer
9:00 - 10:00am	**Opening remarks** Kaarin Anstey (CEPAR, UNSW Sydney)		Leighton Hall
	PANEL 3: Feminising and Ageing Workforces: Implications for Research, Policy and Practice		Leighton Hall
	Introductory remarks: Kaarin Anstey (CEPAR, UNSW Sydney)		
	Chair: Marian Baird (CEPAR, University of Sydney) Panellists: • Virpi Timonen (Professor of Social and Health Services Research and Leadership, Professor, Social Policy, University of Helsinki) • Tim Johnson (Assistant Secretary - Care and Support Economy Taskforce, Department of the Prime Minister & Cabinet) • Myra Hamilton (CEPAR Principal Research Fellow, Associate Professor, University of Sydney) • Alexandra Heron (CEPAR Associate Investigator, University of Sydney)		
10:00 - 10:30am	**Morning Tea**		Foyer
10:30am - 12:00pm	**CONCURRENT SESSION 5**		
	Leighton Hall	Gallery 1	Gallery 2
	Session 5A: **Aspects of Disability and Intrinsic Capacity** Chair: James Rice (CEPAR, University of Melbourne)	**Session 5B:** **Labour Market and Ageing** Chair: Bei Lu (CEPAR, UNSW Sydney)	**Session 5C:** **Support for Late in Life Decisions** Chair: Xiangling Liu (CEPAR, UNSW Sydney)
10:30 - 11:00am	**Modelling Multi-State Health Transitions with Hawkes Process** Jiwon Jung (Department of Statistics, Purdue University)	**Social Security and Female Labour Supply in China** Han Gao (CEPAR, UNSW Sydney)	**The Role of Individual and Social Factors in the Prevalence and Experiences of Making Substitute Financial Decisions for Others** Craig Sinclair (CEPAR, NeuRA, Ageing Futures Institute, UNSW Sydney)
11:00 - 11:30am	**Disability and Morbidity among US Birth Cohorts, 1998-2018: A Multidimensional Test of Dynamic Equilibrium Theory** Tianyu Alex Shen (CEPAR, Australian National University)	**Daily Subtle Discrimination Experiences of Mature Workers and their Effect on Workplace Wellbeing** Irina Gioaba (Kean University)	**inTouch: Reconceptualising Care for Holistic Patient Centred and Enhanced Care Co-ordination** Jasmin Ellis (Integrated and Community Health in Western Sydney Local Health District) and David Greenfield (School of Population Health, UNSW Sydney)

11:30am – 12:00pm	**The Prospective Association between Intrinsic Capacity and Falls Among Older Chinese Adults** Gaoyun Sophie Yan (CEPAR, UNSW Sydney)	**Robust Inference for the Frisch Labour Supply Elasticity** Tim Neal (CEPAR, UNSW Sydney)	**Examining Identity Concerns and the Use of Assistive Technology from the Perspective of Community Dwelling Older Adults: A Scoping Review** Yanet Morejon Hernandez (Department of Psychology, Maynooth University)
12:00 - 1:15pm	**Lunch**		Foyer
1:15 - 3:00pm	**CONCURRENT SESSION 6**		
	Leighton Hall	Gallery 1	Gallery 2
	Session 6A: **Life Expectancy** Chair: Katja Hanewald (CEPAR, UNSW Sydney)	**Session 6B:** **Pension Systems** Chair: Tim Neal (CEPAR, UNSW Sydney)	**Session 6C:** **Macroeconomic Aspects of Population Ageing** Chair: Weifeng Larry Liu (CEPAR, ANU)
1:15 - 1:45pm	**Education-Composition Effect on the Sex Gap in Life Expectancy: A Research Note based on Evidence from Australia** Wen Su (School of Demography, Australian National University)	**Sustaining Algeria's PAYG Retirement System in a Population Aging Context: Could a Contribution Cap Strategy Work?** Farid Flici (Research Center in Applied Economics for Development - CREAD)	**Global Macroeconomic Consequences of Antimicrobial Resistance** Roshen Fernando (CEPAR, CAMA, Australian National University)
1:45 - 2:15pm	**Gender, Education and Cohort Differences in Healthy Working Life Expectancy at Age 50 in Australia** Kim Kiely (CEPAR, NeuRA, Ageing Futures Institute, UNSW Sydney)	**Pension Scheme Reform in Nigeria: An Institutional Renewal, Challenges, Prospects, and Perceptions of Stakeholders** Olusegun Oladeinde (Bells University of Technology)	**Demographic Change, National Saving and International Capital Flows** Weifeng Larry Liu (CEPAR, Australian National University)
2:15 - 2:45pm			**The Generational Economy in Australia from the Turn of the Millennium to the Aftermath of the Global Financial Crisis** James Rice (CEPAR, University of Melbourne)
2:45pm	**Closing Remarks**		
	Hazel Bateman (CEPAR, UNSW Sydney)		

OPENING REMARKS DAY 1



Professor John Piggott AO is Director of the ARC Centre of Excellence in Population Ageing Research (CEPAR) and Scientia Professor of Economics in the UNSW Business School. A former Australian Professorial Fellow, he has published widely in leading international journals as well as highly cited conference volumes on issues in retirement and pension economics and finance, and in public finance more generally. His national policy experience includes membership of the Population Expert Panel of the Australian Treasury's Centre for Population and the Henry Tax Review Panel (2008-2009). John worked with the Japanese government for nearly a decade from 1999 on pension and population ageing issues. From 2008-2010 he was Visiting Scholar at the Wharton School of Business. In 2018, he was awarded a Rockefeller Residency to undertake research into ageing and inequality in Asia. In 2019, he was appointed co-chair of the Think20 (T20) Task Force on Aging Populations during Japan's G20 Presidency and was a Commissioner on the US National Academy of Medicine's International Commission on Creating a Global Roadmap for Healthy Longevity from 2019 until June 2022.

Professor Anika Gauja joined the ARC as Executive Director for the Social, Behavioural and Economic Sciences in January 2023.
Prior to this, Anika was Associate Dean (Research) in the Faculty of Arts and Social Sciences, University of Sydney, and previously Director of Research Development (Social Sciences).
An internationally renowned political scientist, Anika's research has made significant contributions to our understanding of democracy, political participation, and representation in Australia and across the globe. Anika has expertise in elections, democratic decline and resilience, campaign finance and party politics, and a strong track record of interdisciplinary research and cross-sector collaboration.
She has worked extensively with multiple international research teams and has held visiting fellowships at the Australian National University, the Universities of Sheffield and Exeter (UK), University Libre de Bruxelles (Belgium) and Sciences Po, Paris.
Throughout her career, Anika has developed research partnerships with government agencies and non-government organisations. With a strong emphasis on public communication and social impact, her research has been utilised in parliamentary inquiries, policy reports, judicial decisions and the media.

Professor Nicholas Fisk AM, Deputy Vice-Chancellor (Research & Enterprise) provides strategic leadership and support to the Vice-Chancellor and President in the generation of external research income and improving UNSW's overall research performance, and in attracting and retaining outstanding academic staff, research only staff and higher degree research students to UNSW.
Professor Nicholas Fisk assumed the role of Deputy Vice-Chancellor (Research & Enterprise), in August 2016. His research is in the fields of developmental biology and maternal-fetal medicine, and he is the author of more than 400 publications. He graduated MBBS from the University of Sydney, obtained his PhD from University College London and an MBA from Imperial College, London.
He has served in leadership roles in a number of international and national organisations, including as President of the International Fetal Medicine and Surgery Society, Chair of the Scientific Advisory Committee of the Royal College of Obstetricians and Gynaecologists, Chair

of the Steering Committee of the Association of Academic Health Centers International and Chair of the Go8 Deans of Medicine Committee. He is currently a Board Member of Research Australia and Chair of the Go8 DVCR Committee. For UNSW he Chairs the Board of NewSouth Innovations, and is UNSW representative of TEDi-London.
Professor Fisk joined UNSW from the University of Queensland, where he was Executive Dean of the Faculty of Medicine and Biomedical Sciences and served on the Boards of the Queensland Institute of Medical Research and the Metro North Hospital and Health Service. Prior to that, he was the inaugural Director of the University of Queensland's $70 million Centre for Clinical Research, and from 1992-2007 a professor in the Institute of Reproductive and Developmental Biology at Imperial College London. He was elected to Fellowship of the Academy of Health and Medical Sciences in 2014. In 2020 he was appointed a Member of the Order of Australia for significant service to tertiary education, and to maternal-fetal medicine.

Professor Tom Calma AO is an Aboriginal Elder from the Kungarakan (Koong ara kan) tribal group and a member of the Iwaidja (Ee wad ja) tribal group in the NT. He has been involved in Indigenous affairs at a local, community, state, national and international level and worked in the public sector for over 45 years and is currently on a number of boards and committees focusing on rural and remote Australia, health, mental health, suicide prevention, aged care, all levels of education, culture and language, justice reinvestment, research, reconciliation and economic development. In 2010 after a distinguished career of 38 years in the Australian Public Service Professor Calma retired and currently works as a consultant, volunteer and academic.
Prof Calma is Chancellor of the University of Canberra and a Professor of Practice (Indigenous Engagement) at the University of Sydney, an Adjunct Associate Professor at ANU and former Aboriginal and Torres Strait Islander Social Justice Commissioner (2004-10) and Race Discrimination Commissioner (2004-09) at the Australian Human Rights Commission. For the past 13 years he has been the National Coordinator Tackling Indigenous Smoking and in 2022 was appointed a member of the Referendum Working Group and Referendum Engagement Group after co-chairing with Professor Marcia Langton AO the committee leading the Co-design of a Voice to Government and Parliament from 2019-2021. In 2022 he was the first Aboriginal or Torres Strait Islander person appointed a Fellow of the Australia Academy of Science. In the same year he was appointed a Fellow of the Academy of the Social Sciences in Australia. Professor Calma is the 2023 Senior Australian of the Year.
Professor Calma is a member of the Aged Care Council of Elders and a member of the Aged Care Task Force.

ABSTRACTS AND SPEAKER BIOS
KEYNOTE 1: The Role of Private and Public Transfers to Sustain the Generational Economy

Introductory Remarks: Professor John Piggott AO (CEPAR, UNSW Sydney)

The Role of Private and Public Transfers to Sustain the Generational Economy: An Application of National Transfer Accounts (NTA) in an Ageing Europe

Alexia Fürnkranz-Prskawetz (Vienna University of Technology, Austrian Academy of Sciences)

Abstract: The talk gives an overview of the generational economy in European countries as measured in the National Transfer accounts project and rooted in the concept of the economic life cycle. Characteristics of the life course in modern societies are long periods of economic dependency in childhood and old age when consumption exceeds own production. To which extent and by whom these phases of dependency are financed will ultimately determine the economic wellbeing of distinct generations and the sustainability of public finances in ageing populations. In Europe, public pensions play an important role for the elderly dependent population, aggravating the challenge of ageing populations. Considerable cross-country differences exist in the organization of private transfers towards children, especially in the role of men and women. When discussing the social system and reform options of the welfare state in context of demographic change, it is important to consider public and private transfers in tandem and study their functions in different countries. The consideration of public transfers together with private transfers is also indispensable in understanding economic vulnerability and inequality across generations. In this talk we show that the diversity in the degree of ageing and the organization of the generational economy in Europe provide important insights about successful strategies to adapt to an ageing population.

Bio: Alexia Fürnkranz-Prskawetz is Professor of Mathematical Economics at TU Wien, director at the Vienna Institute of Demography, Austrian Academy of Sciences and research associate at the International Institute of Applied Systems Analysis, Laxenburg, Austria. After her study of Technical Mathematics at TU Wien, she attended a postgraduate study at the University of Chicago in Economics and a postdoctorate at the Demography Department of the University of California, Berkley. From 1998 to 2003 she was head of an independent research group on "Population, Economy and Environment" at the MPI for Demography, Rostock. Her main areas of research are in the economic consequences of population and individual ageing, demographic change and long run economic growth and the interrelationship between population, economy and environment. She is full member of the Austrian Academy of Sciences, member of Leopoldina (Nationale Akademie der Wissenschaften) and member of Academia Europaea.

CONCURRENT SESSION 1

Session 1A: Intergenerational Aspects of Ageing

Children's Education as a Predictor of Parents' Successful Ageing: Evidence from India

Akif Mustafa (International Institute for Population Sciences (IIPS))

Abstract: A small but growing literature has examined the intergenerational transmission of educational benefits from children to older parents. Previous studies have found that offspring educational attainment is positively associated with parents' health and longevity; however, offspring education in relation with parents' successful ageing has not yet examined. This study examines the relationship between offspring educational attainment and parent's successful ageing in India. The study also investigates the gender dimension of the proposed relationship. The study utilizes nationally representative, population-based data from the Longitudinal Ageing Study in India (LASI, 2017–18). The study is based on a sample size of 29,473 older adults aged 60years and above. Multi variable logistic regression models were employed to achieve the objectives. We performed Interaction analysis to examine whether the proposed association varies by parents' and children's sex. 25% of the sample population were found to be successful agers. The percentage of successful ageing was comparatively higher in urban areas (32%), the northeastern region of the country (38%), and among older adults with higher education (47%). With a one-year increase in education of the highest educated child, the odds of parents' successful ageing were found to be increasing by three percent (adjusted odds ratio (AOR) =1.03; 95% CI = 1.02-1.04). According to the results of interaction analysis, the association between offspring education and parents' successful ageing did not vary by parents' and children's sex. The findings of this study suggest that children's education might play a crucial role in the successful ageing of older parents.

Bio: Akif Mustafa is a Ph.D. research scholar at IIPS, Mumbai. He earned his M.Sc. and M.Phil. in Biostatistics and Demography from IIPS. He has worked on a variety of topics, including child nutrition, maternal health, NCDs, and population ageing. His main research interest lies in population ageing, intergenerational dynamics, and family demography. Currently, he is doing his Ph.D. under the guidance of Prof. Chander Shekher on the topic 'Intergenerational upward spillover of educational mileage from children to older parents in India'.

Change in Care Provided to Grandchildren by Older Adults in Rural China: Associations with Shifting Demographics in the 21st Century

Merril Silverstein (Syracuse University)

Abstract: This paper examines change in the care provided by older grandparents to their grandchildren in rural China over several decades and the supply and demand factors that have promoted and inhibited this change. Improvements in the health and resources of older adults in China have increased the capacity of grandparents to provide care to grandchildren. However, demographic changes such as fluctuations in labour migration and smaller family size have potentially reduced demand for care. To address the contribution of these opposing dynamics, we used data from the Longitudinal Study of Older Adults in Anhui Province, focusing on two age-matched cohorts (60-77 years of age) measured in 2001 and 2018. We found that between 2001 and 2018, older adults were less likely to have a non-adult grandchild (16 or younger), but, if they had at least one non-adult grandchild, were more likely to provide full-time

care. Lower fertility among adult children was associated with the former result and better physical, emotional, and cognitive health were associated with the latter result. Future directions for this research, and the basis for this presentation, will apply the Kitagawa–Blinder–Oaxaca method to decompose factors that explain cohort differences by inhibiting grandchild care (e.g., reduced kin supply) and enabling grandchild care (e.g., improved health status). An extension to part-time care will also be examined. Results will be discussed in terms of the synergy between economic and family change in China since the beginning of the 21st century.

Bio: Merril Silverstein, Ph.D., is inaugural holder of the Marjorie Cantor Chair in Aging Studies at Syracuse University and serves as professor in the Department of Sociology and the Department of Human Development and Family Science. Professor Silverstein received his doctorate in sociology from Columbia University, after which he served on the faculty of the Leonard Davis School of Gerontology at the University of Southern California. In over 200 research publications, he has focused on aging in the context of family life, with an emphasis on intergenerational relations over the life course and international-comparative perspectives. Professor Silverstein currently serves as principal investigator of the Longitudinal Study of Generations, which has collected data from the same families for over fifty years and is co-originator of the Longitudinal Study of Older Adults in Anhui Province, China, which is now in its 20th year. Professor Silverstein is a Fellow of the Brookdale Foundation, the Fulbright Senior Scholars program, the Gerontological Society of America, and the James Martin School at Oxford University. Between 2010-2014 he served as editor-in-chief of the Journal of Gerontology: Social Sciences. In 2019 he was awarded the Matilda White Riley Distinguished Scholar Award from the Section on Aging and the Life Course of the American Sociological Association.

Children's Education and Parents' Health Care Utilization in the Philippines

Jeofrey Abalos (National University of Singapore)

Abstract: This paper aims to examine the relationship between children’s education and the healthcare utilization of their parents. Data is drawn from the baseline survey of the Longitudinal Study of Ageing and Health in the Philippines, which interviewed nearly 6000 Filipinos aged 60 years and over. Descriptive statistics and regression models will be used in the analyses. Logistic regression results show that older Filipinos with a child who is highly educated are more likely to seek private healthcare facilities for in-patient and outpatient health services and less likely to have an unmet need for health care.

Bio: Dr Jeofrey B. Abalos is a Postdoctoral Fellow at the National University of Singapore Centre for Family and Population Research. His research interests include population ageing and health, marriage and cohabitation, and divorce and separation.

Session 1B: Pension Systems in Asia

The Earned Income Tax Credit and the Tax-Benefit Link of Public Pensions

Dongmin Chun (Seoul National University)

Abstract: The labor supply response to the Earned Income Tax Credit (EITC) during the working age of life increases pension benefits after retirement through the tax-benefit link of public pensions. Such a dynamic return on labor supply can amplify the income-increasing effects of the EITC by (1) raising pension income and (2) intensifying the labor supply response to the program. This paper quantitatively examines the EITC's long-term impact on lifetime

income and welfare over the life cycle and highlights the role of the pension tax-benefit link. To that end, we develop a heterogeneous-agent life-cycle model in which individuals make labor supply decisions at the participation margin that affect pension benefits after retirement. We find that, for newborns with low lifetime income, the dynamic return through the contribution-benefit link can explain half (one-fifth) of the increase in lifetime income (welfare) due to the EITC. The results imply that (1) work-promoting policies for the working age can also prevent old-age poverty in advance through the pension tax-benefit link and that (2) informational intervention about the contribution-benefit link could substantially amplify the EITC's benefits.

Bio: Dongmin Chun is a Ph.D. candidate in Economics at Seoul National University, with research interests in Macroeconomics, Public Economics and Labour Economics.

Informality and Pension Reform in Emerging Asia: A Life-Cycle Model Analysis for Ageing Vietnam

Huyen Hoang (CEPAR, UNSW Sydney)

Abstract: The constellation of countries comprising emerging Asia are among the most populous and rapidly ageing in the world. They are importantly and uniquely characterised by combining rapid demographic transition with high informal labour force participation. This profile renders these countries vulnerable to widespread future old-age poverty, as traditional forms of old-age support become compromised by mass generational migration to urban areas. Policymakers face the challenge of developing effective and sustainable social protection policies which can be accessed by informal workers as their earnings capacity diminishes, often at a time when per capita income is relatively low.
This paper studies the development of retirement social protection policy in Viet Nam, a rapidly ageing country of about 90 million people. About 80% of the workforce is informal workers (ILO, 2018), most of them work without social insurance participation. In this paper, we construct a stochastic life cycle model with heterogeneous agents by gender, sectoral and skill types where individuals face labour earnings and lifespan uncertainty. The paper utilizes the data set from Vietnam Household Living Standard Survey (VHLSS), conducted during 2014-2018. The model has been fitted to the labour market observations, matching closely the VHLSS data. The developed model will then be applied to study the pension reform counterfactuals, targeting differently formal and informal workers under different demographic structures. A range of retirement policy reforms in Vietnam to extend the coverage at a sustainable way in the long run will be examined. For each experiment, we will evaluate the impacts on individuals' behaviour over the lifecycle (including their consumption, labour supply, and total assets) and household welfare.

Bio: Huyen Hoang is a final-year PhD candidate in economics at The University of New South Wales Business school. She did a master's degree of International Development Economics at The Australian National University in 2015. Previously, she worked at the Ministry of Planning and Investment in Vietnam. Her research interests are in the fields of public economics, development economics and economics of ageing. As part of a project "Policy Modelling for Ageing in Emerging Economies", her thesis focuses on retirement social protection policy in Vietnam, a rapidly ageing country with sizeable informality. Her thesis is expected to be submitted in September.

Do Workers in Indonesia Become Retirement Insurance Members? A Sociodemographic Analysis Using The 2019 Labour Force Survey

Yulinda Nurul Aini (Research Center for Population, Indonesian National Research, and Innovation Agency (BRIN))

Abstract: Background: By 2024, Indonesia will have reached its peak rate of population ageing, with around 13% or 35.5 million of the total population becoming elderly. A pension and old-age insurance policy that protects their and their families' well-being in old age without the fear of being destitute is essential to develop healthy and productive seniors. BP Jamsostek administers these insurances, which are important human rights for workers. In Indonesia, coverage for these insurances remains poor. Numerous employees have restricted access and are often ignorant of the significance of these insurances.
Objective: This study attempts to examine Indonesian workers' access to retirement insurance. In addition, this study examines the likelihood of workers enrolling in retirement insurance based on sociodemographic characteristics.
Methodology: This study utilizes data from the 2019 Indonesian National Labor Force Survey (LFS). This study used binary logistic regression with retirement insurance participation as the response variable. Sociodemographic variables such as age, gender, education, marital status, household size, residence, and industry are included as explanatory variables.
Results: This study indicated that just a small percentage of Indonesia's 61.54 million workers are covered by retirement insurance, namely 23.45% for old-age insurance and 19.51% for pension insurance. In addition, urban employees who are male, have 1-4 family members, are of middle age (31-45) and senior age (46-60), are married or divorced, and have a high school diploma or higher are more likely to be members of retirement insurance than their counterparts.
Discussion: Based on these findings, we believe that it is crucial to increase access to retirement insurance, particularly for vulnerable groups such as rural employees, older workers, and those with limited education. Dissemination of the significance of retirement insurance and the development of comprehensive and integrated programs and management systems are additional approaches to boost the implementation of retirement insurance.

Bio: Yulinda Nurul Aini is a junior researcher at the research Center for Population, the National Research and Innovation Agency of Indonesia (BRIN).

Session 1C: Ageing and Mental Disorders

Comparing Apples with Oranges: Demonstrating the Challenges of Using Symptom Screens to Accurately Estimate Population Prevalence of Common Mental Disorders in the Ageing in Rural Indonesia Study

Aliza Hunt (Australian National University, and University of Sydney); Philip Batterham (Australian National University, Black Dog); Zachary Steel (Black Dog, UNSW Psychiatry)

Abstract: Background: LMIC are poorly represented in the global map of late-life mental health problems. Psychiatric epidemiology in countries like Indonesia use mostly short symptom screens as proxies to determine disorder prevalence, whilst high income countries use structured psychiatric interviews and clinical judgement. Different methods of data collection are a source of variability in need of evaluation. However, even the GBD studies, have published pooled estimates based on a mixture of methods. This paper evaluates seven common symptom screens in two samples of older Indonesians to demonstrate systematic threats to validity in current research standards.

Methods: The Ageing in Rural Indonesia Study was a full enumeration of older residents in twelve rural villages in 2015/16 (N=2526; sample 1). Sample 2 re-enumerated two of these villages in 2017 (N=537). Three domains of psychopathology, including depression (PHQ-8/9, CES-D, GDS), anxiety (GAD-7), and distress (K6, DQ5, SRQ-20) were measured. We psychometrically evaluated symptom screens and explored concordance rates.
Results: Some short symptom screens (PHQ-8/9, GAD-7, K6, DQ5) were underpinned by internally consistent unidimensional constructs, composed of highly discriminating items with clear ordered thresholds. The CES-D performed almost as well, with positively worded or somatic-framed questions being problematic. The most frequently used measures in this population (GDS/SRQ-20) performed poorly. These scales were multidimensional, internally unreliable with large proportions of poorly discriminating items with problematic thresholds. Kappa concordance rates suggested ≤15% data was reliably scored, and all estimates lacked comparability (e.g., sample 2 depression point-prevalence 3.2%-39.9%).
Conclusions: Common psychopathology symptom screeners used as proxies for mental health disorders within LMIC contexts are plagued by psychometric threats to validity. In addition, the customary practice of using established cut-points on symptom screeners yielded unreliable and incomparable estimates. Many frequently utilised symptom scales urgently require adaptation to unique cultural contexts to avoid issues such as category fallacy in future research.

Bio: Dr Aliza Hunt is a Visiting Fellow at the Centre for Mental Health Research at National Centre for Epidemiology and Population Health at the ANU and at History and Philosophy of Science at the University of Sydney. She completed her PhD in 2022 and is an Indonesian area specialist working on psychiatric epidemiology, cross cultural conceptions of mental illness, mental health systems development and has a specific expertise in older Indonesian populations. She is an established authority on Indonesian understandings of depression and is also active in the Indonesian anti-pasung or freedom from forcible restraint and confinement of mentally ill persons reform movement.

Childhood Adversity is Associated with Anxiety and Depression in Older Adults: A Cumulative Risk and Latent Class Analysis

James Lian (CEPAR, NeuRA, School of Psychology, UNSW Sydney, and Department of Psychology, University of California)

Abstract: The long-lasting influence of childhood adversity on mental health is clearly documented, however empirical research examining older adults is limited. In this study, cumulative risk and latent class analysis (LCA) were used to model childhood adversity in a representative sample of older adults (N = 2551, age 60-64). Mental health was measured using four validated depression and anxiety questionnaires. Generalised additive models indicated a dose-response relationship, where a greater number of cumulative adversities was associated with poorer scores on all four mental health measures in older adults. LCA identified a 4-class solution; with High Adversity being associated with the poorest mental health outcomes, followed by Parental Dysfunction, whilst Low Affection and Low Adversity scored at healthy levels. When examining mean outcome scores of each latent class, patterns unveiled using LCA were very similar to patterns shown via the cumulative risk model. As such, depression and anxiety patterns using LCA could be more simply explained by cumulative adversity exposures in our data. In conclusion, childhood adversity had independent and additive contributions to depression and anxiety in older adulthood, and this effect was evident in both cumulative and latent class models of adversity.

Bio: James is a PhD student at the UNSW, supervised by Professor Kaarin Anstey and Dr Kim Kiely. His research uses longitudinal data to examine the impact of childhood adversity on the mental health and cognition of older adults. Previously, James has worked as a research assistant examining domestic violence patterns in the US, as well as exploring mental health outcomes following natural disasters. In his spare time, James likes to play tennis, explore new hikes, and go climbing.

Aggregate Social Factors, Genetic Predispositions, and Lifestyle with Risk of Dementia: A Long-Term Cohort Study

Shu Chen (CEPAR, School of Risk and Actuarial Studies, UNSW Sydney)

Abstract: Background: Genetic predisposition, social factors, and lifestyle work together to determine dementia. Considering social factors matter in aggregate, we aimed to assess the association between aggregated social risk, measured by a novel polysocial risk score (PsRS), and the risk of developing dementia, as well as the moderating role of genetic predisposition and lifestyle.
Methods: We conducted a retrospective cohort study based on the US Health and Retirement Study (HRS). We included those aged ≥ 60 years, non-demented at baseline, with genetic data, and completed the module on the psychosocial questionnaire. The baseline year was 2006 and participants were followed up until the 2018 wave. The stepwise Cox regression model was used to select social factors for constructing the PsRS for dementia based on 21 social determinants. We built the PsRS based on the coefficients of the selected social factors and categorized the participants into low, intermediate, and high-risk groups as measured by tertiles of PsRS. Genetic predisposition was measured by the polygenetic risk score (PGS) for Alzheimer's disease (AD) for participants of European Ancestry and African Ancestry respectively. Lifestyle factors include physical activity, smoking, and alcohol consumption. Finally, we used different sets of Cox proportional hazards models to assess the association between aggregate social factors and the risk of dementia, and explore the moderating role of genetic predisposition and lifestyle factors.
Results: We included 5,199 participants in the study (mean age=73.4, SD=8.3; 58.0% female; 11.6% African American). They were followed up for an average of 6.2 years (median: 6.0 [IQR: 3.8-8.5]), and 20.1% developed dementia during follow-up. Eleven social factors were retained to construct the PsRS: personal income, household income, total household wealth, poverty status, education, housing type, life insurance status, marital status, employment status, living alone, and social support. Compared with the low-risk PsRS group, intermediate and high-risk groups were 1.1 times (adjusted hazard ratio [aHR]=2.13, 95%CI=1.64-2.78) and 4.0 times (aHR=4.99, 95%CI=3.82-6.50) more likely to develop dementia respectively. There was no significant interaction between PsRS and PGS, nor between PsRS and lifestyle with dementia.
Conclusion: Older adults with a higher risk of aggregated social factors are more likely to develop dementia, regardless of genetic predisposition or lifestyle factors.

Bio: Shu (Melinda) Chen is a third-year PhD candidate at UNSW (Scientia Scholarships holder), and senior Consultant for Duke Global Health Institute. Her research interest cover health and long-term care system strengthening, dementia and cognitive function decline prevention, and infectious disease control and prevention. She has published over 20 co-authored publications in high-quality peer-reviewed medical journals, and as first author in top medical journals such as The Lancet Public Health, PLOS Medicine, and BMJ Global Health. She was Associate Director of Research for Infectious Diseases Portfolio, China, FHI 360 before she joined UNSW, when she oversaw an NIH-funded project on clinical research capacity building of 20+ TB clinical sites. Before joining FHI 360, she worked at the Global Health Research Center, Duke Kunshan University for four years on health policy and system research. Shu completed her undergraduate study at Peking University Health Science Center (Medical School), China, and obtained her master's degree in global health at Duke University, US.

Session 1D: Attitudes to Older Workers

Exploring the Role of Fact- Based Information, or Imagined Intergenerational Teamwork to Improve Attitudes to Older Workers: An Online Psychological Intervention

Natasha Ginnivan (CEPAR, Neuroscience Australia (NeuRA), School of Psychology, Ageing Futures Institute, Australian Human Rights Institute, UNSW Sydney)

Abstract: With increased longevity and ageing populations in most countries, there is a need for extending opportunities for older workers to continue engagement in meaningful employment beyond the traditional 'age of retirement.' However, ageism, negative attitudes and a lack of policy has resulted in less opportunity for older workers to train, upskill or be employed up to a decade before retirement age. The present study sought to test and compare different intervention methods that have been reported to reduce ageist attitudes. Participants (n = 334, M_{age} = 39.53, 18 – 65 years old, 53% female), were recruited to take part in an online survey that was described as workplace teamwork dynamics, and were randomly allocated to one of three conditions: The first condition was a) An intergenerational vignette and facts on ageing quiz followed by questions about older workers, wisdom, and anxiety about ageing; or b) just facts on ageing quiz, followed by questions on older workers, wisdom, and anxiety about ageing; or c) the control group: just the survey questions about older workers, wisdom and anxiety about ageing. Results showed a general trend for participants in the combined treatment group, followed by the facts on ageing only group to show higher scores on attitudes towards older workers compared with the control group, however, the differences were not statistically significant. Female participants with higher anxiety about ageing or lower social desirability were more likely to have more negative attitudes towards older workers than men. Implications for how this might inform online diversity, equity and inclusion efforts attempting to tackle implicit bias in online intervention-style programs are discussed.

Bio: Dr. Natasha Ginnivan is a CEPAR research fellow with the UNSW School of Psychology and an Associate Investigator with the Ageing Futures Institute whose focus is on investigating implicit and cultural attitudes to ageing, age stereotypes and self-perceptions of ageing. Her research includes the lived experience of ageing and dementia and ageing in marginalised populations, including ageing prisoners. Her current research is focusing on how ageist attitudes and age-stereotypes can create barriers to the working life of older adults, as well as how social media and ageist discourse impacts on self-perceptions of ageing.

Determinants of Ageism Among Young Adults: A Cross-Cultural Investigation

Yvonne Leung (CEPAR, NeuRA, School of Psychology, UNSW Sydney)

Abstract: Ageism is defined as the systematic prejudice, discrimination, and stereotyping of one age group against another (Butler, 1969). The current study aimed to identify the factors that contribute to ageism towards older adults and examine how culture may play a role by comparing young adults from high (Malaysia) and low (Australia) collectivist cultures. We hypothesised that (1) having better knowledge of ageing, higher frequency and quality of intergenerational contact are associated with lower levels of ageism; (2) higher anxiety about ageing, negative perception of grandparents' ageing and health are associated with higher

levels of ageism; and (3) women would be more ageist than men. Undergraduates from Australia (n = 108, 73% females, M_{age} = 19.51, SD_{age} = 2.09) and Malaysia (n = 103, 65% females, M_{age} = 20.59, SD_{age} = 1.18) completed a set of online survey that assessed their level of ageism, anxiety about ageing, and their own experience in interacting with older adults. Our data suggested that young Australians had significantly lower level of ageism than young Malaysians (B = 8.16, SE = 1.07, p<.001). However, regardless of cultural background, better knowledge about ageing, lower level of anxiety about ageing, and better quality of intergenerational contact were associated with lower level of ageism. Gender difference in the level of ageism, or the associations between these factors and ageism was not found. These results indicated that the factors associated with ageism are similar across cultures and genders, and the difference in ageism between two samples might be contributed by the better knowledge about ageing among Australians than Malaysians. Our findings help us better understand the determinants of stereotyping towards older adults in different cultures and have implications for intervention in intergenerational interactions and wellbeing in older adults.

Bio: Dr Yvonne Leung is a postdoctoral fellow at the School of Psychology, UNSW. She has a background in cognitive psychology and her research focuses on cognitive ageing and dementia. She was formerly the coordinator of the International Centenarian Consortium-Dementia. She is experienced in harmonising internationally sourced data and examining factors associated with dementia and cognitive impairment in ethno-regionally diverse populations. Her current work (funded by CEPAR) involves examining gender differences in cognitive ageing, cognitive reserve, and expectations regarding ageing.

Does Organisational Branding Impact Whether Mature Workers Self-Select out of the Job Application Process?

Serena Wee (CEPAR, University of Western Australia)

Abstract: Organisations routinely send signals (e.g., text and imagery on websites) about what their brands are, and what they value from or about their employees. This study investigates how cues on company websites send signals that impact mature workers' intention to apply for a position. The possibility that employers may lose out on talent and mature workers on a job simply due to unclear or ill-considered organisational cues, suggests an area where interventions are both urgently needed, and likely to be highly effective if deployed. We focus on two key mechanisms theorised to impact perceptions of the attractiveness and feasibility of engaging in the job application process: perceived fit and perceived inclusiveness. We use experimental vignette methods to manipulate the imagery displayed on a company website to determine if the cues cause intentions to apply. Participants were randomly assigned to one of four conditions in a between-subjects design: (a) young/White, (b) young/culturally diverse, (c) age-diverse/White, and (d) age-diverse/culturally-diverse. Cultural diversity is included to reduce the salience of the target demographic dimension (age). First, we expect that age-diversity signalling will have a stronger effect for older (vs younger) participants on fit perceptions, perceived likelihood of successful job application, and intention to apply for a job. If this hypothesis is supported, we would test if the expected effect of age signalling on intention to apply is mediated by perceived fit and perceived likelihood of successful job application. We also expect a statistically significant effect of diversity signalling (both age and cultural diversity) on perceived inclusiveness, attraction to the hiring organisation, and intention to apply for a job. If this hypothesis is supported, we would test if the expected effect of diversity signalling on intention to apply is mediated by perceived inclusiveness and attraction to the hiring organisation.

Bio: Dr Serena Wee is a senior lecturer in work psychology at the School of Psychological Science at The University of Western Australia. Serena is passionate about helping organisations develop equitable and effective selection systems. In her research, she investigates how people's skills, personality, and attitudes predict work outcomes in relation to hiring, promotion and turnover, with the ultimate aim of advancing diversity outcomes in organisations. Her work has been published in a wide-range of top-tier journals including Journal of Applied Psychology, Personnel Psychology, Journal of Organizational Behaviour, and Psychological Bulletin. She serves on the editorial board of the Journal of Applied Psychology.

KEYNOTE 2: Financial Decision Making in Older Age

Introductory remarks: Kaarin Anstey (CEPAR, UNSW Sydney)

Kaarin Anstey is a CEPAR Co-Deputy Director, ARC Laureate Fellow, and Director of the UNSW Sydney Ageing Futures Institute focused on enabling optimal ageing for individuals and society. She is also a Senior Principal Research Scientist at Neuroscience Research Australia (NeuRA). Kaarin's research programs focus on cognitive and mental health resilience in ageing, dementia risk reduction and epidemiology. A second focus is on older drivers' risk assessment and safety. Kaarin has worked extensively with longitudinal studies, the development of risk assessment tools, and interventions to optimise healthy ageing and mobility. Kaarin is the Chair of the International Research Network on Dementia Prevention and a member of the Governance Committee of the Global Council on Brain Health, an initiative supported by the American Association of Retired Persons. Kaarin also leads the PATH Through Life Project, a large cohort study focusing on common mental disorders and cognitive function, based in the ACT and surrounding regions.

Financial Decision Making in Older Age

Duke Han (University of Southern California)

Abstract: Decision making refers to the ability to consider competing alternatives and make an optimal choice. Older adults face many critical decisions regarding financial matters which could have a profound impact upon independence and wellbeing, with far-reaching consequences for family members, caretakers, and communities. Relatedly, scam, fraud, and financial exploitation of older adults is a devastating and widespread societal problem resulting in billions of dollars lost annually. There are multiple considerations for what may make certain older adults poorer decision makers and consequently more vulnerable to scam, fraud, and financial exploitation. Age-associated pathological changes in the brain are well documented, suggesting the suboptimal functioning of specific neural systems may contribute to declining cognition and poorer decision making in older age. Medical conditions, psychological symptoms, and interpersonal relationship dynamics may also impact decision making in older age. Recent compelling work has implicated poor financial decision making as an early marker of Alzheimer's Disease dementia. Understanding impaired financial decision making in older age is therefore a significant public health issue with important public policy implications; however, the causal factors, contextual circumstances, and consequences are poorly understood. This presentation will provide an overview of our program of research, which leverages neuropsychological, neuroimaging, behavioral economics, qualitative, and other multidisciplinary empirical approaches to better understand financial decision making and financial exploitation vulnerability in older age.

Bio: Duke Han, PhD, is a Diplomate of the American Board of Professional Psychology in Clinical Neuropsychology, a Fellow of the American Psychological Association and the National Academy of Neuropsychology, Director of the Neuropsychology Division in Family Medicine, and a tenured Professor of Family Medicine, Neurology, Psychology, and Gerontology at the Keck School of Medicine of the University of Southern California. He received his Bachelor of Science degree in Psychology with a specialization in Neuroscience from Duke University, and his PhD Doctorate Degree in Clinical Psychology from the University of Massachusetts Boston. He received training in clinical neuropsychology and experimental neuroimaging techniques through various programs of Harvard Medical School's Brigham and Women's Hospital. He continued his clinical neuropsychology and neuroimaging activities during his clinical internship and postdoctoral fellowship years at the University of California San Diego (UCSD) and the San Diego VA Healthcare System. He maintains an active research collaboration with the Rush Alzheimer's Disease Center (RADC) in Chicago where he was formerly a tenured faculty member.
Dr. Han is interested in the factors that affect cognition and decision making in aging. He also has special interests in leveraging novel empirical approaches to better understand these factors, and in the advocacy of justice, equity, diversity, and inclusion considerations in aging and neuroscience research. He was the recipient of the prestigious Paul B. Beeson fellowship, which is considered the premiere career development award of the National Institute on Aging (NIA). He is the primary investigator or co-investigator on multiple research grants extramurally funded by the National Institutes of Health (NIH) and private foundations. He is actively involved in the peer-review of aging and Alzheimer’s Disease research grants, and has previously served as the Chair of the NIA Clinical and Translational Research of Aging review committee (NIA-T) and the Neuroscience of Aging review committee (NIA-N). Dr. Han is a founding governance committee member of the Global Council on Brain Health, an international independent science collaborative convened by AARP that is tasked with offering the aging public the best advice about brain health. He is also a member of the Scientific Advisory Board for the Alzheimer’s Disease Neuroimaging Initiative (ADNI) and the American Psychological Association (APA) Presidential Task Force on Neuropsychological Test Norming in Diverse Populations. Dr. Han has served as an oral examiner for the clinical neuropsychology board certification process for the American Board of Clinical Neuropsychology (ABCN), and he currently holds multiple service or mentorship roles in the International Neuropsychological Society (INS), the National Academy of Neuropsychology (NAN), the American Academy of Clinical Neuropsychology (AACN), and the Society for Clinical Neuropsychology (Division 40) of the APA. His work has been featured in multiple media outlets, including Reuters, CBS, PBS, Forbes, Fox Business News, and U.S. News and World Report.

CONCURRENT SESSION 2
Session 2A: Migration and Ageing

Inequalities in Disability-Free Life Expectancy Between Migrant and Non-Migrant Populations in Australia

Mitiku Hambisa (CEPAR, NeuRA, School of Psychology, UNSW Sydney)

Abstract: Background: There is conflicting evidence on the existence of a “healthy migrant” effect in Australia and limited evidence concerning migrant age-related health status as they become integrated into the community. This study aimed to estimate migrants’ disability-free life

expectancy (DFLE) at age 65 by gender, age at migration to Australia, and first language spoken.
Method: Interpolated Markov-Chain multistate modelling was used to analyse data from the Household Income and Labour Dynamics in Australia (HILDA) survey. Mortality data were obtained from the National Death Index. Disability was defined by a Global Activity Limitation Indicator (GALI), and severe mobility limitations were measured by difficulties with activities of daily living (ADL). We categorized our sample into five groups based on country of birth and age at migration to Australia.
Findings: We found few reliable differences between groups due to small cell sizes and wide confidence intervals. Men who were born in a primarily non-English speaking country and migrated to Australia after the age of 25 had longer life expectancy but also more years lived with disability than Australian-born men. In contrast, men born in a primarily English-speaking country who migrated after age 25 had longer disability-free life years.
Women who were born in a primarily English-speaking country and migrated to Australia before the age of 25 had more years lived disability-free than any other group, whereas women born in a non-English speaking country who migrated after the age of 25 had the most years lived with disability.
Conclusion: These findings indicate heterogeneity in the “healthy migrant effect” and considerably poorer health outcomes for migrants who migrated during adulthood – particularly women. Targeted interventions are needed to improve these groups’ health behaviours and service access. There is also a need for better cohort data on ageing research in Culturally and Linguistically Diverse (CALD) communities.

Bio: Dr Mitiku Hambisa is a Postdoctoral Research Fellow at the University of New South Wales and a Conjoint research fellow at Neuroscience Research Australia, where he studies social determinants of Health and Working Life Expectancies.
Dr Hambisa completed his PhD in Clinical Epidemiology and Medical Statistics as a CEPAR-affiliated research student at the University of Newcastle, Australia, in 2022 under the supervision of Emeritus Professor Julie Byles.
He is passionate about healthy ageing research. Dr Hambisa’s PhD project examined healthy ageing and healthcare utilisation of older Australian women using Australian Longitudinal Study on Women’s Health (ALSWH) data. Prior to this, he was a long-time lecturer at the School of Public Haramaya University, Ethiopia, before joining the University of Newcastle. He has conducted public health research in Ethiopia and published 22 articles.

Understanding the Role of International Migration and Changing Religious Affiliation on Aged Care: Preparing for the Future

Jeromey Temple (CEPAR, University of Melbourne, Curtin University)

Abstract: New data from the 2021 Census has underscored that Australian society is increasingly secular but also religiously diverse. This is driven in part by the decline of Christianity and growing international migration, principally from Asia. These demographic shifts have implications for the design and delivery of aged care as a significant portion of the Residential Aged Care (RAC) sector in Australia is comprised of facilities owned or affiliated with Not-for-Profit religious institutions. Changing religious affiliation will shift the commercial viability of many facilities, while presenting new opportunities for others.
Our paper seeks to estimate the religious affiliation of Australia’s older population through to mid-century. Utilising newly released data from the Australian Census of Population and Housing, we calculate transition probabilities between competing religious affiliation states, stratified by single years of age, sex and birthplace. Adopting a multi-state framework, we endogenize these transition probabilities to project the older Australian population by religious

affiliation and birthplace of the period 2021 – 2051, whilst allowing for demographic recuperation effects of the COVID-19 pandemic.
Our findings are important for several reasons. Firstly, Christian RACs that wish to maintain their religious identity will need to diversify their remit from European to Asian, African, and Oceanic-born clientele to continue to deliver religiously informed aged care. Secondly, those RACs that wish to reach a larger clientele will need to offer more diverse religiously informed care by drawing on tenets from Islam, Hinduism, Buddhism, and Sikhism. Thirdly, given the cultural diversity of the aged care workforce, growing religious diversity may offer common ground to deliver person-centred care. Finally, methodologically it is important to adopt a multistate framework while controlling for changes in preferences due to cohort flow imbued in Australia's migration history. Ignoring this complex interaction could significantly distort projections of religious affiliation.

Bio: Dr Jeromey Temple is Associate Professor of Demography at CEPAR, and head of the Demography and Ageing Unit at the University of Melbourne. Temple is one of Australia's few economic demographers and leads the Australian National Transfer Accounts (NTA) project.

Session 2B: Disability and Capacity in Later Life

Inequalities in Disability- Free and Disabling Multimorbid Life Expectancy in Costa Rica, Mexico, and the United States

Anastasia Lam (Max Planck Institute for Demographic Research, and School of Geography and Sustainable Development, University of St Andrews)

Abstract: The burden of multimorbidity – the co-existence of two or more chronic diseases – varies within and between countries. Existing research has mainly been cross-sectional, prevalence-based, and from high-income countries, even though rates of chronic diseases and related mortality are highest in low- and middle-income countries. There is also a lack of research comparing countries at different levels of development to see how multimorbidity progression might differ. This study uses nationally-representative longitudinal data from Costa Rica, Mexico, and the United States and an incidence-based multistate Markov chain approach to estimate multimorbid life expectancy (MMLE) from age 60. MMLE describes the years someone is expected to live with multimorbidity and provides a new perspective to view multimorbidity's effect on life and well-being. We disaggregate MMLE into disability-free and disabling states to elucidate the meaning of multimorbidity severity and progression, and then stratify models by gender and education to study within-country heterogeneity. We found that Costa Ricans had the lowest MMLE (Males: 11.6 years, Females: 15.2 years), followed closely by Mexicans (Males: 11.4 years, Females: 17.2 years), then Americans (Males: 16.3 years, Females: 18.5 years). The largest cross-country difference was seen for disability-free MMLE, with Americans spending about twice the time with disability-free MMLE (Males: 11.9 years, Females: 11.1 years) compared to Costa Ricans (Males: 6.0 years, Females: 6.6 years). Women generally had higher MMLE than men, particularly disabling MMLE where the difference was about three years in all countries. In the United States, disability-free MMLE increases and disabling MMLE decreases with more education, resulting in larger educational inequalities in MMLE. This study highlights widespread MMLE inequalities in gender, education, and disability status. More attention must be paid to additional drivers of these disparities, such as life course and health system differences across contexts.

Bio: Anastasia Lam is a PhD candidate in a joint programme between the University of St Andrews and the Max Planck Institute for Demographic Research. She is also an affiliated student with the International Max Planck Research School for Population, Health, and Data Science (IMPRS-PHDS). She received a B.S. in general biology from the University of

California, San Diego, then went on to work as a community health outreach volunteer with the Peace Corps in Mozambique. That experience led her to pursue a Master of Public Health at the University of Edinburgh, where her master's thesis was about diabetes comorbidities in low- and middle-income countries. Prior to starting her PhD, she worked as a research assistant at the Karolinska Institute where she assisted with the development of material for a textbook on statistical and epidemiological methods related to case-control studies and extensions to case-control designs and analyses. Her research interests revolve around healthcare access and utilization, communicable and non-communicable disease co-occurrence, and social and structural inequalities in health, particularly in ageing populations in low- and middle-income countries.

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70 Really is the New 60: Cohort Trends in Intrinsic Capacity in England and China

Katja Hanewald (CEPAR, School of Risk & Actuarial Studies, UNSW Sydney)

Abstract: Life expectancy is increasing in almost every country, but whether the years of life gained are being experienced in the same, better or worse health than was the case for previous generations is still unclear. Much of the research examining this question is based on complex trends in the incidence or absence of disease that are difficult to interpret. Moreover, the critical issue for older people is whether they can be and do the things they value, and disease patterns are only indirect markers for these functional abilities. However, to date, research considering this question from the perspective of functioning has only considered severe losses or limited domains.
As an alternative approach, we used the concept of intrinsic capacity proposed by WHO in 2015 to directly examine trends in functioning in two large longitudinal studies of ageing – the English Longitudinal Study on Ageing (ELSA with 14,710 participants aged 60+ followed over 9 waves) and the China Health and Retirement Longitudinal Study (CHARLS 11,411 participants over 3 waves). Multilevel growth curve models were used to model the change over time in previously validated measures of intrinsic capacity and 5 subdomains of capacity using both linear (constant change) and quadratic (accelerated change) terms to allow for non-linear trajectories. We identified significant improvements in functioning in more recent cohorts of older people. More recent cohorts entered older ages with higher levels of capacity, and subsequent declines were less steep than for earlier cohorts, although these declines accelerated over time (ELSA linear change -0.0565 (- 0.062, -0.051) p< 0.001; CHARLS linear change -0.034 (-0.043, -0.026) p<0.001). The greatest improvements were seen in cognitive, locomotor and vitality domains. The trends were similar for both males and females and, while analysis was limited by the lesser availability of data in CHARLS, were consistent in both English and Chinese cohorts. These changes are large, with younger cohorts needing to be more than five years older than earlier cohorts before they experienced equivalent levels of decline in intrinsic capacity. Even greater improvements were seen for cognitive capacity. However, the causes are unclear and previous research suggests these trends may be inequitably spread across the population with higher socio-economic groups likely to be most advantaged.

Bio: Dr. Katja Hanewald is an Associate Professor in the School of Risk and Actuarial Studies and the Coordinator of the Actuarial Co-op Program at UNSW Sydney. She is also an Associate Investigator in the ARC Centre of Excellence in Population Ageing Research (CEPAR) and the Director of Research of CEPAR's Ageing Asia Research Hub. Her research models longevity and healthy ageing trends and develops risk management and insurance responses to population ageing. She has published over 25 peer-reviewed articles in leading insurance, actuarial, economics, and medical journals and is a member of the editorial boards of the Journal of Pension Economics and Finance, the Risk Management and Insurance Review, and the Journal of Retirement. Katja obtained her PhD in Economics from Humboldt-Universität zu

Berlin in 2010 and worked as an Economist at the German Federal Ministry of Finance from 2013 to 2015.

Session 2C: Caring and Work

Understanding the Drivers and Outcomes of Carer Recognition among Working Carers of Ageing Relatives

Myra Hamilton (CEPAR, University of Sydney)

Abstract: This study explores influences on perceived recognition of informal, unpaid family caring and its flow-on outcomes in the form of social connectedness and well-being among employees with care responsibilities for ageing relatives. We predicted that unfavourable experiences in both employment and the co-ordination of aged care services would separately and interactively combine to shape carer recognition. In turn, carer recognition was associated with social connectedness and well-being outcomes. Findings provided support for the mediating role of carer recognition. Additionally, difficulty navigating services moderated the relationship between career disruption and outcomes (social connectedness, well-being). Employees who reported greater difficulties with aged care services reported lower community recognition of the carer role and worse outcomes than employees with fewer difficulties with aged care services. The results provide new insights for policymakers about the role of aged care service navigation, and of recognition by government and service providers, in facilitating positive outcomes for working carers.

Bio: Associate Professor Myra Hamilton is a Principal Research Fellow at the ARC Centre of Excellence in Population Ageing Research at the University of Sydney. She is a sociologist and social policy researcher whose research focus is on gender, work and care across the life-course. Myra's research explores how policies and services can build wellbeing and financial security in work and in care over the life course. Her projects have covered: the employment experiences and policy needs of parents, grandparents, unpaid carers and young people in care; work/care reconciliation at different times in the lifecourse; gender inequalities in later life; and the care workforce. She combines traditional academic research with applied policy research for government and non-government organisations, including evaluations of policies and programs. Myra sits on the board of COTA NSW.

Career Lifecycle Planning and the Impact on Employee Wellbeing and Residential Aged Care Organisations

Jennifer Pollock (Faculty of Health, Engineering and Sciences, University of Southern Queensland)

Abstract: The Australian population, similar to other countries internationally, is continuing to age and societal ageing is affecting economic growth, patterns of work and retirement. While healthcare is currently experiencing workforce challenges across the whole of care and support, these shortages are being felt acutely in aged care. The two key elements driving these workforce challenges are - the increasing service demands to meet the needs of an ageing population who are living longer and an ageing workforce.
Personal Care Workers (PCWs) are the cornerstone for providing care to residents of Residential Aged Care Facilities (RACFs). The Australian Government forecasts a gap greater than 250,000 employees in the aged care sector by 2050. To attract additional workers to this sector, employers need to align employment opportunities to the changing wants and needs of

the PCWs. Career Life Cycle Planning (CLCP) incorporates career management but extends this to include additional factors which impact on an individual's career such as family, health, age, and financial obligations and has become increasingly important due to the extension of working lives. This is in part due to increasing lifespans as well as changing economic environments and political intervention with new legislation to gradually increase retirement age. PCW provide 70% of the resident care and considering their skill, qualifications and motivation is essential to improving PCW wellbeing and subsequent organisational improvement. Hence this gives rise to the overarching research question: What are the enablers, barriers, and benefits to implementing CLCP into the RACF?
The research sites are RACF in Sydney Australia, and the study subjects are PCW and managers. The study tools are surveys, focus group and key informant interview. Data analysis will be conducted using descriptive statistic and thematic analysis. Implementation of CLCP for PCW will contribute to improved employee wellbeing. This in turn will subsequently improving the standards of care for residents in RACF and positively affecting the organisation's overall performance.

Bio: Jennifer Pollock joined the NSW Nominal Insurer for workers compensation (icare), in January 2019 as Strategic Employer Manager supporting the Aged Care and Disability sector. In this role Jennifer consults with organisations in the Aged Care and Disability Sector to manage workplace injury, early return to work and improve the wellbeing of their employees. Prior to joining icare Jennifer utilised her experience in Clinical Redesign to manage change projects across the aged care sector. Jennifer holds a Diploma in Therapeutic Radiography, Bachelor of Commerce (Mktg), MBA (Human Resource Management) and a Graduate Diploma in Clinical Redesign. Jennifer is continuing her passion for influencing change in the Aged Care sector and is currently a PhD candidate studying at the University of Southern Queensland.

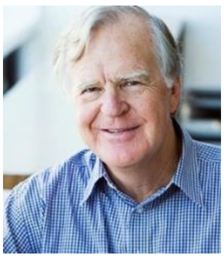
PANEL 1: Migration Policy for Australia in the Context of Population Ageing

Introductory remarks: Alan Woodland (CEPAR, UNSW Sydney)

Chair: Peter McDonald (CEPAR, University of Melbourne)

Panellists:

- Abul Rizvi (former Deputy Secretary of the Department of Immigration)
- Liz Ritchie (CEO, Regional Australia Institute)
- Trent Wiltshire (Immigration and Housing Expert, The Grattan Institute)



Alan Woodland is a CEPAR Chief Investigator and Emeritus Professor of Economics in the School of Economics within the UNSW Business School. Alan has published many papers in leading journals including Econometrica, Review of Economic Studies, Journal of Econometrics, Journal of International Economics, European Economic Review and the Journal of Economic Dynamics and Control. Current research focuses on the analysis of taxation and retirement polices within the context of population ageing and their implications for macroeconomic, distributional and economic welfare outcomes within ageing populations. He is an elected Fellow of the Econometric Society and the recipient of the Distinguished Economist Award of the Economics Society of Australia. He is an Associate Editor of the Review of International Economics, and is currently on the editorial boards of the International Journal of Economic Theory and the Economic Record. Alan has been a Reserve Bank of Australia Fellow in Economic Policy and a Senior Fulbright Fellow. He is also on the scientific boards of the European Trade Study Group (ETSG), Asia Pacific Trade Seminars

(APTS), Australasian Trade Workshop (ATW) and the Dynamics, Economic Growth, and International Trade (DEGIT) Research Centre.

Peter McDonald is a CEPAR Chief Investigator and Honorary Professor of Demography within the Centre for Health Policy at the University of Melbourne and Emeritus Professor at the Australian National University. In 2022, he received the Laureate Award of the International Union for the Scientific Study of Population, the leading international award in the field of demography. He is frequently consulted on the issue of population futures (causes, consequences and policies) by governments around the world, especially in Australia, Europe and East Asia. He was President of the International Union for the Scientific Study of Population for the years, 2010-2013. In 2015, he received the Irene B. Taueber Award from the Population Association of America which recognises an unusually original or important contribution to the scientific study of population. In 2008, he was appointed as a Member of the Order of Australia. He has worked previously at the Australian National University, the Australian Institute of Family Studies, the World Fertility Survey and the University of Indonesia.

Abul Rizvi is an economics, accounting and public policy graduate from the ANU and holds a PhD in immigration and population policy from Melbourne University.
From 1998, Rizvi managed major growth in overseas students, skilled temporary migration, visitors and working holiday makers, including development of pathways to permanent migration.Between 1996 and 2006, Rizvi was Chair of the Commonwealth/State Working Party on State-Specific and Regional Migration that gave state/territory governments a much greater role in immigration to their jurisdictions. He was responsible for commissioning research on the demographic, economic and budgetary impact of immigration that was extensively used in development of the 2002 and 2007 Intergenerational Reports. He was Deputy Secretary responsible for all aspects of immigration, humanitarian, citizenship and settlement policy from 2005.
Rizvi was awarded the Public Service Medal and the Centenary Medal for services to the development and implementation of Australian immigration policy.
Rizvi is a frequent media commentator on population, immigration and its impact on Australia's economic and budget directions.
He was invited to participate in the 2022 Jobs and Skill Summit and recently published a book in the 'In the National Interest' series titled 'Population Shock'.

As the CEO of the Regional Australia Institute (RAI), **Liz Ritchie** is driving a new national conversation about the future of this country that recognises regional Australia in a new light.
Whilst understanding the unique issues and opportunities of each regional area, Liz is dedicated to reform through the recently released Regionalisation Ambition 2032 which she is spearheading a new plan to #rebalancethenation through collective action.
For over 20 years, Liz has worked across the nation with corporates, government and the not-for-profit sector, and she specialises in leading business transformation to build a sustainable future. Liz is a purpose-led leader who leans into bold ideas. She is a change agent, an innovator, a researcher, an influencer and an extremely passionate advocate for regional Australia, heralding from Deniliquin, in NSW.
In 2022, Liz was selected to join 23 CEOs to complete the first Social Impact Leadership Australia (SILA) program. Liz is a founding Director of the Australian Gender Equality Council (AGEC), advocating to ensure women can have equal access and opportunity. She is also a graduate of Australian Institute Company Directors and holds a Master of Applied Science (Organisational Dynamics) from RMIT.

POSTER VIEWING SESSION
Poster No. 1

Are Older Colleagues More Trustable? The Interactive Effect of Employee Relational Age and Voice Behaviour on Coworker Trust and Task Performance

Sanjeewa Perera (University of South Australia)

Abstract: It is very common for modern organizations to have three generations of people working together and often professionals are placed in age-diverse teams. However, the present literature presents a mixed view on whether the chronologically older employees are more trustable and capable in the eyes of their colleagues and supervisors. To address this issue, we integrate the stereotype content model with the status attainment theory to propose that when older employees' voice behaviour is frequently witnessed, the potential destructive effect of their relational age (i.e., the difference between their chronological age and their team's mean age) on coworker trust will be neutralized. However, if, older members choose to keep quiet, they will be less trusted by their peers, and this can hurt their performance evaluations in the eyes of their supervisors. We test our hypotheses using a sample of 199 employees from 56 professional work teams in Taiwan. We adopt a round-robin design and social network approach to capture employees' voice behaviour and coworker trust; performance is rated by teams' supervisors. After controlling for employees' gender, education, team tenure, and peer-rated performance capability, we find a significant moderating effect of voice behaviour on coworker trust and a significant moderated mediation effect on supervisor-rated task performance. Our research conclusions contribute to the literature on workplace aging, voice behaviour, as well as the protean careers, and provide important insights for organizations who manage age-diverse teams and for older professionals who are motivated to build sustainable careers.

Bio: Sanjeewa Perera is a Senior Lecturer at UniSA Business. She received her PhD from the University of South Australia. Dr Perera's research focuses on demographic diversity with a focus on age and gender. Her research has been funded by state government and Australian Research Council grants and has been published in top peer-reviewed journals in the field of management e.g., Academy of Management Journal, Human Resource Management, The Leadership Quarterly. Her current research projects examine work experiences of mature age people, and gender diversity practices in organisations. She serves as an editorial board member of the Journal of Organizational Behavior and Human Resource Management Journal.

Poster No. 2

Forgotten in Crisis: Aged Care and COVID-19
Carolyn Morgan (University of New England)

Abstract: Segregating older persons during the pandemic further widened the cracks in the aged care landscape. Access to support from loved ones was severally curtailed, if not completely denied. Aged care residents were classified as high-risk and immediately categorised as a vulnerable group. This was ostensibly introduced for their own protection. As a result of these rigid measures, however, other issues have arisen, the effects of which are still unknown. There has been a systemic denial of human rights for older people and missed opportunities for shared decision-making within aged care. This presentation will present the

preliminary findings from a research project that examines the psychological effects and lack of human rights experienced by aged care residents as a result of the COVID-19 lockdowns. It will explore the impact of the lockdowns on the mental health of aged care residents and their families, including the effects of social isolation, loneliness, and anxiety and discuss the lack of human rights experienced by aged care residents, such as the right to freedom of movement, the right to privacy, and the right to access family and friends. Preliminary findings from an online survey indicate that the majority of aged care residents experienced feelings of loneliness, anxiety, and depression due to the lockdowns. In-depth interviews will be conducted in the coming months with consenting respondents. It is anticipated that future research at PhD level will include in-depth interviews with healthcare staff and industry experts to provide a more comprehensive understanding of the challenges faced by aged care homes during the lockdowns. The current research makes the assumption that there are possible physical and psychological effects, that human rights could have been denied, and that these effects are measurable.

Bio: Carolyn Morgan is a Master of Philosophy student at the University of New England. Her thesis examines the experiences of Australians living in Aged Care during the Covid-19 lockdown periods. Her studies were recommended by her confirmation committee to be advanced to a Doctor of Philosophy. Carolyn is bringing her personal experience of being a family member of a resident of an aged care home during lockdown to her research. Her project examines residents' experiences from a human rights perspective by delving into how the human rights of aged care residents and their families have been affected during the COVID lockdown periods in N.S.W. Carolyn has a strong interest in advocacy for both those in care and their carers. Her personal experience of being a parent of a child with a disability has given her 35 years of lived experience of people with a disability and the social and institutional barriers they face. As such, she has faced these barriers alongside her daughter and has a concentrated and determined attitude to problem-solving in overcoming these challenges. Carolyn has extensive experience as a volunteer aiding students to participate in education programs within the school setting, for example, scribing for students with dyslexia, dysgraphia, and intellectual and physical disabilities to sit examinations. She has also worked for a local specialist school, supporting children with moderate to severe needs.

Poster No. 3

The Implicit Measure of Ageism: Eye-Tracking

Kimberly Min Xi Man (School of Psychology, University of Nottingham Malaysia)

Abstract: Ageism is defined as the systematic prejudice, discrimination and stereotyping of one age group against another on the basis of chronological age. Past literature consistently reported older adults to be perceived more negatively by the young as the former are viewed as a resource threat and a burden due to their physical and cognitive decline. The negative expectations and self-perceptions of ageing among the younger generation manifests as ageing anxiety. This phenomenon is defined as the fear and negative feeling associated with growing older. Greater ageing anxiety has been reported among the young as older adults remind them of their impending death and the fallibility of the human body. Past studies suggested that facial ageing cues directly influence the perceptual processing of faces and acts as a cue to age-related stereotypes. To date, limited studies (especially in Asia) have investigated the phenomenon of ageism implicitly using the eye-tracker and self-aged face. Hence, by utilising eye-tracking technique and controlled software manipulation to age faces of the self, friend and stranger, this proposed study aims to investigate the levels of ageing anxiety and attitudes of the young and middle-aged adults towards older adults. The perceptual processing of facial features via eye movements (e.g., differences in fixation and gaze patterns) of the "present" and "aged" faces of the self, friend and stranger will also be explored. We hypothesise that implicit

attitudinal tests (e.g., Age-Implicit Association Test) of ageism and subjective measurement via ageism scale will be correlated with greater ageing anxiety. Moreover, females are predicted to be more anxious about ageing relative to males. We also anticipate to observe differential fixation and gaze patterns and their associations with attitudes towards ageing and ageing anxiety, especially when viewing the aged faces of the self, compared to friend or stranger.

Bio: Kimberly (Kim) is an aspiring researcher and a MRes Psychology student from the University of Nottingham Malaysia. Her area of interest in research focuses on the field of human ageing, where she is interested in exploring the phenomenon of ageism and human behaviour. Her previous work revolved around investigating the factors associated with ageism among Malaysians, and also cross-cultural study of the similar topic that looked into the differences in the attitudes towards older adults among Malaysian and Australian young adults. Her current research topic for Masters looks into investigating the phenomenon of ageism implicitly among the Malaysian young and middle-adult population. She aims to further expand existing research on ageism via various different lenses, angles and with different populations via cross-cultural studies.

Poster No. 4

Financial Protection in Health for the Geriatric Population: Indian Context

Maya Vimal Pandey (Centre for Research Studies, Birla Institute of Management Technology)

Abstract: The elderly or geriatric population has no standard definition, but anyone above the age of 65 years is considered to be elderly, as per the United States Social Security Administration. In India, the term ‘senior citizen’ is used for persons aged 60 years who have retired or superannuated from work. This paper considers 60 years and above as the geriatric population, which was 138 million in 2021, as per the National Statistical Office’s 2021 report on the Elderly population in India. According to the same report, it is projected to reach 194 million in 2031. Globally, the geriatric population was 703 million (65 years) in 2019 and is likely to reach 1.5 billion in 2050 (WHO, 2019). The reduction in fertility and mortality rates along with improved healthcare are a few reasons for the rising geriatric population worldwide.
Longevity is a positive outcome, yet considered to be a strain on the resources of a country and a burden on growth and economic productivity (Eozenou, 2021). For emerging economies like India, the health-related services rendered to people who need it most or insurance coverage, are grossly inadequate, leading to exposure to high out-of-pocket expenses. The rising cost of healthcare services often results in people going without treatment, partly or wholly. Older people usually find it difficult to fend for age-related complex healthcare needs. The economic disparity and consequent burden on the elderly poor have been growing alarmingly. Financial literacy and management of wealth holdings are critical to the financial protection of the geriatric population. This study aims to explore the healthcare needs of the geriatric population through a survey conducted by eliciting responses to the questionnaire on the health insurance needs of senior citizens. Based on the responses, the authors have attempted to propose a financial solution with non- conventional institutional settings like hospice care, sub-acute care or home care for chronic conditions through innovative insurance coverages.

Bio: Mrs. Maya Pandey has three decades of insurance industry experience, having worked at senior executive positions in public, private & MNC insurance companies in India and overseas. She holds a M.Phil degree in International Trade law apart from various short-term management courses. She has specialization in financial line products of the non-life insurance industry, having attended numerous international conferences. She is currently a faculty & doctoral researcher at Birla Institute of Management Technology.

Poster No. 5

Intergenerational Caregiving in India: Evidence on its Impact and Implications for Caregivers

Sruthi Anilkumar Hemalatha (International Institute for Population Sciences)

Abstract: Providing care is an essential aspect of familial caregiving over one's life course, playing a vital role in intergenerational relationships and family well-being. However, in India, institutional and community-based care have not been adequately established, and family caregivers are still primarily responsible for providing care to family members. Thus, the study's main aim was to understand the different aspects of intergenerational caregiving in India using multiple datasets such as LASI Wave 1, 2017-18 and SAGE-India, 2015. More specifically, the study tried to examine familial caregiving and the different types of care provided by younger generations to other family members. The study also tried to investigate grandparental caregiving and the factors that influence it. Both bivariate and multivariate analyses have been used in the study. When looking at the proportion of younger individuals who gave care to an adult in the household, based on the respondent's background characteristics, we see a small increase in the percentage of respondents who assisted an older adult household member as their age grew. Men and urban respondents assisted more frequently than women and rural ones. Most grandparents in India are relatively young (40-59 years), falling in the 40-59 years age group (59.3%). Among them, 22.3% actively care for their grandchildren, while 18.8 % of grandparents above 60 years care for their grandchildren. Living arrangements, sex, age, and limitations in activities of daily living significantly affect caregiving. However, there appear to be gender differences in grandparenting, with 21.8% of grandmothers providing care to grandchildren compared to 17.89% of grandfathers caring for their grandchildren. Different intergenerational relationships and caregiving patterns in India need to be further explored to better understand family dynamics and the possible challenges that they may face.

Bio: Sruthi Anilkumar Hemalatha is a Doctoral Fellow in Population Studies specializing in ‘Aging and Gerontology’ with a special focus on intergenerational relationships, familial caregiving and household dynamics for the Dept. of Family and Generations, International Institute for Population Sciences, Mumbai, India.

Poster No. 6

Social Ties and the Prevalence of Multimorbidity among the Elderly Population in Selected States of India

Sree Sanyal (Jawaharlal Nehru University)

Abstract: Research in ageing highlights the age-related health dimension more than the psycho-social characteristics of the elderly (60+), which also influences the health outcomes in India. Multimorbidity is defined as the person having more than one chronic non-communicable diseases and their prevalence increases with ageing. On the other hand, Social Tie can be defined as the inter-personal connections or relationships whether it is positive or negative, weak or strong based on the level of exchange or interaction between persons. The social tie can be further divided into (1) Social Support; (2) Social Engagement or Integration; and (3) Perception of Social Support, Connectedness and the importance of the elderly.
The study aims to evaluate the influence of social ties with the background characteristics on self-reported prevalence of Multimorbidity (selected chronic morbidities) among the elderly

population in selected states of India. With Building Knowledge Base on Population Ageing in India, 2011 (BKPAI) secondary data set, bi-variate analysis has been done to show the relationship of Social Ties and the persons suffering from ‘No disease’, ‘One Disease’ and ‘Multimorbidity’. Adjusted percentage was estimated using predicted probability from the multiple logistic regression analyses to show the prevalence of chronic diseases. Results shows the female oldest old (80+), who are others in Caste, Christian in religion, widowed, having less than 5 years of education completed, ever worked, from highest wealth quintile, residing in Urban Kerala are more associated with multimorbidity. The elderly population who are more socially connected through family visits, public gatherings, gets support in decision making and who prefers to spend their later years with son and spouse only, shows lesser association with multimorbidity. More family and neighborhood involvement, special care for the elderly with free checkups and healthcare services for cognitive ailments discussing the health and wellbeing of elderly and ways for improvement are necessary.

Bio: My name is Sree Sanyal and I am a Doctoral Fellow in Population Studies studying in Jawaharlal Nehru University from 2018. I have pursued my Masters in Arts in Geography and M.Phil in Population Studies from the same University from 2014 to 2018. I have accomplished the knowledge of data science and have skills of handling large datasets on Stata and SPSS. I am highly interested in working in Gerontology. In my M.Phil Dissertation 2018 I have worked on the Prevalence of Chronic morbidities and Multimorbidities among elderly population in selected parts of India. I am deeply involved in the field of Geriatrics and Gerontology and would love to learn and contribute in this field.

Poster No. 7

Fortune or Misfortune: Farming Population Ageing and the Development of Agricultural Mechanization Services in China

Xinjie Shi (College of Public Affairs, Zhejiang University)

Abstract: Farming population aging (FPA) has been serious in China; thus, outsourcing services in agriculture, such as agricultural mechanization services (AMS), are developed to relieve the labor shortage. Drawing on the 2017-2021 China Household Finance Survey data, this study investigates the links between FPA and the development of AMS. The results show that FPA reduces the adoption of AMS and the proportion of crop area operated by AMS. The mechanism analysis indicates that FPA significantly reduces crop area and grain area, and also activates agricultural land abandonment and land renting-out. Further analysis shows that both rural population aging and FPA induce the target of agricultural production changing from for-profit to self-sufficiency, and the perfection of social security in rural China inhibits smallholder farmers’ adoption of AMS. In addition, the factor marketization exacerbates the negative effects of FPA on AMS. Our analysis implies that although it seems that FPA increases the demand for AMS, agricultural land abandonment and land renting-out are commonly adopted and smallholder farmers’ target of agricultural production is in transition when FPA is coming.

Bio: Dr. Xinjie Shi obtained his Ph.D. degree at Crawford School of Public Policy, Australian National University (ANU). He is currently an Assistant Professor and “Hundred-Talent Program” Researcher at School of Public Affairs/China Academy for Rural Development (CARD), Zhejiang University. Xinjie's research has covered a wide range of Chinese rural development issues, including (i) rural factor reallocation (e.g., rural-urban migration and land conversion); (ii) human capital in rural China (e.g., rural ageing, education and health of the migrants and left-behind people); (iii) inequality of opportunity. His recent works have been published in journals including Health Economics, Journal of Rural Studies, World Development, China Economic Review, Energy Policy and Population, Space and Place.

Poster No. 8

Potential of Intergenerational Practices in Achieving Successful Ageing in Australia: A Literature Review

Yixuan Huang (Social Policy Research Centre, UNSW Sydney)

Abstract: Intergenerational practices have been recognised as a promising approach to addressing the challenges posed by an ageing population. These practices work to strengthen positive social and emotional ties between generations and have been shown to bring many benefits. Despite their influences, there is a lack of evidence on the potential of intergenerational practices to promote successful ageing in Australia.
The aim of this literature review is to explore the current state of intergenerational practice in Australia and its potential to support successful ageing by investigating the use of intergenerational practice and the available evidence. As a result, questions are answered about how intergenerational practices are being used to support successful ageing in Australia and what evidence supports the potential for intergenerational practices to promote successful ageing in Australia. The results show that intergenerational practices in Australia take many forms, including education, community development and health, and play an important role in promoting positive social and emotional connections between generations. This review also highlights the benefits of intergenerational practices in successful ageing, such as improved physical and mental health, increased social support and quality of life, and preservation of cognitive function. And all of these can contribute to successful ageing in Australia. However, research findings suggest that access to intergenerational programs, adequate funding and overcoming cultural and social barriers are critical to maximising the impact of intergenerational practices on successful ageing.
This literature review highlights its potential, emphasises the importance and benefits of intergenerational practice in promoting successful ageing in communities, and calls for increased opportunities, funding and resources, as well as breaking down cultural and social barriers to enhance its impact of intergenerational practices on successful ageing. Discover the potential for more intergenerational practice to achieve successful ageing in Australia, thereby realising the benefits of ageing between individuals and communities.

Bio: Yixuan Huang is a PhD candidate at the Social Policy Research Centre at the University of New South Wales (UNSW), where she is under the supervision of Prof. Bingqin Li and Prof. Ilan Katz. Her unique blend of architectural and social science knowledge enables her to delve into the complex issues surrounding intergenerational practices in the community. With a focus on ageing research, Yixuan possesses a thorough understanding of the challenges and opportunities facing older adults and is dedicated to finding innovative opportunities that support successful ageing in the local community. Her passion for her work is evident in her commitment to sharing her insights and knowledge with others. Yixuan's diverse background and passion make her a valuable contributor to the field, and she is eager to continue exploring intergenerational research and the community development of the Chinese population in Australia through her current projects.

Poster No. 9

Identifying Access Barriers to Care and Unmet Needs in Community-dwelling Older Australians

Yuchen Xie (CEPAR, NeuRA, School of Psychology, Ageing Futures Institute, UNSW Sydney)

Abstract: Little is known about how the psychosocial contexts of older adults influence their unmet needs for receiving formal home care services. A population-based National Survey of Disability, Ageing and Carers (SDAC) was used to examine the prevalence of community-dwelling older Australians with unmet need(s) for home care services by using a subsample from SDAC of those ≥65 years and living in households (n=9271). We also examined the association between the perceived social isolation of older adults and their reported unmet needs for home care services. Logistic regression analyses were conducted to analyse the association between reported unmet needs to care and perceived social isolation using a smaller sample from SDAC (n=1964) of older adults who accessed home care services. The complex survey design features were reflected in the analyses. Among older Australians living in households, around one in ten (9.7%) reported an unmet need for assistance from formal home care services. Of those who receive formal care at home, about one-third (32.4%) had an unmet need for formal assistance. Within this group, the primary barriers to accessing formal care at home reported were ‘service costs too much’ and ‘did not know of service’. Regression analyses showed that perceived social isolation among older adults was associated with an almost 2-fold (OR=1.95, 95%CI:1.60-2.38) increase in having unmet need(s) for home care services. The odds ratio (OR=1.68, 95%CI:1.35-2.09) remained statistically significant after adjusting for age, sex, education, psychological distress, income, language, remoteness, availability of informal support, and severity of disability. Many older Australians have unmet needs for formal home care services. Findings also suggest that social isolation is strongly associated with experiencing barriers to navigating aged care systems and accessing formal care services among older adults.

Bio: Yuchen is a PhD student in the School of Psychology at the University of New South Wales. She holds a Master of Science in Public Health from the Johns Hopkins School of Public Health, with a background in social and behavioural sciences. Yuchen has gained valuable research experience in health services research across various countries.
With a keen interest in interdisciplinary research and population aging, Yuchen moved to Sydney to embark on a project at UNSW focused on aged care navigation for older adults and their families. Her current research uses qualitative and quantitative methods to explore the influence of psychosocial factors and family involvement on access to aged care among older adults. Yuchen also investigates the unique challenges faced by culturally and linguistically diverse communities in this context.

OPENING REMARKS DAY 2

Hazel Bateman is a Co-Deputy Director, Professor of Economics in the UNSW School of Risk and Actuarial Studies. Hazel researches consumer financial decision making especially as it relates to retirement accumulation and decumulation. Her work focuses on interventions to facilitate better retirement financial decisions; retirement insurance product design; home equity release to fund retirement; the demand for aged care insurance; and the taxation and regulation of pension and superannuation funds. She is the author of over 80 peer-reviewed publications and book chapters and has been Chief Investigator on over a dozen ARC funded projects. Hazel has consulted on retirement income issues to international organisations including the OECD, the World Bank, the Social Insurance Administration (China) and the Korean Institute of Health and Social Affairs. She is the Chair of Netspar's International Scientific Council and a member of the China Ageing Finance Forum and serves on the UniSuper Consultative Committee and the Advisory Boards of the Mercer CFA Institute Global Pension Index, the Conexus Institute and the Centre for Behavioural Economics, Science and Technology (BEST). Hazel is an associate editor of Insurance: Mathematics and Economics and inaugural President of the International Pension Research Association (IPRA).

KEYNOTE 3: Work and Retirement Pathways Matter

Introductory remarks: Hazel Bateman (CEPAR, UNSW Sydney)

Is Retirement a Curse or a Blessing? Work and Retirement Pathways Matter

Mo Wang (University of Florida)

Abstract: This presentation aims to explore the crucial research question of how retirement affects individual well-being. It will delve into an extensive body of research comprising longitudinal and nationally representative data, which have been utilized to provide insights into this inquiry. By drawing upon accumulated research findings, the presentation will demonstrate how the scientific conceptualization and understanding of work and retirement pathways has evolved over time, particularly regarding their influence on the retirement adjustment process. Moreover, the presentation will shed light on various factors operating at macro, meso, and micro levels that are exogenous to work and retirement pathways. These factors play a significant role in shaping individuals' experiences during retirement. To conclude, the presentation will highlight several compelling avenues of future research for the attendees to consider.

Bio: Dr. Mo Wang is a University Distinguished Professor and the Lanzillotti-McKethan Eminent Scholar Chair at the Warrington College of Business at University of Florida. He is also the Associate Dean for Research and Strategic Initiatives, Department Chair of the Management Department, and the Director of Human Resource Research Center at University of Florida. To date, Mo has published more than 185 peer-reviewed journal articles, 30 book chapters, and 5 books. He is known for his research on retirement and older worker employment, occupational health psychology, expatriate and newcomer adjustment, leadership and team processes, and advanced quantitative methodologies. He received numerous awards for his research in these areas, including

Academy of Management HR Division Scholarly Achievement Award (2008), Careers Division Best Paper Award (2009), European Commission's Erasmus Mundus Scholarship for Work, Organizational, and Personnel Psychology (2009), Emerald Group's Outstanding Author Contribution Awards (2013 and 2014), Society for Industrial-Organizational Psychology's William A. Owens Scholarly Achievement Award (2016), and Journal of Management Scholarly Impact Award (2017). He also received Cummings Scholarly Achievement Award from Academy of Management's OB Division (2017), Early Career Contribution/Achievement Awards from American Psychological Association (2013), Federation of Associations in Behavioral and Brain Sciences (2013), Society for Industrial-Organizational Psychology (2012), Academy of Management's HR Division (2011) and Research Methods Division (2011), and Society for Occupational Health Psychology (2009).

Mo's research is well recognized and regarded by major federal funding agencies. His research program has been supported with more than $5M from NIH, NSF, CDC, and various other research foundations and agencies. As a true scientist-practitioner, Mo is also committed to providing students, workers, employers, and policy makers with evidence-based knowledge. His work has been reported extensively by the popular media, such as NPR, BBC, Associated Press, WSJ, NYTimes, HBR, and the Washington Post. In 2015, he conducted a Congressional Debriefing on retirement for U.S. Congress. He also served as an invited speaker for White House Social and Behavioral Sciences Team twice, giving talks on retirement (2015) and older worker job search (2016).

Mo is an elected Foreign Member of Academia Europaea (M.A.E) and a Fellow of AOM, APA, APS, and SIOP. He was the Editor of The Oxford Handbook of Retirement and an Associate Editor for Journal of Applied Psychology (2010-2020) and currently serves as the Editor-in-Chief for Work, Aging and Retirement. He was the President of Society for Occupational Health Psychology (2014-2015) and the Director for the Science of Organizations Program at National Science Foundation (2014-2016). He currently serves the Presidential Track for Society for Industrial-Organizational Psychology (2021-2024).

CONCURRENT SESSION 3

Session 3A: Long-Term Care Prevalence and Funding

Air Pollution and Long-Term Care Burden: Evidence from China

Cheng Wan (CEPAR, ETH Zürich)

Abstract: We examine the causal effects of air pollution exposure on long-term care (LTC) burden by matching a satellite based PM2.5 (particulate matter smaller than 2.5 μm) dataset to a nationally representative longitudinal study in China over 2011-2018. We find significant adverse effects of PM2.5 exposure – instrumented by thermal inversions, on LTC burden. A 10 μg/m3 increase in annual PM2.5 exposure increases average monthly LTC hours and associated financial costs by 11 hours and CNY 135, respectively. The effects are larger for the low-income group and for the individuals having experienced at least one year severe air pollution exposure (PM2.5 > 35 μg/m3, WHO air quality interim target I) in the past five years. We show that the air pollution induced LTC costs most likely come through its adverse impact on cancer, mental disease, and cardiovascular disease. Our findings assist policymakers to plan for LTC provision and to implement clean air policies.

Bio: Cheng Wan is a Postdoctoral Researcher at the Chair of Integrative Risk Management and Economics (IRME) at ETH Zürich. His research interests focus on pension economics and finance, household consumption and saving behaviour, health risks of environmental factors, and the economics of cognitive ageing. Cheng has a PhD degree on retirement insurance in

China at the UNSW School of Risk & Actuarial Studies. He has a Master of Science in Statistics from Katholieke Universiteit Leuven and a Bachelor of Science in Information and Computational Science from Wuhan University. He was a Research Associate at CEPAR's UNSW Business School node, and he worked as a Research Manager in Willis Towers Watson Research and Innovation Centre (Wuhan Office) before pursuing the PhD.

Pricing Long-Term Care Insurance for Healthy or Chronically Ill Australians

Kyu Park (CEPAR, UNSW Sydney)

Abstract: In our prior study, we have developed and estimated a multi-state Markov model of functional disability (based on core activity limitations) and chronic illness status for Australians aged 60 or greater. The model explains transitions between five states (healthy, disabled but not ill, ill but not disabled, disabled and ill and dead) with age, sex and trend factors. Estimation of the model utilised four unlinked cross-sectional data sets with prevalence of disability and illness across 10 years (data in the Survey of Disability, Ageing and Caring 2009, 2012, 2015 and 2018), and aimed to find the transition parameters that best explain the observed changes of prevalence in Australia. The objective of this study is to price a long-term care (LTC) insurance for healthy or chronically ill Australians based on the estimated model. For the product design, we consider existing LTC insurance products in the US and UK, previous studies pricing LTC insurance, and the applicability in the Australian context. These considerations are supplemented by a systematic literature review on pricing method of the LTC insurance included in our study. Sensitivity tests for model and product parameters are performed. The pricing method with R codes is presented.

Bio: Kyu is a Senior Research Associate in the Risk and Actuarial Studies Department at the University of New South Wales, working for the Australian Research Council (ARC) Centre of Excellence in Population Ageing Research (CEPAR). He is working on research projects in the Sustainable Wellbeing in Later Life research stream, focusing on the development of longevity and health risk models and optimal design of health and aged care insurance products with applications to various public sector support policies for retirement incomes and aged care. He recently completed a PhD in Actuarial Studies and Business Analytics at Macquarie University for his work on analysis to find causes and outcomes of medication adherence in aged population.

Regional Variation in Lifetime Probability of Admission to Residential Aged Care in Australia

Mark Cooper-Stanbury (CEPAR, University of Melbourne)

Abstract: At any one time, around 4% of Australians aged 65 and over are in permanent residential aged care; yet previous Australian studies have shown that the likelihood of an individual moving into permanent care at some point in their remaining lifetime is as high as 54% for women and 42% for men. To date, there have been no regional estimates of the likelihood of admission. There are four broad approaches to determining the probability of admission: methods based on analysis of place of death recorded on death certificates, methods based on retrospective or prospective cohorts (starting or finishing with death records, respectively), methods based on life table models, and transitional probability models.
Using comprehensive data on aged care usage, mortality and population, this study adopts a two-population life table approach—along with several other methodological improvements—to estimate the lifetime probability of admission to residential aged care for sub-national regions of

Australia. This method makes optimal use of Australian data sources. The results show that the probability of admission generally increases with age: nationally, lifetime probability (at age 0) was 47% for females and 34% for males. At age 65, the [remaining lifetime] probability is only slightly higher at 50% and 37%, respectively, rising to 56% and 47%, respectively, at age 85.This general pattern applied across all regions, but with substantial variation by region. For example, at age 65, the probability of admission for women varied from 27% to 69%, and for males from 25% to 49%. There was modest correlation between probability of admission and life expectancy in a region, and between probability of admission and supply of residential aged care places in a region. The regional variation is of interest to providers, governments, aged care advocates, and anyone interested in equity of access to care.

Bio: Mark Cooper-Stanbury is a PhD candidate at the Centre for Health Policy, Melbourne School of Population Health, looking at optimal policy regarding equitable access to residential aged care. Prior to commencing graduate research, Mark spent 27 years at the Australian Institute of Health and Welfare, where he led the development, collection and reporting of several major statistical collections, most recently covering aged care.

Session 3B: Age Diversity in the Workforce

Preventing a Knowledge Vortex from the Mature Workforce: Negative Effects of Age Discrimination on Older Employees' Knowledge Sharing

Fangfang Zhang (CEPAR, Centre for Transformative Work Design, Curtin University)

Abstract: Many organizations are losing great stores of knowledge from the impending retirement of older employees whose knowledge, skills, and wisdom have not been passed on to others in the organizations. Despite the significance of older employees' knowledge sharing to organizational knowledge retention and talent pool development, older workers may not be willing to share their knowledge as they sometimes experience disadvantageous treatment due to their age in the workplace. This study aims to investigate the mechanisms of how perceived age discrimination affects older employees' knowledge sharing. Drawing on the inclusion perspective, we argue that perceived age discrimination will negatively affect older employees' knowledge sharing through decreased feelings of inclusion, defined as the degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness. We conducted a three-wave survey with 367 older employees who are 45 years old and above. The dual-path mediation analysis supported our hypotheses that perceived age discrimination was negatively related to older employees' knowledge sharing via decreased feelings of belongingness and uniqueness.

Bio: Fangfang Zhang is a CEPAR Research Fellow based at the Centre for Transformative Work Design at Curtin University. She obtained her PhD from Curtin University in 2020 for a thesis on the topic of job crafting. Her research interests include work design, job crafting, proactive behaviour, overqualification, and employability. Within CEPAR, Fangfang focuses on understanding how work design/job crafting can support successful ageing, especially in terms of employees' learning and employability. Fangfang's research has been published in the Journal of Organizational Behavior and the European Journal of Work and Organizational Psychology. One paper, written in collaboration with Sharon Parker on the topic of job-crafting, won the award for best paper in the Journal of Organizational Behavior in 2019, a highly cited paper award for 2019-2020, and was the top downloaded paper from Wiley in 2018-2019.

Organisational Meta- Strategies for an Age- Diverse Workforce: Scale Development and Test of Model

Jane Chong (CEPAR, Curtin University)

Abstract: Managing an older and more age-diverse workforce is critical given the population ageing that is occurring across the globe. Yet, the literature is still under-developed with regards to which human resource management (HRM) practices help to support ageing employees and enable organisations to benefit from an age-diverse workforce. We draw on an integrative framework of organisational meta-strategies, the 3i framework, to test a path model in which bundles of HRM practices differentially impact successful ageing at work outcomes. The 3i framework encompasses inclusive practices (aimed at reducing biases and creating an inclusive climate for workers), individualised practices (aimed at designing and adapting work to the changing needs of an age-diverse workforce), and integrative practices (targeted at effective collaboration and knowledge sharing processes across age groups). Prior to testing the model, we first report a study in which we developed and validated the 3i-HRM scale using three diverse samples (total N = 945) of employees from the USA and Australia. We subsequently used the 12-item measure to test a theoretical model which examines how each core HRM practices relate, directly and indirectly, to outcomes using a time-lagged design with 497 employees from Australia. By providing this initial evidence, we hope to stimulate future research focusing on an integrative approach to understanding factors that affect age-diverse workforce.

Bio: Dr Jane Chong is a CEPAR Research Fellow based in the Future of Work Institute at Curtin University. She obtained her PhD and Master’s in Industrial and Organisational Psychology from the University of Western Australia in 2020 and is a registered psychologist. She joined CEPAR as a Research Fellow in 2021 with a keen interest in conducting rigorous research whilst partnering with organisations to support the successful ageing of their age-diverse workforce. Together with the Stream 3 team, Jane has received grant funding over AUD $400,000 to conduct several field research projects. Her research interests include human motivation, work design, and newcomer socialisation. Jane’s research has been published in international outlets including the Journal of Business and Psychology, Perspectives in Psychological Science, and Journal of Personality. She is also a recipient of multiple research awards, including Best Individual Research Paper presented by the Australian Psychological Society in 2017, the Graduate Student Scholarship presented by the Society of Industrial and Organisational Psychology based in the United States in 2020, and the 2021 UWA School of Psychological Science Award for an Excellent PhD thesis in Psychology.

Older Workers’ Safety in the Workplace

Isabella Caddy (Safe Work Australia)

Abstract: A tightening labour market should encourage employers to attract and retain older workers (55 years and older) to meet their employment needs. Unfortunately, older workers still encounter stigma that they are more prone to work-related injury than their younger counterparts. This analysis uses data from the Work-related Injury Survey, the National Dataset for Compensation-based Statistics, the Traumatic Injury Fatalities database and the National Return to Work Survey to explore and understand older workers’ experiences of safety in Australian workplaces.
Examination of these data illustrate that in fact older workers were less likely to experience a work-related injury or illness, however those that were injured or made ill by work took more time off work, were more likely to be fatally injured, were paid more compensation and were

less likely to return to work following an injury than their younger counterparts. These findings have policy implications for both supporting participation of older workers in the workplace and further examining their unique experience of workplace injury and disease.

Bio: Isabella Caddy is a Senior Analyst in Safe Work Australia's Data Analysis team. Isabella leads the collation of workers' compensation data from Australian workers' compensation authorities in each state, territory and the Commonwealth government into the National Dataset for Compensation-based Statistics, which is Safe Work Australia's primary source of information about work-related injury and disease. Isabella also conducts analysis of work, health and safety (WHS) data from a variety of sources to develop and publish reports, including Safe Work Australia's annual Australian Workers' Compensation Statistics and Key WHS Statistics reports. These reports and insights are an important tool used by Safe Work Australia to inform the development and evaluation of WHS and workers' compensation policies and strategies. Isabella holds a Bachelor of Science (Advanced) (Physiology) and a Master of Global Health from the University of Sydney. Isabella's key areas of interest include WHS hazards and outcomes in vulnerable populations and psychosocial health in the workplace.

Session 3C: Drivers of Population Ageing

Decomposing the Drivers of Population Ageing

Tabitha Thomas (Australian National University)

Abstract: Population ageing is an important and increasingly relevant area of study for demographers. A growing body of research seeks to determine how long-term changes in fertility, mortality and migration, the three drivers of any demographic process, have shaped the present ageing situation. Using variable-r decomposition and cohort data, this research note presents a new decomposition of the change in old-age dependency ratio to determine the extent to which relative changes in fertility, mortality and migration rates contribute to ageing. This provides a careful and in-depth picture of ageing and contributes to the debate concerning whether fertility or mortality changes have had the strongest effect on population ageing. When applied to several European populations, the United States and Australia, the decomposition of the old-age dependency ratio shows that ageing occurred in all populations and that changes in both fertility and mortality contributed to this ageing. Analysis of these populations shows that although populations were divided regarding which of these factors contributed more, changes in birth rates prevailed as the more significant factor. In nearly all populations, migration decreased the rate of population ageing.
Model extensions: In the first half of 2023, the researchers plan on extending the scope of this project to consider not only the old-age dependency ratio, but also the regular dependency ratio in our decomposition and analysis.

Bio: Tabitha Thomas is a student of demography at ANU. She was the runner-up of the 2022 W.D. Borrie Prize in the undergraduate category for a paper on the family planning program in Iran. She has worked for the ARC Centre of Excellence in Population Ageing Research assisting in research as an intern over two summers and has conducted her own research in mathematical demography. Her interests lie in population ageing, mathematical demography, fertility policy analysis and Indigenous demography.

Projections of Population with Long-Term Health Conditions at the Local Area Scale in Australia

Tom Wilson (CEPAR, University of Melbourne)

Abstract: Recently released census data provides spatially and demographically detailed statistics on people living with chronic health conditions in Australia. It is derived from a question, asked for the first time in the 2021 Census, about long-term health conditions. Given that Australia's population is growing and ageing, and that the spatial dimensions of these trends vary considerably, we combined these new census data with local area population projections to calculate the likely growth in the numbers of people with long-term health conditions over the period 2021 to 2036. The projections should provide a good indication of the overall need for heath and aged care services at the local scale. We prepared projections of the population by sex and five year age group at the SA3 scale (populations mostly in the range 30,000 – 130,000) and divided the population into those suffering from 1 long-term health condition and those with 2 or more long-term health conditions (who require much greater care and support). The population projections were prepared using a modified bi-regional cohort-component model, while health status projections were calculated using a propensity model assuming that 2021 Census propensities of living with long-term health conditions remain constant. The projections indicate that the population with at least one long-term health condition will rise substantially from 2021 to 2036, increasing from 7.7 million to 9.8 million. This represents an increase of 27%, while population is projected to grow by 20%. The projected increase in those with 2 or more long-term health conditions is greater at 34%. Population growth and ageing are driving these changes. Considerable spatial variations are also projected, providing guidance on the extent to which health care, aged care, and associated support services will need to be geographically targeted.

Bio: I am an applied demographer specialising in population projections, household modelling, migration analysis, indirect estimation, advanced age populations, Indigenous demography, regional and local population change, and LGBTQ demography. In addition to working in the academic sector I have also worked for the NSW public service and in consulting.

National Population Growth Rate, its Components, and Subnational Contributions

Vladimir Canudas-Romo (School of Demography, Australian National University)

Abstract: A population's current growth rate is determined jointly by changes in fertility, mortality, and migration. This overall growth rate is also the average of age-specific growth rates, which can be decomposed into the result of historical changes in fertility, mortality and migration. However, doing so requires over 100 years of historical data, meaning that such analyses are possible only in select few populations. In this research note, we propose an adapted version of the variable-r model to measure contributions to the population growth rate for countries with shorter demographic series. In addition, extend this model to explore the contribution of subnational changes to the national population growth rate. Our results show that the age-specific contributions to the growth rate obtained from short historical series, say 25 years, closely match those of the longer series. These abbreviated age-specific growth rates closely resemble the growth rate at birth of their respective cohorts, which is the major determinant of population growth, except at older ages where mortality becomes the main explanatory element. Exploring subnational populations, we find considerable heterogeneity in the age-profile of the components of growth, and find that the most populous regions tend to have an outsized impact on national-level growth.

Bio: Vladimir Canudas-Romo is professor and head of the School of Demography at ANU. He is internationally known for his expertise in mathematical demography and his research on the longevity revolution. He has made major contributions to the demographic debates on alternative measures of longevity and the development of decomposition methods to better understand these issues. He has received funding for his work from: i) the European Research Council, ii) The USA insurance company, AIG, and iii) the Australian Research Council. More recently, he has advised on mortality-forecasting methods the Social Security Administration in the USA, the World Bank and the Australian Government Actuary at Treasury. Canudas-Romo is thus in a position to communicate demographic perspectives on important public topics involving length of life to decision makers and the actuarial industry. Canudas-Romo's international experience is extensive having worked both in Europe and the USA, before moving to the School of Demography at the Australian National University in 2017.

Session 3D: Financial Decision Making

Diverse Effects of Recurrent Communication Boosts and Nudges on Retirement Savings

Nguyen Bang Chau (Victoria) Hoang (CEPAR, University of Sydney)

Abstract: The demand for adequate self-provision in retirement has exponentially grown in recent decades. As global retirement income systems gradually transform to defined contribution schemes, individuals tend to take most responsibility for their savings and planning choices when funding for retirement. Long-term planning has never been a straightforward task and not everyone can self-regulate to overcome cognitive roadblocks against sound and pronounced financial plans. Many get perplexed by the under-saving and under-spending paradox. People might fail to save sufficiently when working and consume too little when retired due to inertia or ill-informed decisions. Communication boost and nudge which superannuation funds provide their members with can help urge attention and alleviate confusion when people deal with retirement planning problems that require reflective decisions. This paper estimates the perennial impacts of interventions in information exchange between private-saving plan providers and their members. In particular, we aim to investigate how retirement income estimates (a form of communication boost) and goal-setting messages (a form of communication nudge), can inform, and enlighten individuals.

Bio: Nguyen Bang Chau (Victoria) Hoang is a PhD candidate in Consumer Finance at The University of Sydney Business School. Her research interests are in the fields of retirement, superannuation, personal and consumer finance, behavioural economics, intertemporal decision-making and economics of ageing. As part of an ARC Linkage project, her current work focuses on exploring behavioural changes in retirement savings as a result of periodical communication boost and communication nudges. She is investigating the diverse impacts of persistently providing retirement income projections and different goal-setting messages for a superannuation fund's members on their voluntary superannuation contributions in the long run. Before coming to Sydney, she completed an Honours Degree in Econometrics at The University of Queensland.

Feeling Comfortable with a Mortgage: The Impact of Framing, Financial Literacy and Advice

Susan Thorp (CEPAR, University of Sydney)

Abstract: The family home is the most important asset on household balance sheets, aside from human capital. Choosing a suitable mortgage is therefore critical to financial well-being but costly mistakes are common. We collect data in an online survey (2020; n=999) to test

borrowers' comfort with, and understanding of, mortgage debt. We analyze the impact of financial literacy, mortgage broker advice and whether the loan is framed as a lump sum debt or an equivalent stream of repayments. We conjecture that participants' caution about loans and their ability to match lump sum debt to equivalent repayment streams will help them to choose a suitable mortgage. Results show that participants with high financial literacy are less comfortable with mortgage debt in general and also less sensitive to framing than those with low financial literacy. Literate participants are better able to match repayment streams with the equivalent lump sums. Survey responses indicate more uncertainty about future house prices among borrowers who intend to consult brokers than those who do not. Endogeneity-controlled regression analysis shows that consulting brokers leads to higher comfort with debt.

Bio: Susan Thorp is Professor of Finance, Associate Dean Research and Research Education in the Business School. She has previously held positions at the University of Technology Sydney and the Reserve Bank of Australia. Susan has an honours degree in Economics from the University of Sydney, and a PhD in Economics from the University of New South Wales.

Home Equity Release Strategies in a Two- Generation Model

Katja Hanewald (CEPAR, School of Risk & Actuarial Studies, UNSW Sydney)

Abstract: We examine the potential benefits of reverse mortgages for the financial planning of Australian families in a two-generation context. Our study extends beyond previous research that only considered the impact on individual retirees or couples. We establish a multi-period simulation model that takes into account the welfare gains of both parents and children. The model compares two approaches of transferring wealth through reverse mortgages: leaving a bequest and releasing home equity as gifts. We show that the most beneficial use of a reverse mortgage is to receive income while also gifting payments to a child for a down payment on a home. However, our analysis of customer data from an Australian reverse mortgage lender reveals that gifting is not a common practice. This presents an opportunity for reverse mortgage providers to increase awareness of the ‘gifting function’ of reverse mortgages, potentially addressing the low demand for this financial tool.

Bio: Dr Katja Hanewald is an Associate Professor in the School of Risk and Actuarial Studies and the Coordinator of the Actuarial Co-op Program at UNSW Sydney. She is also an Associate Investigator in the ARC Centre of Excellence in Population Ageing Research (CEPAR) and the Director of Research of CEPAR’s Ageing Asia Research Hub. Her research models longevity and healthy ageing trends and develops risk management and insurance responses to population ageing. She has published over 25 peer-reviewed articles in leading insurance, actuarial, economics, and medical journals and is a member of the editorial boards of the Journal of Pension Economics and Finance, the Risk Management and Insurance Review, and the Journal of Retirement. Katja obtained her PhD in Economics from Humboldt-Universität zu Berlin in 2010 and worked as an Economist at the German Federal Ministry of Finance from 2013 to 2015.

KEYNOTE 4: To Have or Not to Have Long-Term Care Insurance: The Economic Evidence

Introductory remarks: Michael Sherris (CEPAR, UNSW Sydney)

Michael Sherris is a CEPAR Chief Investigator, Professor of Actuarial Studies at UNSW Sydney where he was appointed in 1998 to establish the Actuarial Studies program in the UNSW Business School. He is a Fellow of the Institute of Actuaries of Australia, the Institute of Actuaries (UK) and the Society of Actuaries (North America). His research sits at the intersection of actuarial science and financial economics and has attracted a number of international and Australian best paper awards. He has published in leading international risk and actuarial studies journals; is on the editorial boards of the Annals of Actuarial Science and Asia Pacific Journal of Risk and Insurance; is a co-editor of the North American Actuarial Journal ; and is an Editor-in-Chief of the Springer Actuarial Series. He has served on the Council of the Institute of Actuaries of Australia; is a past president (2008-2009) of the Asia Pacific Risk and Insurance Association; and is a past Chair of the AFIR-ERM Section of the International Actuarial Association. He was named Australian Actuary of the Year 2007 in recognition of his contributions to actuarial research and education both internationally and within Australia.

To Have or Not to Have Long-Term Care Insurance: The Economic Evidence

Norma Coe (University of Pennsylvania)

Abstract: While most countries have adopted universal health insurance coverage, long-term care, or social care, insurance is much less common, with on-going debates about what services should be covered, who should be covered, and who should provide this insurance. This talk will review the economic evidence of the costs and benefits of having long-term care insurance, with a focus on spill-over effects to beneficiaries, family members, and caregivers, both paid and unpaid.

Bio: Norma B. Coe, PhD, is an Associate Professor of Medical Ethics & Health Policy at the Perelman School of Medicine at the University of Pennsylvania. She is an economist whose research focuses on identifying causal effects of policies that directly and indirectly impact health, human behavior, health care access, and health care utilization. Norma is the Director of the Policy and Economics of Disability, Aging, and Long Term Care (PEDAL) lab and Co-Director of the Population Aging Research Center (PARC). In her research, Dr. Coe merges the rigor of economic thinking and empirical analysis with the practical health services skills of measurement and knowledge of the health policy context to answer pressing questions for policymakers and other stakeholders on how we can improve aging in America.

CONCURRENT SESSION 4
Session 4A: Inequalities in Healthy Life Expectancy

A Growing Divide: Trends in Social Inequalities in Healthy Longevity in Australia, 2001-2020

Collin Payne (CEPAR, School of Demography, Australian National University, and Harvard Center for Population and Development Studies).

Abstract: This study examines two decades of change in social inequalities in life and health expectancy among older adults in Australia, one of the few countries that escaped an economic recession during the global financial crisis. We compare adults aged 45+ across three measures of individual socioeconomic position: education, occupation, and household wealth, and use multistate life tables to estimate total life expectancy (TLE) and life expectancy free of long-term limiting illnesses (LTLIs) based on 20 waves of the Household, Income, and Labour Dynamics in Australia survey (2001-2020). Our findings highlight substantial social disparities in both TLE and LTLI-free LE in Australia. Grouping individuals by household wealth shows the most striking differentials in LTLI-free LE. We observe widening social disparities in healthy longevity over time by all three measures of SEP. This diverging trend in healthy longevity is troubling against the backdrop of widening income and wealth inequalities in Australia.

Bio: Collin Payne is an Associate Professor and ARC DECRA Fellow at the Australian National University School of Demography and a Visiting Faculty Member at the Harvard Center for Population and Development Studies. I completed my Ph.D. in Demography at the University of Pennsylvania Population Studies Center. My research focuses on key questions of global demography—how long we live, how health is maintained across the life-course, and how specific diseases (particularly chronic non-communicable diseases and HIV/AIDS) affect present and future health outcomes. In addition to my substantive work, I am interested in developing and improving the estimation of macro-level population processes using micro-level longitudinal data, and advancing formal demographic techniques for calculating cohort life expectancy and mortality patterns.

Trends in Health Expectancy Inequality in Australia: Is Morbidity Expanding or Compressing Uniformly?

Rafal Chomik (CEPAR, UNSW Sydney)

Abstract: Whether rising life expectancies are leading to more years in good health is relevant for labour markets, retirement income system design, the costs and performance evaluation of health and aged care systems, as well as for the quality of life individuals and their families. There is ample evidence of health inequality in most countries but not enough on the evolution of these trends across different groups at a sub-national level. This paper makes use of Australian Census data to estimate the expected years of life living free of profound or severe disability by socioeconomic status between 2006 and 2021. Consistently defined geography allows for fixed area effects to be controlled for so that changes in the relationship between socioeconomic status and health expectancies is better isolated. The results show that healthy life expectancy is related to socioeconomic status and that this relationship has strengthened over time. People living in poorer areas are still seeing an increase in years lived free of disability but the gap between the rich and poor is widening. The paper also shows that Australian men are seeing a relative expansion in morbidity (i.e., a declining proportion of life in good health) while women are seeing a relative compression (i.e., an increase in proportion of

life in good health). But these trends are worse for the poor: share of life lived in poor health for people living in low socioeconomic status areas is either expanding more (in the case of men) or compressing less (in the case of women) than it is for those living in high socioeconomic status areas.

Bio: Rafal Chomik is a Senior Research Fellow at the ARC Centre of Excellence in Population Ageing Research (CEPAR), located in the UNSW Business School. He joined CEPAR in April 2012. Rafal has worked in public administration and policy analysis for over a decade, initially as a project manager in economic regeneration and subsequently as an economist focusing on social policy. He has experience in economic and business consulting in the private sector, working as an economic advisor for the British Government and as a pensions economist at the Organisation for Economic Cooperation and Development in Paris.
He specialises in social policy design, public and private pension analysis, static microsimulation modelling of the tax-benefit system, and poverty and income measurement. His current work at CEPAR is centered on producing policy related briefing papers, summarising existing CEPAR and external research and assisting the secretariat in producing technical content for conferences and the media. He is also undertaking a research project on the interactions between demography and inequality.

Session 4B: Time Use and Wellbeing

Socio-Economic Determinants of Time Use of Older Population in India

Harchand Ram (International Institute for Population Sciences)

Abstract: This study examines the time allocation of older individuals in India across various activities throughout 24 hours and the factors that affect it. The nationally representative Time-Use Survey (2019), first ever conducted by the National Sample Survey Organization, is used in this study. The results from multivariate linear regression revealed that the expected probability of spending time on paid activities was significantly lower for older females, oldest-old age groups (80 years and above), and widowed/divorced/never married older adults compared to their counterparts. The results of this study emphasise the significance of a person’s socio-economic level in determining how much time they spend on various activities in their daily lives. It is crucial to change the perception that the elderly depend on younger people by acknowledging the contribution made by older people through their participation in paid labour, unpaid domestic tasks, and caregiving.

Bio: Harchand Ram is a Research Analyst at the International Institute for Population Sciences.

Lifelong Learning and the Subjective Wellbeing of Older Adults in Singapore

Zheng Fang (Singapore University of Social Sciences)

Abstract: Our study explores whether attitudes towards lifelong learning are associated with the subjective wellbeing among the elderly in Singapore. Through a primary survey of 300 301 individuals aged 65 and above, we develop a novel index to capture three different aspects of subjective wellbeing, which arewe term “Quality of Life”, “Satisfaction with Life” and “Psychological Wellbeing”. Utilizing both supervised and unsupervised machine learning techniques, we find that lifelong learning is associated with measures of wellbeing reflecting the “Quality of Life” and “Satisfaction with Life”, but not “Psychological Wellbeing”, which suggests that the relationship between lifelong learning and wellbeing is complex. The findings of this

research will aid government agencies in creating an early warning system for identifying older adults at risk of mental health issues and provide evidence-based recommendations for promoting lifelong learning among the elderly population.

Bio: Dr Zheng Fang is an Associate Professor and Deputy Director of the Office of Graduate Studies at the Singapore University of Social Sciences, Singapore. Prior to the employment, she worked as a Research Fellow at Nanyang Technological University, Singapore; Associate Professor at Southwestern University of Finance and Economics, China; and Consulting Analyst at Mercer-HRBS, Singapore. She obtained PhD in Economics from Nanyang Technological University (Singapore) and has has published more than 30 articles in leading journals including Energy Economics, Energy Policy, Economics of Transition, World Economy, Applied Economics, Economic Modelling, Empirical Economics, Social Indicators Research, Journal of Happiness Studies, Asian Economic Journal, and Singapore Economic Review. She is Associate Editor of Singapore Economic Review (SSCI, ABDC Rank B) and the Guest Editor of Sustainability (SSCI).

Session 4C: Disability and Multimorbidity

Cohort Differences in Functional Limitation Trajectories after Age 50 in Indonesia: Findings from a 21-Year Longitudinal Study

Nur Cahyadi (CEPAR, Australian National University)

Abstract: Background: The increasing prevalence of multimorbidity and disability among middle-aged and older populations in low-middle-income countries (LMICs) has become a global concern. This situation calls for monitoring the development of health outcomes over mid- and late-life, including the development of disability. However, little evidence exists on how late-life disability has developed in LMICs. This study examines the shift in the developmental trajectory of functional disability in successive birth cohorts in Indonesia.
Method: Using five waves of the Indonesia Family Life Survey (IFLS) 1993-2014, this study examines the developmental trajectories of limitations in physical functioning among Indonesian age 50 and above using multi-level growth models.
Results: The descriptive analysis revealed that 14% of males and 41% of females had at least one functional difficulty in their early 50s. Females developed functional limitations earlier than males–by age 57, half of the females had developed at least one functional limitation, compared to age 65 for males. In addition, females experienced higher functional limitations over age than males. Further, this study found significant variation in functional limitation trajectories between birth cohorts, with younger cohorts experiencing more functional limitations at comparable ages to the older cohorts.
Conclusion: Younger birth cohorts in Indonesia have developed more functional limitations earlier in life than older cohorts. These findings highlight the substantial gender disparities in functional limitation trajectories and a rising burden of functional limitations among more recently-born cohorts in Indonesia. Combined, these results highlight the need to monitor functional health outcomes among the current middle-aged and older population in LMICs, particularly in Indonesia.

Bio: Nur Cahyadi is a PhD student in the School of Demography at the Australian National University. His thesis concerns the experiences of late-life disabilities among the middle- and older-age population in Indonesia. His research is funded by the ANU University Research Scholarship.

Childhood Socio-Economic and Behavioural Impacts on Multimorbidity in Older Adults in India: A Life Course Perspective

Bandita Boro (Centre for the Study of Regional Development, Jawaharlal Nehru University)

Abstract: Childhood socioeconomic conditions (SES) affect health at a later stage of life in many ways. The chance of remaining healthy at older ages is also affected by pre-natal conditions and other birth defects. Also, behavioural factors starting at an early age has detrimental effects on health at older ages. In this study, we investigated the influence of childhood SES, behavioural risk factors and family history on Non-Communicable Diseases (NCD) multi-morbidity in the older population of India. We used the data from the Longitudinal Aging Study in India (LASI), conducted in the year 2017-2018. The total sample size was 65,562 among older adults aged 45 years and older. Two multinomial logistic regression models were applied to fulfil the objectives. Results shows that better childhood socioeconomic conditions and family history were significantly more likely to have multi-morbidity at older ages and were independent of current SES conditions. The study has also found that childhood socio-economic status can have long-term effects on health across the life course even after controlling for current socio-economic status. The adjusted relative risk of reporting multimorbidity were significantly high among older adults whose father's educational level as primary or below (ARRR=1.27) and secondary or above (ARRR= 1.26). Similarly, better childhood financial condition had higher risk of multimorbidity(ARRR=1.13) compared to poor financial condition. The ARRR for those with family history of chronic diseases with one family member (1.55) and those with more than two family members (1.74) were significantly higher compared to those without any family member. This study strengthens the need to formulate policies and clinical innovations to address the determinants of multi-morbidity across the life course.

Bio: Bandita Boro is a PhD Scholar at the Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi, India. Her topic of research is "Differentials and determinants of health status among older adults in India, 2017-2018". Her research interest revolves around public health, with a particular focus on ageing, and health of tribal groups and children in India. Prior to joining her PhD, she did her Masters in Population Studies from International Institute of Population Sciences, Mumbai, and her MPhil from Jawaharlal Nehru University. She has published extensively in journals such as BMC, Plos One and BMJ Open. Currently she resides in New Delhi.

Session 4D: Issues in Old Age Support

Fertility and Human Capital Investment in Developing Countries: The Role of Intergenerational Old-Age Support Norm

Trang Le (CEPAR, UNSW Sydney)

Abstract: This study examines the impacts of the societal norm of intergenerational support for elderly parents on fertility choices and intergenerational mobility in developing economies. The decision to have children has historically been influenced significantly by the conventional expectation of getting support from adult offspring in old age, especially in developing economies. The study aims to propose a life cycle model that integrates the anticipation of transfers from children based on the filial responsibility norm in a quantity – quality trade-off framework. To precisely measure the resources and constraints that the parents face during their life cycle, I estimate earnings profiles and life cycle uncertainty we use household survey data from Indonesia. I also measure money transfers from adult children to parents to show the current strength of the norm in the 2000s. The benchmark model can well match the total fertility

rates in 2000s, fertility by wealth quantiles, and education investment. I then investigate the influence of the filial responsibility norm on fertility and education investment choices using counterfactual experiments and discover that a weakening of the norm could be responsible for a sizable amount of the drop in the overall fertility rate. Overall, the results show how crucial it is to take into account how intergenerational transfers influence fertility choices, intergenerational mobility, and demographic outcomes in developing countries.

Bio: Trang Le is a CEPAR PhD candidate in the School of Economics at UNSW Business School. Supervised by CEPAR's Scientia Professor John Piggott and Dr George Kudrna. Before joining CEPAR, Trang worked for the Banking Academy in Vietnam and the Asian Development Bank Institute in Japan. Trang's PhD project focuses on constructing a multi-period life cycle model of fertility and education with income uncertainty and economic inequalities. Her estimation results for emerging economies, in particular in Indonesia and beyond, could provide a new and enduring instrument for policy analysis. Insightful implications on policy design to address inefficiency in those countries could be also drawn from the outcome of her analysis.

Economics of Long-term Care Policy: Funding and Labour Force Participation

Bei Lu (CEPAR, UNSW Sydney)

Abstract: As populations continue to age, long-term care (LTC) has become a crucial aspect of social security policies in most developed countries and is now being promoted in developing countries. The economic implications of long-term care policies are significant and contribute to society's overall welfare. Currently there are two basic funding models widely adopted in mature systems: social insurance with mixed contributions; and universal or targeted government tax funded schemes, either separated or integration with the healthcare system. As for individual recipients, there are two types of funding available: cash subsidy or service provision.
This presentation focuses on the economic implications of LTC policies. The first part of the analysis utilizes case studies of four countries to examine their practices, including funding model, labour force and service provision. A comparison of key variables such as beneficiaries, cost per recipient, types and total cost, ratio of home care and institutional care and basic social and economic statistics is provided. The second part of the analysis discusses the funding mechanisms and their associated impacts on labour force participation (LFP) rates in the general population. High income OECD counties are selected for this analysis, covering the time range from 1990 to 2020. We employ a difference-in-difference (DID) approach to estimate the difference in LFP rates between countries with cash subsidy as long-term care policy provision to those with only service provision. The initial findings are presented and discussed.

Bio: Bei Lu is a CEPAR Senior Research Fellow located at the UNSW Business School and a Research Fellow with Tsinghua University and Zhejiang University, China. She is also Director of Engagement for the CEPAR Ageing Asia Research Hub. Bei returned to academia in 2002 to undertake a PhD in Economics at UNSW after working as an international trader for 12 years. Her research focuses on demographics, health, pensions and population ageing related social welfare and economic issues. Bei has been very successful in developing international linkages over the past ten years with organisations such as the provincial government of Zhejiang, China and the World Bank China as well as academic institutions. She also participated in a Chinese Key National Science Project from 2015- 2019 and currently serves as a director for an aged care service provider in NSW Australia. She has presented her research at a number of international conferences including the Stanford-Harvard Population Ageing Conference.

PANEL 2: Macroeconomic Risk and Demographic Change

Introductory remarks: Fiona Blyth (CEPAR, The University of Sydney)

Chair: Mike Keane (CEPAR, UNSW Sydney)

Panellists:

- Ayhan Kose (Vice President, World Bank)
- Adam Triggs (Partner, Mandala, Non-resident Fellow, Brookings Institution and the ANU Crawford School)
- Warwick McKibbin (CEPAR Chief Investigator, Centre for Applied Macroeconomic Analysis (CAMA), Australian National University)

Fiona Blyth is a CEPAR Chief Investigator, Professor of Public Health and Pain Medicine and Director of the Master of Clinical Epidemiology Program at the School of Public Health in the Faculty of Medicine and Health at the University of Sydney. She is a senior academic within the University's Centre for Education and Research on Ageing at Concord Hospital, and Co-Director of the Concord Hospital Healthy Ageing in Men Project (CHAMP) Study. She also works with the Sax Institute in knowledge translation (promoting the use of research evidence in health policy). She is recognised internationally for her body of work defining chronic pain as a major public health problem, the epidemiology of pain in older people, pharmacoepidemiology using linked datasets, and the global burden of pain conditions. Fiona is a Council member for the International Association for the Study of Pain, and Section Editor for Topical Reviews for the leading journal PAIN. She was awarded a Member of the Order of Australia (AM) for significant service to medical research and education in the field of public health, pain management and ageing, and to health policy reform in 2018.

Michael Keane is a CEPAR Chief Investigator, an ARC Laureate Fellow and Professor of Economics in the UNSW Business School. Several independent sources have placed Michael among the top economists internationally in terms of citations and the impact of his work. He is considered to be a world leader in choice modelling, and in the areas of life cycle labour supply, human capital investment, and the economics of education. In 2009 he prepared a report on tax transfers and labour supply for the Australian Treasury's Commission on Australia's Future Tax System, and he is currently engaged in a major research project aimed at improving the efficiency of the Australian tax system. He was elected a Fellow of the Econometric Society in 2005 and in 2018 was elected to the Econometric Society Council. He won the Kenneth Arrow Award in 2008, was named an Australian Federation Fellow in 2005 and was awarded an Australian Laureate Fellowship in 2011. He is an Associate Editor of the Journal of Econometrics and a fellow of both the Society of Labor Economists and the International Association for Applied Econometrics.

Ayhan Kose is Vice President of the World Bank's Equitable Growth, Finance and Institutions (EFI) Practice Group and Director EFI's Prospects Group. He manages operational, policy, and advisory engagements across the areas of finance, competitiveness, and innovation; macroeconomics, trade, and investment; poverty and equity; and governance. He also leads the Bank's policy and analytical work on global macroeconomic outlook, financial flows, and commodity markets. Under his oversight, the Prospects Group produces the Bank's flagship report, Global Economic Prospects.

Adam Triggs is a partner at the economics advisory firm, Mandala, and is a non-resident fellow at the Brookings Institution and the ANU Crawford School. He has previously worked as an economist at AlphaBeta, the e61 Institute, the Prime Minister's department, the ACCC, the ANU and the Brookings Institution.

Warwick J. McKibbin is a CEPAR Chief Investigator, a Distinguished Professor of Economics and Public Policy and Director of the Centre for Applied Macroeconomic Analysis in the Crawford School of Public Policy at the Australian National University. He is also Director of Research at McKibbin Software Group Pty Ltd; a Distinguished Public Policy Fellow of the Economic Society of Australia; a Distinguished Fellow of the Asia and Pacific Policy Society; a Fellow of the Centre for Economic Policy Research (London) and a Non-Resident Senior Fellow at the Brookings Institution in Washington D.C. He was awarded the Order of Australia in 2016 for distinguished service to education as an economist, and the Centenary medal in 2003 for service to Australian society through economic policy and tertiary education. Warwick is internationally renowned for his contributions to global economic modelling, the theory of monetary policy, climate change policy and economic modelling of pandemics. He served on the Board of the Reserve Bank of Australia from 2001 to 2011 and worked at the Reserve Bank from 1975 to 1991. He regularly advises international institutions, central banks, governments, and corporations across a range of developed and emerging economies.

DINNER SPEECH: THE FUTURE OF WORK

Introductory remarks: Marc de Cure (CEPAR Advisory Board Chair, Adjunct Professor, CEPAR, UNSW Business School)

Dinner speaker: Sharon Parker (CEPAR, Curtin University)

Marc de Cure is Chair of the CEPAR Advisory Board and Adjunct Professor, CEPAR, UNSW Business School. Marc has recognised since 2001 the social and economic significance of demographic change and the need to undertake and promulgate research to inform government policy, social awareness and commercial responses. He played a key role in establishing CEPAR and provides critical input to the development of the Centre's ongoing strategy, research translation and engagement activities. He has chaired both the Advisory Board and the Leaders' Forum since inception. Marc has been a member of the Business Advisory Council of the UNSW Business School since 2001 and was appointed as an Adjunct Professor at the UNSW Business School in 2015. He holds a Bachelor of Commerce (Honours) from UNSW and is a Fellow of the Institute of Chartered Accountants ANZ. Marc has been a non-executive company director and senior executive in financial and professional services groups globally. He was AIA Group's Executive Vice President and CFO and AMP Group's CFO, Executive General Manager Strategy and Executive General Manager responsible for AMP Bank and Virgin Money, and a senior partner in PwC, Bain & Co and AMP's Asian and European Operations.

Sharon K. Parker is a CEPAR Chief Investigator, an ARC Laureate Fellow, John Curtin Distinguished Professor, and the Director of the Centre for Transformative Work Design within the Future of Work Institute at Curtin University. Sharon's research focuses particularly on job and work design, and she is also interested in employee performance and development, mature workers, mental health and wellbeing, and related topics. She has attracted competitive research funding worth over $40,000,000, has published over 150 academic articles, and is the author of a SAGE book on work design and a Routledge book on proactive behaviour. Sharon is a recipient of the ARC's Kathleen Fitzpatrick Award and the Academy of Management OB Division Mentoring Award and is a Fellow of the Society for Industrial and Organisational Psychology. In 2019, she was identified as a Clarivate Highly Cited Researcher in the field of Business and Economics. She helped to develop the Good Work Design principles being used by Safe Work Australia and Comcare to foster the improved quality of work within Australian organisations and is a co-founder of the Thrive at Work Initiative.

OPENING REMARKS DAY 3

Opening remarks: Kaarin Anstey (CEPAR, UNSW Sydney)

Please refer to page 26 for Kaarin Anstey's bio.

PANEL 3: Feminising and Ageing Workforces: Implications for Research, Policy and Practice

Introductory remarks: Kaarin Anstey (CEPAR, UNSW Sydney)

Chair: Marian Baird (CEPAR, University of Sydney)

Panellists:

- Virpi Timonen (Professor of Social and Health Services Research and Leadership, Professor, Social Policy, University of Helsinki)
- Tim Johnson (Assistant Secretary - Care and Support Economy Taskforce, Department of the Prime Minister & Cabinet)
- Myra Hamilton (CEPAR Principal Research Fellow, Associate Professor, University of Sydney)
- Alexandra Heron (CEPAR Associate Investigator, University of Sydney)

Marian Baird is a CEPAR Chief Investigator, Professor of Gender and Employment Relations, Co-Director of the Women, Work and Policy Research Centre and a Presiding Pro-Chancellor in the University of Sydney. She is a Fellow of the Academy of the Social Sciences in Australia and in 2016 was awarded an AO for outstanding services to improving the quality of women's working lives and for contributions to tertiary education. In 2019 she was named in Apolitical's Top 100 Most Influential People in Gender Equality list for the second year in a row. She is a leading researcher in the fields of women, work and family and is a highly recognised member of international networks on women, work and empowerment. Marian has received numerous grants from business and government to study parental leave in Australia, gender equitable organisational change, and work and family policy. She has contributed to a number of government advisory boards and reference groups relating to parental leave, gender equity, flexibility of work and sexual harassment in the workplace.

Virpi Marjaana Timonen is Professor of Social and Health Services Research and Leadership, Professor, Social Policy. Helsinki Inequality Initiative (INEQ), and Supervisor for doctoral programme, Doctoral Programme in Gender, Culture, and Society at the University of Helsinki. My research focuses on ageing societies but I work flexibly and ethusiasically across different inter-connected topics in the interest of contributing my expertise on theorising and research methods to diverse projects.
Since completion of my doctorate at the University of Oxford in 2001, I have published over 125 research outputs on social policies, welfare states, intergenerational relations, ageing, care, technology and research methods (among other topics), including three sole-authored and one co-authored book, two edited volumes, 25+ book chapters and 65+ journal articles. Approximately 90% of my journal articles have been published in Q1 and Q2 journals, and my work has gained 5,250+ citations and a H-index of 40 +.
I have held leading research and advisory roles in over 18 major research initiatives, including over 12 research grants which have involved gaining and personally managing over EUR 3 million in research funding, as well as direct collaboration in projects in excess of EUR 20 million.
A significant amount of my time has been devoted to management and leadership duties. I have a track-record of productive involvement in numerous cross-Faculty and multi-disciplinary initiatives.
I have served as the elected President of the Research Committee on the Sociology of Ageing (RC11) of the International Sociological Association (ISA), the largest global scholarly community of social gerontologists.

Tim Johnson is a senior leader in the Care and Support Economy Taskforce in the Department of Prime Minister and Cabinet. In this role, Tim has been leading the development of a cross-sectoral and holistic policy framework for the care and support sectors in Australia. Tim has more than 20 years' experience in the Australian Public Service, specialising in strategic policy across a range of fields including workplace relations, naval shipbuilding, work health and safety, and employment programs.

Myra Hamilton is an Associate Professor and Principal Research Fellow at the ARC Centre of Excellence in Population Ageing Research, in Work and Organisational Studies at the University of Sydney Business School. She is a sociologist and social policy researcher whose research focus is on gender, ageing and care. She is Reviews Editor of the International Journal of Care and Caring and a member of the Work and Family Policy Roundtable. Prior to moving to the University of Sydney, Myra worked for 10 years at the Social Policy Research Centre at the University of New South Wales and spent several periods working in the United Kingdom and Europe, as a Lecturer at the School for Policy Studies at the University of Bristol (2010-2011), and in visiting research positions at the Centre for Research on Ageing and Gender at the University of Surrey (2007), the Centre for Research on Families and Relationships at the University of Edinburgh (2010), and Collegio Carlo Alberto at the University of Turin, Italy (2019).

Alexandra Heron is a CEPAR Associate Investigator, doctoral candidate in the University of Sydney Business School and a part-time Research Associate in its Women and Work Research Group. Her thesis topic is 'Organisational policies and employee eldercare responsibilities: the role of the line manager'.
She has a legal background, and has practised as a lawyer in East London and then as head of the Legal Department of one of the UK's largest health unions. Subsequently she has worked in a range of research, policy and teaching positions in Australia, France and England. Her focus is on employment, discrimination and gender issues and the impact of caring responsibilities on women's lives. Her major publications include reporting on research she undertook on the range and impact of programmes in six OECD countries to assist migrant women workers with less than a tertiary education into employment. For an OECD/EU initiative, a comparative analysis of pregnancy discrimination laws in a number of European countries for the then UK Equal Opportunities Commission and co-authoring a practical legal guide to enforcing UK sex discrimination laws. Most recently she has worked as a consultant on the Australian Human Rights Commission's 2014 Supporting Working Parents review which examined pregnancy and parental leave discrimination. She is also contributing to a similar enquiry by the UK Equality and Human Rights Commission. She has reviewed articles for Social Policy, the Journal of Cross Cultural Gerontology and the Journal of Industrial Relations. Alex was awarded a Joe Isaac Travel Fellowship to attend the Isaac Industrial Relations Symposium in 2016 and was a recipient of the NSW National Council of Women Australia Day Awards 2017 for Australian women students of achievement.

CONCURRENT SESSION 5
Session 5A: Aspects of Disability and Intrinsic Capacity

Modelling Multi-State Health Transitions with Hawkes Process

Jiwon Jung (Department of Statistics, Purdue University)

Abstract: We present a multi-state health transition model with a Hawkes process. Despite the popularity of Markovian assumptions, our observational findings suggest that the elderly who have experienced functional disability have a higher chance of functional disability and mortality. To account for the impact of past events and their duration, we incorporate a Hawkes process to estimate the intensity of age and gender-specific transitions: functional disability, recovery, and mortality. The estimation results suggest that functional disability and mortality intensities significantly increase on the onset of the disability and decay as the duration since the latest transition gets longer.

Bio: Jiwon Jung is a 3rd-year PhD student in the department of Statistics at Purdue University. She double majored in Economics and Statistics at Seoul National University and completed her master's degree in Statistics from the same institution. Her areas of interest include time series analysis using machine learning, modeling and prediction in finance, and applications of stochastic analysis. She has received the Emily and Paul Kidwell Graduate Student Excellent Award and multiple student travel grants. She has also worked as a smart factory intern at Vivity AI and LG CNS, and as a researcher on cancer imaging at Asan Medical Center.

Disability and Morbidity among US Birth Cohorts, 1998-2018: A Multidimensional Test of Dynamic Equilibrium Theory

Tianyu Alex Shen (CEPAR, School of Demography, Australian National University)

Abstract: A substantial body of prior research has explored patterns of disability-free and morbidity-free life expectancy (LE) among older populations. However, these distinct facets of later-life health are almost always studied in isolation, even though they are very likely to interact with each other. Using data from the US Health and Retirement Study (HRS) and a multistate life table approach, this paper explores the interactions between disability, morbidity, and mortality among four successive US birth cohorts, born from 1914-1923 to 1944-1953. These 10-year cohorts are compared in the periods 1998-2008 and 2008-2018. The LE and health expectancies (HEs) are calculated via demographic microsimulation, and are modelled separately by sex, educational attainment and race/ethnicity. We find little compression of disability but a substantial expansion of morbidity across cohorts in each of the three age ranges. Investigating interactions between morbidity and disability, we find that disability-free life expectancy (DFLE) among those living with chronic morbidities has increased, but that at the population level DFLE is largely unchanged across successive cohorts. Investigating patterns in population sub-groups, we find that less advantaged populations (low educated and non-white groups) live substantially fewer years free of disabilities or chronic morbidities. Broadly, these patterns suggest that the link between chronic morbidities and disability has weakened over time in the US population. However, at the population level, successive cohorts are spending fewer years of life free of both chronic morbidities and disability.

Bio: Tianyu Shen is a PhD candidate at School of Demography at the Australian National University. He completed Master of Social Research at the Australian National University. His PhD thesis centers on the analysis of social inequalities in health and the advancement of multistate models to capture population dynamics. His articles have appeared in leading demographic journals, such as Demography and Demographic Research.

The Prospective Association between Intrinsic Capacity and Falls Among Older Chinese Adults

Gaoyun Sophie Yan (CEPAR, UNSW Sydney)

Abstract: Background: Intrinsic capacity is proposed by the World Health Organization as a fine-grained measure of an individual’s overall functioning ability. This study evaluated the prospective association between intrinsic capacity and the risk of falls in an older Chinese cohort.
Methods: Deidentified data were accessed from the China Health and Retirement Longitudinal Study 2011 and 2013 waves. Self-reported incident falls, fall-caused hospitalisation, and fall-caused hip fractures were used as outcome variables. The validated value of intrinsic capacity and its five subfactors (i.e., locomotor functioning, cognitive, psychological and sensory capacities, and vitality) were employed to examine the prospective association with falls in regression analyses.
Results: We evaluated 6 455 participants (mean age: 68.0 ± 6.8 years). During a follow-up of 2 years, 19.24% of participants recorded the presence of incident falls, 8.76% reported fall-caused hospitalisation, and 1.07% reported fall-caused hip fracture. As expected, a higher level of Intrincity Capacity is positively associated with a lower chance of falls, consistent across univariate and adjusted models. Specifically, results of our adjusted model suggest that participants with middle-level and high-level Intrinsic capacity were significantly associated with a 3.7 (95% CI: 1.1 to 6.4) and a 6.0 (95% CI: 2.9 to 9.2) percentage-point decrease in the

likelihood of incident falls, respectively. This significant decrease associated with higher-level Intrinsic capacity in the probability of adverse outcomes is also found with fall-caused hospitalisation and hip fracture, even after controlling for demographic and socioeconomic characteristics and the history of falls. The results were held using the five subitems of IC. Conclusion: Lower level of IC has a positive prospective association with a higher risk of falls among the older Chinese cohort. Therefore, regular monitoring of Intrinsic capacity could work as an early warning system to prevent falls and fall-caused injuries.

Bio: Sophie Yan is a Postdoctoral Research Fellow at CEPAR and the Ageing Futures Institute, based at the UNSW Business School. She joined CEPAR after completing her PhD in Economics at UNSW Sydney. Sophie co-authored CEPAR research briefs and policy briefs on relative poverty among the elderly, retirement income, pension system and labour market for the seniors. Her research interests lie on people's behaviour in health economics and labour economics, with a focus on policy evaluation. Sophie's current projects involve long-term care program for the elderly and housing in Australia. Since 2019, she is also affiliated with the UNSW Ageing Futures Institute.

Session 5B: Labour Market and Ageing

Social Security and Female Labour Supply in China

Han Gao (CEPAR, UNSW Sydney)

Abstract: This paper studies how a potential policy change that raises women’s social security eligibility age from 50 to 60 would affect women’s employment, human capital, and earnings in China. I develop a dynamic model of female labor supply, featuring voluntary retirement; occupational choice; human capital accumulation contingent on occupation, age, and employment status; and child care using time inputs from parents, grandparents, and formal child care from the market. I estimate the model parameters by matching moments on employment, wages, and the time allocation of child care from micro data in China. The policy counterfactual raising women’s social security eligibility age yields two main findings. First, the policy change leads to only a moderate increase in aggregate labor supply because it affects the employment of old and young women in opposite directions. The reduction in social security insurance encourages women above the age of 50 to supply more labor. Yet low-skilled young women with children reduce their labor supply in response to the children’s grandmothers working more and providing less child care. Second, since human capital accumulation is faster on the earlier career path rather than later, the reduction in early career employment leads to persistent losses in human capital and earnings for low-skilled women.

Bio: Han Gao is a Postdoc Fellow in economics at the University of New South Wales and an Associate investigator at CEPAR. He received his PhD in economics from the University of Minnesota in 2021. His research fields include macroeconomics, labour economics, and monetary economics.

Daily Subtle Discrimination Experiences of Mature Workers and their Effect on Workplace Wellbeing

Irina Gioaba (Kean University)

Abstract: Given the increasingly age-diverse workforce, ensuring equality and inclusion of mature employees is essential. Most research focuses predominantly on overt forms of

discrimination and less is known about subtle forms and their effects on targets. In this project we are interested in exploring the effects of subtle age discrimination on mature workers' workplace wellbeing, with an additional emphasis on understanding which mature workers are most affected. We propose that experiencing subtle discrimination reduces individuals' self-regulatory resources and their perceived belongingness to the group, which in turn have a negative impact on their job satisfaction and work engagement. We test these assumptions using an experience sampling study involving 150 participants (e.g., working adults over the age of 50) surveyed for 10 consecutive working days. We expect this research to further our understanding of the contexts and consequences of subtle bias against mature workers. In addition, it informs organizations about the ramifications of age discrimination in the workplace and hopefully motivate them to take steps to curtail this phenomenon.

Bio: Irina Gioaba is a postdoctoral research fellow at Kean University. Irina received her PhD in Management from the University of Lausanne, Switzerland. Her primary research interests include identity, discrimination, and stigma in the context of age, gender, and their intersection.

Robust Inference for the Frisch Labour Supply Elasticity

Tim Neal (CEPAR, UNSW Sydney)

Abstract: The Frisch labour supply elasticity plays a key role in many policy debates, but its magnitude remains controversial. Many studies use 2SLS regressions of hours changes on wage changes to estimate the Frisch elasticity. But a little appreciated power asymmetry property of 2SLS causes estimates to appear (spuriously) imprecise when they are shifted away from the OLS bias. This makes it difficult for a 2SLS t-test to detect a true positive Frisch elasticity. We illustrate this problem in an application using middle-aged workers in the PSID. We obtain a Frisch estimate of 0.75 for middle-aged men, but the t-test indicates it is insignificant. In contrast, the Anderson-Rubin (AR) test – which avoids the power asymmetry problem – implies the estimate is highly significant. The same power asymmetry issue that afflicts the t-test here will arise in many IV applications. Thus, we argue the AR test should be widely adopted in lieu of the t-test. We also discuss the implications of the magnitude of the estimated Frisch elasticity for policies relating to the labour supply of older men.

Bio: Tim Neal is a Scientia Senior Lecturer in the School of Economics and also the Institute for Climate Risk & Response (ICRR). His main research interests are panel data econometrics, machine learning, and climate change / environmental economics. His research has involved developing and applying large data to a diverse range of topics including the effects of climate change on crop yield, the impact of child labour on child development, and panic buying during the COVID pandemic. His future research agenda includes modelling the economic implications of climate change and exploring the synergies that exist between machine learning and econometric approaches to prediction and causal inference.
Alongside academic research, he has worked as an economic consultant on a full time and casual basis for prominent firms in Australia including Ernst & Young and Deloitte Access Economics. Tim is recipient of the prestigious Paul Bourke Award for Early Career Research in 2021 by the Academy of Social Sciences in Australia.

Session 5C: Support for Late in Life Decisions

The Role of Individual and Social Factors in the Prevalence and Experiences of Making Substitute Financial Decisions for Others

Craig Sinclair (CEPAR, NeuRA, School of Psychology, Ageing Futures Institute, UNSW Sydney)

Abstract: When a person is deemed to be incapable of making decisions for themselves, substitute decision-makers are required to make decisions across a range of domains. Substitute decision-making (SDM) for other people has been described as a difficult task, which can be associated with experiences of guilt, stress and decisional regret. This study aimed to understand the prevalence of financial SDM and the context in which financial SDM is occurring (e.g. for who, and on what basis) in Australia.
Methods: Using the Personality and Total Health (PATH) Through Life study, a longitudinal cohort study undertaken in Australia, we report results from survey items administered to the mid-life (born 1957-1960) cohort in wave five (age 59-65, 53% female) and an ‘opt-in’ subsample of the older adult (born 1937-1941) cohort in wave six (age 79-87, 45% female). Five-year prevalence of financial SDM was assessed for the mid-life cohort and three-year prevalence for the older adult cohort.
Results and Discussion: This pre-registered analysis included 1412 participants in the mid-life cohort and 633 from the older adult cohort. The crude sample estimates of financial SDM prevalence were 22.2% and 11.4% respectively. Adjustments for age, gender, education, marital status and employment status using wave one sample weights suggest an estimated population prevalence of 21.7% and 10.2% for the two cohorts. Financial SDM was most commonly undertaken for parents (76%) in the mid-life cohort, and for partners (65%) in the older adult cohort. Financial SDM typically occurred within one of the legally authorised frameworks (e.g. Enduring Power of Attorney), and shows an unadjusted association with household financial role-strain. Experiences of decisional distress were reported by a substantial minority of participants. The paper concludes with implications and recommendations for policy and practice.

Bio: I am a Senior Research Fellow in the School of Psychology at the University of New South Wales, with conjoint appointment at Neuroscience Research Australia (NeuRA). My research interests include decision-making and ageing, decision-making capacity, supported decision-making, dementia, advance care planning, palliative and end-of-life care, aged care and research with Aboriginal and Torres Strait Islander and culturally and linguistically diverse (CaLD) communities. I undertake a range of research projects in aged care and end-of-life care, including clinical trials and implementation research.

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inTouch: Reconceptualising Care for Holistic Patient Centred and Enhanced Care Co-ordination

Jasmin Ellis (Integrated and Community Health in Western Sydney Local Health District) and David Greenfield (School of Population Health, UNSW Sydney)

Abstract: Aging populations are driving the need for patient-centric care with enhanced care co-ordination to ensure high quality, safe health services. Reconceptualising, implementing and sustaining services to achieve these goals – across health and community services - is a considerable and ongoing challenge. The inTouch program, designed and implemented by

Western Sydney Local Health District across 2021-22, is a holistic, system approach to reconceptualising service delivery that focuses on integrating systems components, platforms for service delivery and environments for improved care delivery. The study aim was to identify cultural, system, technical and practice changes necessary for patient-centric care with enhanced care co-ordination. This case study of the inTouch program uses document analysis (n=10 documents; 186 pages) and discussions with key informants (n=4). The study examined three redesigned care pathways: ambulance, residential aged care and atrial fibrillation pathways.The inTouch program and models of care has six core elements, including: stakeholder engagement and risk assessment; population and individual care plans; continuum care coordination; shared decision making; knowledge translation and health literacy; and, monitoring, review and adaptation. inTouch integrates stakeholders across the health and community sectors to reconceptualise the planning, implementation and ongoing management of care needs.To enable success changes are necessary at multiple levels: cultural – governance and attitudinal approaches to delivering care; system – incentives and models directing how care is planned, monitored and evaluated; technical – sharing of information and knowledge; and practice – decision making and care coordinating at a daily level. Collaborative strategies, cross-sectorally planned and directed, at micro, meso and macro levels are required for ongoing workability. A positive consequence and response to an aging population is implementing transformative system and practice change: integration, flexibility, timely and optimised care for populations and individuals. Patient-centric care with enhanced care co-ordination, as achieved by the inTouch program, can ensure high quality, safe health services.

Bios:
Jasmin Ellis is the General Manager of Integrated and Community Health in Western Sydney Local Health District (WSLHD), where she leads a team of 1,200 individuals operating services across WSLHD, providing health care to a population of over 1 million. Integrated and Community Health encompasses all services provided to patients outside of hospital settings, including population and public health services, and services provided to priority and vulnerable populations. Jasmin is focused on supporting her team to develop innovative models of care that span across services and care settings, improve patient access, and consider health literacy and the social determinants of health. Jasmin has worked at all levels of the health system – from the frontline as a paramedic, to Executive statewide operational and policy roles within the Ministry of Health and NSW Government.

Professor David Greenfield is the Professor of Health Leadership and Management, School of Population Health, Faculty of Medicine and Health, University of New South Wales. David is dedicated to improving safety, quality and efficiency of organisations by: educating and mentoring professionals to lead, manage, and innovate in increasingly complex organisational and clinical environments; undertaking evaluations and assessments of wicked problems; performing strategic, policy and performance reviews; and, conducting collaborative translational research projects. David's organisational, educational and research work is at the intersection of systems, service, safety and quality improvement, and knowledge translation sciences.

Examining Identity Concerns and the Use of Assistive Technology from the Perspective of Community Dwelling Older Adults: A Scoping Review

Yanet Morejon Hernandez (Department of Psychology, Maynooth University)

Abstract: Adoption and integration of assistive technology may involve changes in older adults' identities which may influence patterns of use. This scoping review examined identity-related concerns regarding the use of assistive technologies and explored their psychosocial impact

among community-dwelling older adults. Searches were run in EMBASE, PsychINFO, PubMed, SAGE, Scopus, and Web of Science, limited to papers published between 2000 and 2022, in English and Spanish. The reviewed thirty-four papers considered a variety of identity-related constructs, including many self-related terms, such as self-efficacy, self-perception, self-concept, and self-esteem among others. Papers referring explicitly to identity were less frequent. Other related terms included 'self-identity' and 'place identity'. Findings exploring the psychosocial impact of identity-related concerns were informed by ambivalent emotions experienced among older adults. Assistive technology was associated with feelings of independence, autonomy, security, and safety, but also, with a loss of independence, stigma, and a threat to older adults' identity and dignity. Often, these experiences accompanied the current use of assistive technologies. Patterns of use were strongly determined by older adults' self-perception of the need to use assistive technologies and denial of need, leading to forgetfulness and loss. Compensatory strategies were identified, such as negotiations, delaying the use, resignation, substitutions with common objects, and pragmatic customisations to fit individuals' needs and avoid stigmatisation. This review showed that older adults' concerns regarding their identity and self are important at all stages of assistive technology integration and use.

Bio: Yanet Morejon Hernandez. PhD Candidate in the Department of Psychology and ALL Institute, Maynooth University, Ireland. Funded by ADVANCE_CRT SFI: Centre for Research and Training in Advance Networks for Sustainable Societies.
Yanet Morejon Hernandez is a PhD candidate under the supervision of Prof. Deidre Desmond. Her doctoral research aims to explore the role of identity in the use of Assistive Technology (AT) among older adults. Yanet holds a Master's in Educational Psychology and a Bachelor's in Psychology (Summa Cum Laude) from the University of Havana, Cuba. Between the years 2016-2020, she worked as a research member of the Cinema and Audiovisual Research Group at the "Juan Marinello" Cuban Institute for Cultural Research and in collaboration with the Cuban Institute of Cinema Industry. In addition, she worked at the Institute of Sports Medicine as a sport psychologist for the Cuban Beach Volleyball Team (2013-2016). Previous research interests have been the impact of communication technologies on children's education and its uses in the family context, media learning, and adults' participation as mediators.

CONCURRENT SESSION 6

Session 6A: Life Expectancy

Education-Composition Effect on the Sex Gap in Life Expectancy: A Research Note based on Evidence from Australia

Wen Su (School of Demography, Australian National University)

Abstract: Female life expectancy has exceeded male life expectancy globally in this century. Additionally, there is also considerable variation within countries in life expectancy related to levels of education. Life expectancy sex gaps can be decomposed into two components: gaps driven by sex differences in mortality and another driven by sex differences in the composition of education groups. We illustrate this using Australian data which in 2016 had a life expectancy sex-gap at age 25 of 3.8 years: the sex gap would be as large as 4.5 years if males and females had the same levels of education, or mortality component; However, the life expectancy sex gap is reduced by 0.7 years given the lower levels of education among women compared to men, or education component. A hypothetical scenario that accounts for recent female education achievements, estimates potential changes to 4.1 years in favour of females' life expectancy advantage.

Bio: Wen Su is a PhD student interested in formal demography. He's passion is in examining how mathematical and demography techniques can help us get a better understanding in mortality and the heterogeneity of mortality across different subpopulations. Wen is currently doing his PhD in the School of Demography, Australian National University. Prior to his PhD, Wen finished his MA in demography in ANU.

Gender, Education and Cohort Differences in Healthy Working Life Expectancy at Age 50 in Australia

Kim Kiely (CEPAR, NeuRA, School of Psychology, Ageing Futures Institute, UNSW Sydney)

Abstract: Background: There is limited evidence on cohort differences in healthy working life expectancy (HWLE), a population indicator that disaggregates life expectancies into years lived: (1) healthy and in work, (2) healthy and not in work, (3) not healthy and in work, and (4) not healthy and not in work. Drawing from a broader program on social determinants of health expectancy, we will present our most recent findings of HWLE in Australia.
Methods: We analysed data from two cohorts of the Household Income and Labour Dynamics in Australia (HILDA) survey. Each cohort was followed annually for 10 years; a 2001 cohort followed until 2010, and a 2011 cohort followed until 2020. Multistate modelling was used to estimate transitions between health-work states and to calculate the average number of years lived in each health-work state by sex, education, and birth cohort.
Findings: Working life expectancy increased for all groups, but health expectancies only increased for men and those with higher education. For men, total life expectancy at age 50 was 31.7 years (9.9 working in good health; 3.3 working in poor health) in 2001 and 32.7 years (10.8 working in good health; 3.6 working in poor health) in 2011. For women, total life expectancy at age 50 was 36.3 years (7.9 working in good health; 2.5 working in poor health) in 2001 and 37.5 years (9.0 working in good health; 2.9 working in poor health) in 2011.
Discussion: The statutory pension age currently matches healthy life expectancy at age 50 but exceeds healthy working years – particularly for women and those with lower educational attainment. Findings will be discussed in relation to universal changes to the age pension age, and emerging evidence older adult willingness to work, opportunity to work, and ageism.

Bio: Dr Kim Kiely is Senior Research Fellow in the School of Psychology and NeuRA, and Associate Investigator in CEPAR. He has also been an active member of the Australian Association of Gerontology (AAG) since 2009 – and is currently secretary to the AAG NSW Division. Dr Kiely's research adopts a contextualised perspective to human development across the life-course and spans the fields of life-course epidemiology, social psychiatry, and gero-psychology. His primary research interests concern the social and lifestyle determinants of healthy longevity and cognitive ageing. He is lead investigator of the ARC Discovery Project entitled 'Healthy and Working Life Expectancies in an Ageing Australia' and has previously been supported by NHMRC and Alzheimer Australia fellowships for his research in ageing.

Session 6B: Pension Systems

Sustaining Algeria's PAYG Retirement System in a Population Aging Context: Could a Contribution Cap Strategy Work?

Farid Flici (Research Center in Applied Economics for Development - CREAD) (TBC)

Abstract: Previous research has shown that keeping Algeria's PAYG retirement system financially viable in the coming decades will be difficult. Algeria's population is undergoing

profound structural changes as a result of increased life expectancy and lower fertility rates. Currently, there are six people of working age for every one person of retirement age in Algeria, but this ratio is expected to fall to less than three for one beginning in 2040. Such a transformation will increase the system's financial deficit to up to 60% by 2050.It was also demonstrated that even heavy parametric reforms of the systems will not be sufficient to keep the systems sustainable in the most favorable environment changes (i.e. activity, employment, social security enrollment,... etc). However, shifting to a mixed or fully funded system will be difficult due to the fact that Algerian retirees have historically benefited from generous benefits. However, a reform must be implemented to prevent the system from collapsing in the coming decades. In this paper, we investigate the effects of an eventual contribution ceiling strategy on reducing the future financial burden of pension benefits. Each monetary unit contributed today is simply a future engagement that will be paid ten times over, especially since we know that both rich and poor retirees benefit from the system's high generosity. Limiting the contributable salary will result in a focus on the lower part of the salary distribution and a reduction in public subsidies to high salary contributions. These latter can contribute (for the higher range of their salaries) to a secondary fund with lower return rates. We simulate the future sustainability of the Algerian retirement system with various contributable salary caps versus various scenarios of environmental evolution and potential parametric reform actions.

Bio: Farid Flici is an Actuary with a Ph.D in Statistics. I'm a Researcher at the Research Center in Applied Economics for Developement - CREAD in Algiers (Algeria) interested in studying mortality & longevity, ageing, and pensions sustainability. I'm the Managing Director of the Human Development and Social Economics Department, member of the Population Studies Team and leader and founder of the Actuarial Demography Working Group. Besides, I'm a member-expert at the national committee for population belonging to the Algerian health ministry and of the National Council of Statistics.

Pension Scheme Reform in Nigeria: An Institutional Renewal, Challenges, Prospects, and Perceptions of Stakeholders

Olusegun Oladeinde (Bells University of Technology)

Abstract: An effective pension scheme remains a critical element of social protection that drives socio-economic development of every society. Nigeria has over time adopted strategies aimed at optimizing the gains of its pension schemes. However, this evolutionary process has attendant to it, unanticipated challenges which this research project aims at unpacking, with a view to innovating by adaptation the extant pension scheme. The research focuses on the sense-making perspectives of all the pension stakeholders in Nigeria. Using the survey technique and focused group discussions, questionnaire, and in-depth interviews, anticipated results would include critical review of pension administration, theoretical and comparative approaches, the adoption-diffusion process, and institutional governance deficits of all stakeholders in all the geopolitical zones of Nigeria; and how these have impacted on the reforms so far. The innovation output will facilitate continuous improvement in pension administration in Nigeria, through transformative and innovative social policy. A simplified pension handbook will be produced for use by all level human resource officers and workers in both formal and informal sectors.

Bio: Olusegun O Oladeinde, PhD (Rhodes University, South Africa, 2011): I am Lecturer/Researcher at Bells University of Technology, Ota, Nigeria. My research interests focus on Sociology of Work and Development. More specifically, my research work is on Comparative Political Economy of Public /Social Policy.

Global Macroeconomic Consequences of Antimicrobial Resistance
Roshen Fernando (CEPAR, CAMA, Australian National University)

Abstract: Antimicrobial resistance (AMR) is a dominant and growing global health threat that led to 1.27 million deaths in 2019. Given the widespread use of antimicrobials in agriculture and industrial applications in addition to healthcare and a range of factors affecting AMR, including climate variability, demographic trends, and plastic and metal pollution, an economy-wide approach is essential to assess its macroeconomic implications. This study summarizes the existing literature on the identified factors driving AMR and reviews the factors considered in existing macroeconomic studies. We highlight the limitations in the available macroeconomic studies and suggest how those could be overcome via an economy-wide modeling approach that integrates the factors behind the evolution of AMR. We present three frameworks to conceptualize the economy-wide use of antimicrobials, the epidemiology of AMR, and how AMR affects the economy in a stylized economy embedded within a more extensive system. We propose how the AMR impacts could be mapped onto economic variables, discuss the significance of these shocks, and outline how AMR evolution scenarios could be designed, particularly with reference to climate change, demographic trends, and associated socioeconomic changes. We will then apply the framework and simulate the macroeconomic consequences of AMR within the G-Cubed model under seven scenarios. Three scenarios assume the evolution of AMR alone while the other factors remain at the baseline. Illustrating the interactions between AMR and climate change, two scenarios will focus on AMR impacts under two Representative Concentration Pathways (RCPs): 4.5 and 6.0. Two last scenarios will evaluate the AMR impacts under United Nations' low and high fertility population projections. The results will demonstrate the significant global health and economic burden of AMR and how its interactions with climate change and demographic trends could exacerbate the consequences. We will also analyze the AMR effects on production sectors, financial markets, global trade, and global welfare.

Bio: Roshen Fernando is a PhD candidate from the Centre for Macroeconomic Analysis at the Crawford School of Public Policy of the Australian National University. His PhD focuses on assessing the macroeconomic consequences of infectious diseases (such as COVID-19), climate change, and antimicrobial resistance. He is interested in applying modelling, machine learning, and econometrics to conduct integrated assessments of those phenomena. His work with Professor Warwick McKibbin on COVID-19 has been cited in over 3,000 academic publications according to Google Scholar. He has used his expertise in climate change and economic modelling to contribute to the work of the Australian Prudential Regulation Authority, Asian Development Bank, The International Monetary Fund, The World Bank, and the Network for Greening the Financial System.
Prior to the commencement of his PhD, Roshen obtained master's degrees in International and Development Economics, Financial Economics, and Business Administration. His undergraduate studies were in Chemical and Process Engineering, specializing in Environmental and Energy Engineering.

Demographic Change, National Saving and International Capital Flows
Weifeng Larry Liu (CEPAR, Australian National University)

Abstract: This paper explores the impacts of demographic change on national saving and international capital flows. Introducing demographic structure and pension systems into a four-stage overlapping-generation model of a small open economy, the paper derives analytical

solutions which link a wide range of factors to national saving and the current account. This framework enables tractable analysis of the effects of various demographic shocks on national saving and external balances, and of the interaction between demographic shocks and productivity growth and pension systems. The demographic impacts on national saving and capital flows depend on the nature of demographic shocks (fertility or mortality; transitory, permanent or persistent) and on the stage of demographic shocks, as well as productivity growth and pension structure. The paper further applies the model to three economies (Japan, China and India) to project the demographic impacts on external balances over this century.

Bio: Larry Liu is a senior lecturer in economics in the Crawford School of Public Policy at the Australian National University (ANU). He has been affiliated with the Centre of Excellence in Population Ageing Research (CEPAR) since 2018. His research focuses on the macroeconomics of global demographic change.

The Generational Economy in Australia from the Turn of the Millennium to the Aftermath of the Global Financial Crisis

James Rice (CEPAR, University of Melbourne)

Abstract: The time period from the turn of the millennium to the aftermath of the Global Financial Crisis was a tumultuous time in Australia. Significant shifts occurred in a range of economic indicators, including GDP per capita, unemployment, interest rates, and share prices. At the same time, Australia was experiencing population ageing. These economic and population shifts placed a number of stresses and strains on the generational economy in Australia. This article examines how the Australian generational economy adjusted and changed in response to these economic and population shifts. To this end, the article utilises data from the Australian National Transfer Accounts for the time period between 2003–04 and 2015–16. The Australian National Transfer Accounts measure current age-specific economic flows (including consumption, labour income, transfers, asset income, and saving, through both the private and the public sector) by age in a manner consistent with the Australian System of National Accounts. As a result, data from the Australian National Transfer Accounts provide a new and unique window into the evolution of the generational economy in Australia. A deeper understanding of how the Australian generational economy responded to the Global Financial Crisis is likely to provide insights into how it may respond to other economic crises, current and future.

Bio: James Rice is a sociologist who works at the intersection of sociology, economics, and political science. His work focuses on inequalities in the distribution of economic resources such as income and time and how private and public conventions and institutions shape these inequalities. Recent research has focused on the systems of economic transfers that exist between ages and generations and how these systems are placed at risk by demographic processes such as population ageing.

Rice's co-authored book, Discretionary Time: A New Measure of Freedom, was awarded the 2009 Stein Rokkan Prize for Comparative Social Science Research by the International Science Council, the European Consortium for Political Research, and the University of Bergen. Other work has appeared in journals such as the British Journal of Sociology, Frontiers in Public Health, Perspectives on Politics, Population and Development Review, Science, and Social Indicators Research, as well as in reports for Australian government departments.

James has held research positions at the Australian National University and the University of New South Wales and is currently working as a research consultant while completing a PhD in the Demography and Ageing Unit at the University of Melbourne.