

# Old and New Challenges to Longevity Prospects The 6<sup>th</sup> Human Mortality Database Symposium



June 16-17 2022  
INED, Paris

<b>Dates</b>	June 16-17, 2022
<b>Location</b>	Salle Sauvy, INED, 9 Cours des Humanités, 93300 Aubervilliers, France (M° line 12, Front Populaire)
<b>Sponsors</b>	INED/iPOPs, CEDA/University of California, Berkeley, Max Planck Institute for Demographic Research
<b>Organizers</b>	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*

### 12:30–13:30 LUNCH BREAK

### 13:30–15:00 SESSION I: **Frontiers of longevity** / in memory of James Vaupel • Chair: *Jacques Vallin*

- **James Oeppen** (SDU)  
*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*

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*

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

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



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