

Old and New Challenges to Longevity Prospects The 6th Human Mortality Database Symposium



June 16-17 2022
INED, Paris

Dates	June 16-17, 2022
Location	Salle Sauvy, INED, 9 Cours des Humanités, 93300 Aubervilliers, France (M° line 12, Front Populaire)
Sponsors	INED/iPOPs, CEDA/University of California, Berkeley, Max Planck Institute for Demographic Research
Organizers	Magali Barbieri, Dmitri Jdanov, Domantas Jasilionis, France Mesle

PROGRAMME

Thursday, June 16

8:30–9:00 Registration

9:00–10:20 OPENING SESSION • Chair: **Magali Barbieri** (UCB and INED; co-Director of the HMD)

Magda Tomassini (Director of the INED), **Mikko Myrskylä** (Director of the MPIDR)

- *Welcome*

John Wilmoth (UN, founding director of the HMD) and **Vladimir Shkolnikov** (MPIDR, founding director of the HMD)

- *20 years of the HMD project*

Dmitri Jdanov (MPIDR; co-Director of the HMD) and **Magali Barbieri** (UCB and INED; co-Director of the HMD)

- *HMD plans and challenges*

10:20–10:50 COFFEE BREAK

10:50–12:30 KEYNOTES • Chair: *John Wilmoth*

- **Vladimir Canudas Romo** (ANU)
HMD in the classroom
- **France Meslé** (INED) and **Jacques Vallin** (INED)
The health transition theory: taking recent mortality changes into account
- **Johan Mackenbach** (Erasmus MC)
Longevity and the rise and fall of disease

12:30–13:20 LUNCH BREAK

13:20–15:00 SESSION I: **Frontiers of longevity** / in memory of James Vaupel • Chair: *Jacques Vallin*

- **James Oeppen** (SDU) and **John Wilmoth** (UN, founding director of the HMD)
Tribute to James Vaupel
- **Alyson A. van Raalte** (MPIDR); **Ugo Filippini** (MPIDR, INED); **Carlo Giovanni Camarda** (INED); **Marília R. Nepomuceno** (MPIDR); **Mikko Myrskylä** (MPIDR, UH)
The dangers of drawing cohort profiles from period data
- **Michel Poulain** (UCLouvain, TLU); **Anne Herm** (TLU); **Dany Chambre** (Independent)
No improvement in survival at extreme age: what the data reveal?
- **Jean-Marie Robine** (INED); **Carlo-Giovanni Camarda** (INED)
Measurement and indicators of longevity in HMD
- **Frans van Poppel** (NIDI); **Peter Ekamper** (NIDI); **Lenny Stoeldraijer** (CBS)
Identifying regional environmental conditions affecting longevity: Differences in the chance to become a centenarian in 19th and early 20th century Dutch birth cohorts

15:00–15:30 COFFEE BREAK + POSTER SESSION

15:30–16:40 **SESSION II: Modelling and Forecasting** • *Chair: Carl Boe*

- **Salvatory R. Kessy** (UNSW, CEPAR); **Michael Sherris** (UNSW, CEPAR); **Andrés M. Villegas** (UNSW, CEPAR); **Jonathan Ziveyi** (UNSW, CEPAR)
Mortality forecasting using stacked regression ensembles
- **Karim Barigou** (UCBL); **Pierre-Olivier Goffard** (UCBL); **Stéphane Loisel** (UCBL); **Yahia Salhi** (UCBL)
Bayesian model averaging for mortality forecasting using leave-future-out validation
- **Daniel Meier** (SwissRe)
Applications of neural networks in a Life & Health context

16:40–16:50 BREAK

16:50–18:00 **ROUND TABLE I: Data revolution(s): challenges and opportunities** •

Moderator: Dmitri Jdanov

Discussants: John Wilmoth, Arianna Caporali, Tim Riffe, Ariel Karlinsky

18:00–19:00 RECEPTION

Friday, June 17

9:00–10:30 **SESSION III: Mortality at the subnational level** • *Chair: Domantas Jasilionis*

- **Jim Oeppen** (SDU)
A Regression Approach to Changes in Life-Table Densities of Deaths at the Sub-National Level
- **Jesús-Daniel Zazueta-Borboa** (NIDI); **Wanda MJ Van Hemelrijck** (NIDI); **Pekka Martikainen** (UH,MPIDR); **Nicolás Zengarini** (ASL TO3); **Anton E Kunst** (UVA); **Fanny Janssen** (PRC)
The contribution of alcohol consumption to past long-term trends in socio-economic inequalities in life expectancy in selected European countries
- **Steven H. Woolf** (VCU)
Understanding the decline in life expectancy in the United States and the persistence of racial-ethnic inequities: an examination of root causes
- **Fabrice Murtin** (OECD)
Educational Inequalities in Longevity in OECD Countries Around 2016

10:30–11:00 COFFEE BREAK

11:10–12:30 **SESSION IV: Past and recent mortality: challenges in data** • *Chair: Vladimir Shkolnikov*

- **Ryan K. Masters** (CU Boulder); **Steven H. Woolf** (VCU)
Life Expectancy Declines during the COVID-19 Pandemic and the Worsening US Health Disadvantage: Insights using the US Mortality Database and the Human Mortality Database
- **Nicholas Reynolds** (UOE); **Jeffrey Lin** (FRB Philadelphia); **Bryan Stuart** (FRB Philadelphia)
Worsening Health for Americans Born Since 1947 and the US Life Expectancy Disadvantage
- **Julio Romero Prieto** (LSHTM); **Andrea Verhulst** (PennPSC); **Michel Guillot** (INED)
Assessing the omission of early deaths in historical vital registration data
- **Alexandre Boumezoued** (Milliman R&D); **Amal Elfassihi** (Milliman R&D)
Mortality data correction in the absence of monthly fertility records

12:30 – 13:30 LUNCH BREAK

13:30–14:15 **SESSION V: Global views** • *Chair: Dmitri Jdanov*

- **David Leon** (LSHTM, UiT)
Climate change, health and longevity
- **Vladimir Shkolnikov** (MPIDR)
Studying human longevity with the HMD

14:15–14:30 BREAK

14:30–16:00 **SESSION VI: Modelling mortality patterns** • *Chair: Laszlo Nemeth*

- **Jiaxin Shi** (MPIDR, OX)
Decomposing the variance of lifespans: A distributional approach
- **Isaac Sasson** (TAU); **Iñaki Permanyer** (CED)
Formalizing Shifting Mortality Inequalities: A Multivariate Approach
- **Tim Riffe** (Ikerbasque, UPV/EDU, MPIDR)
Inferring a mortality gradient from compositional change
- **Ariel Karlinsky** (HUJI); **Dmitry Kobak** (TU)
Tracking excess mortality across countries during the COVID-19 pandemic with the World Mortality Dataset

16:00–16:30 COFFEE BREAK

16:30–17:30 **ROUND TABLE II: Recent mortality trends and longevity perspectives** •

Moderator: Magali Barbieri

Discussants: Jacques Vallin, Vladimir Shkolnikov, Jean-Marie Robine, Alyson van Raalte

17:30 END OF THE SYMPOSIUM

POSTER PRESENTATIONS (Thursday, June 16)

Posters will be presented during the entire Symposium. All authors are asked to be around their posters on Thursday from 3:00 pm to 3:30 pm.

- **Arianna Caporali** (INED); **Étienne Couppié** (INED); **Iris Hourani** (INED); **Svitlana Poniakina** (INED)
INED's Mortality and Health Databases: Valuable Sources for Comparative Research
- **László Németh** (MPIDR)
HMD scripts
- **Saddaf Naaz Akhtar** (CSR); **Jon Anson** (BGU)
Does greater longevity come with lower life disparity in India? A comparative study between Kerala and Delhi
- **Filipe Ribeiro** (UEVORA)
Dynamic laws of adult mortality
- **Antonino Polizzi** (OX); **Andrea M. Tilstra** (OX)
Implications of rising female reproductive-age mortality for fertility in the United States, 2010–2019
- **Markéta Majerová** (VŠE); **Radim Krupička** (CTU)
Modelling Covid-19 spread in Czechia: comparison of agent-based simulation and observed excess deaths
- **Magdalena Muszyńska-Spielauer** (ÖAW); **Tim Riffe** (Ikerbasque, UPV/EDU, MPIDR)
Life expectancy at current rates and current population composition
- **Rebecca Mancy** (Glas.); **Max Schroeder** (Glas.); **Spyridon Lazarakis** (LUMS); **Konstantinos Angelopoulos** (Glas.)
How have pandemics ended? Two decades of recurrent outbreak risk following the main waves
- **Munir Hiabu** (KU); **Andrés M. Villegas** (CEPAR, UNSW)
Estimating and modelling mortality rates in the absence of population denominators
- **Liliana Patricia Calderón Bernal** (MPIDR, SU)
Mortality statistics in Colombia, 1998–2019. An analysis of demographic data source
- **Daumantas Stumbrys** (VU); **Domantas Jasilionis** (MPIDR, VMU); **Dainius Pūras** (VU)
The burden of mental health-related mortality in the Baltic States in 2007-2018
- **Tianyu Shen** (ANU); **Vladimir Canudas-Romo** (ANU)
The contribution of subnational changes in the national population growth
- **Iñaki Permanyer** (CED); **Serena Vigezzi** (SDU)
Cause-of-death drivers of lifespan inequality dynamics
- **Surender Prasad Pandey** (UOM)
Assessment of death registration completeness and estimation of the level and differentials of national and subnational life expectancy in Nepal
- **Mary Abed Al Ahad** (UOSA); **Urška Demšar** (UOSA); **Frank Sullivan** (UOSA); **Hill Kulu** (UOSA)
The association between long-term 16-years exposure to air pollution and mortality: The case of Scotland (2002-2017)
- **Andrew Scott** (LBS, CEPR); **Julian Ashwin** (LBS)
Estimating Mortality Curves and Implications for Future Life Expectancy with a Dynamic State Space Model
- **Lisa Koerber** (MPIDR); **Ainhoa Alustiza Galarza** (MPIDR)
Short Term Mortality Fluctuations data series at the Human Mortality Database
- **Marina Kolobova** (MPIDR)
Variation in burden of COVID-19 pandemic across the federal states in Germany: the role of reported morbidity and selected structural factors

- **Christos H. Skiadas (TUC) - *virtually***
Kane Tanaka's 119 birthday and the Supercentenarians' age estimation. Further remarks on the oldest old record of 122 years by Jeanne Calment

Acknowledgements

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List of institutions abbreviations

ANU	Australian National University (<i>Canberra, Australia</i>)
ASL TO3	Azienda Sanitaria Locale Torino 3 (<i>Italy</i>)
BGU	Ben-Gurion University of the Negev (<i>Beersheba, Israel</i>)
BiB	Federal Institute for Population Research (<i>Wiesbaden, Germany</i>)
BIVS	Berlin Institute for Comparative Social Research (<i>Germany</i>)
BMC	Bristol Medical Center (<i>UK</i>)
Brown	Brown University (<i>Providence, USA</i>)
CBS	Statistics Netherlands (<i>Netherlands</i>)
CED	Centre for Demographic Studies, Autonomous University of Barcelona (<i>Barcelona, Spain</i>)
CEER	Centro de Estudios Económicos Regionales (<i>Cartagena, Colombia</i>)
CEPAR	ARC Centre of Excellence in Population Ageing Research, University of New South Wales (<i>Sydney, Australia</i>)
CEPR	Centre for Economic Policy Research (<i>London, UK</i>)
CIDR	CUNY Institute for Demographic Research (<i>New York, USA</i>)
CSDE	Center for Studies in Demography & Ecology, University of Washington (<i>Washington, USA</i>)
CSRD	Centre for the Study of Regional Development, Jawaharlal Nehru University (<i>New Delhi, India</i>)
CTU	Czech Technical University (<i>Prague, Czechia</i>)
CU Boulder	University of Colorado Boulder (<i>Boulder, USA</i>)
FRB Philadelphia	Federal Reserve Bank of Philadelphia (<i>Philadelphia, USA</i>)
Glas.	University of Glasgow (<i>Glasgow, UK</i>)
HKU	University of Hong Kong, Mindlink Research Centre (<i>Hong Kong</i>)
HSE	National Research University Higher School of Economics (<i>Moscow, Russia</i>)
HUJI	Hebrew University of Jerusalem (Jerusalem, Israel)
Ikerbasque	Basque Foundation for Science (<i>Bilbao, Spain</i>)
INED	Institut National d'Études Démographiques (<i>Paris, France</i>)
IPSS	National Institute of Population and Social Security Research (<i>Japan</i>)
KU	University of Copenhagen (<i>Copenhagen, Denmark</i>)
LBS	London Business School (<i>London, UK</i>)
LSHTM	London School of Hygiene and Tropical Medicine (<i>London, UK</i>)
LUMS	Lancaster University Management School (<i>Lancaster, UK</i>)
MPIDR	Max Planck Institute for Demographic Research, (<i>Rostock, Germany</i>)

NIDI	Netherlands Interdisciplinary Demographic Institute (<i>Den Haag, Netherlands</i>)
NYU	New York University (<i>New York, USA</i>)
ÖAW	Austrian Academy of Sciences (<i>Vienna, Austria</i>)
OSU	The Ohio State University (<i>Columbus, USA</i>)
OX	Nuffield College, University of Oxford (<i>Oxford, UK</i>)
Paris1	Université Paris 1 Panthéon Sorbonne (<i>Paris, France</i>)
PennPSC	Population Studies Center, University of Pennsylvania (<i>Philadelphia, USA</i>)
PRC	Population Research Centre (<i>Groningen, Netherlands</i>)
PSE	Paris School of Economics (<i>Paris, France</i>)
RKI	Robert Koch Institute (<i>Berlin, Germany</i>)
RUC	Renmin University of China (<i>Beijing, China</i>)
SDU	University of Southern Denmark (<i>Odense, Denmark</i>)
SU	Stockholm University (<i>Stockholm, Sweden</i>)
TAU	Tel Aviv University (<i>Tel Aviv, Israel</i>)
TLU	Tallinn University (<i>Tallinn, Estonia</i>)
TU	University of Tübingen (<i>Tübingen, Germany</i>)
TUC	Technical University of Crete (<i>Chania, Greece</i>)
UCB	University of California Berkeley (<i>Berkeley, USA</i>)
UCBL	Université Claude-Bernard Lyon 1 (<i>Lyon, France</i>)
UCI	University of California, Irvine (<i>Irvine, USA</i>)
UCLouvain	Université Catholique de Louvain (<i>Louvain-la-Neuve, Belgium</i>)
UCR	University of California Riverside (<i>Riverside, USA</i>)
UdeM	Université de Montreal (<i>Montreal, Canada</i>)
UEVORA	University of Évora (<i>Évora, Portugal</i>)
UG	University of Groningen (<i>Groningen, Netherlands</i>)
UH	University of Helsinki (<i>Helsinki, Finland</i>)
UiT	The Arctic University of Norway (<i>Tromsø, Norway</i>)
UniRostock	University Rostock (<i>Rostock, Germany</i>)
UniTirana	University of Tirana (<i>Tirana, Albania</i>)
UNPD	United Nations Population Division, United Nations (<i>New York, USA</i>)
UNDP	United Nations Development Programme
UOE	University of Essex (<i>Colchester, UK</i>)
UOM	University of Melbourne (<i>Melbourne, Australia</i>)
UOSA	University of St. Andrews (<i>Scotland, UK</i>)
UPV/EHU	University of the Basque Country (<i>Biscay, Spain</i>)
UNSW	University of New South Wales (<i>Sydney, Australia</i>)
UT Austin	University of Texas at Austin (<i>Austin, USA</i>)
UTokio	University of Tokyo (<i>Tokio, Japan</i>)
UVA	University of Amsterdam (<i>Amsterdam, Netherlands</i>)
VCU	Virginia Commonwealth University (<i>Richmond, USA</i>)
VID	Vienna Institute of Demography (<i>Vienna, Austria</i>)
VŠE	University of Economics Prague (<i>Prague, Czech Republic</i>)
VU	Vilnius University (<i>Vilnius, Lithuania</i>)
VMU	Vytautas Magnus University (<i>Kaunas, Lithuania</i>)