Ugofilippo **Basellini**

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Academic Positions

Max Planck Institute for Demographic Research	*Rostock, Germany*
Deputy Head	*Jan 2023 - present*
Research Scientist	*Jan 2020 - present*
Research Area Chair	*Sept 2021 - Dec 2022*
Pre-doctoral student	*Feb 2015 - Jul 2016*

Institut national d'études démographiques	*Aubervilliers, France*
Associated researcher	*Jan 2020 - Dec 2022*
PhD student	*Sep 2016 - Dec 2019*

University of Southern Denmark	*Odense, Denmark*
PhD student	*Sep 2016 - Dec 2019*
Research assistant	*Nov 2014 - Feb 2015*

Education

Ph.D. in Health Sciences — *Odense, Denmark · Paris, France*

University of Southern Denmark · Institut national d'études démographiques — *Sep 2016 - Feb 2020*

Thesis Title: *New Approaches in Mortality Modelling and Forecasting* (Online link)
Supervisors: Dr. Carlo Giovanni Camarda; Prof. Jim Oeppen; Prof. Vladimir Canudas-Romo

European Doctoral School of Demography and MaxNetAging Research School — *Rostock, Germany · Rome, Italy*

Max Planck Institute for Demographic Research & Sapienza Università di Roma — *Feb 2015 - Jul 2016*

M.Sc. and B.Sc. in Economics and Social Sciences — *Milan, Italy*

Bocconi University - Grade: 110/110 summa cum laude — *Sep 2006 - Nov 2011*

Thesis Title: *Estimating and Forecasting Mortality Rates*
Supervisors: Prof. Carlo Ambrogio Favero; Prof. Marco Bonetti
Exchange student at Boston University, Department of Economics and Mathematics

Publications

Authors listed as authorship order:

Journal Articles

23. Alburez-Gutierrez*, D., U. Basellini* and E. Zagheni (2024). When do mothers bury a child? Heterogeneity in maternal age at offspring loss. *Population Studies*, Online first. Online link, Github R codes, MPIDR preprint. (*): equal contribution

22. Basellini, U. (2024). Open science practices in demographic research: an appraisal. *Demographic Research*, **50**(43), 1265–1280. Online link, Github R codes, SocArXiv preprint

21. Bonetti*, M., U. Basellini* and A. Nigri (2024). The Average Uneven Mortality index: Building on the 'e-dagger' measure of lifespan inequality. *Demographic Research*, **50**(44), 1281–1300. Online link, Github R codes, SocArXiv preprint. (*): equal contribution

20. Conte Keivabu, R., U. Basellini and E. Zagheni (2024). Racial disparities in deaths related to extreme temperatures in the United States. *One Earth*, **7**(9), 1630–1637. Online link, Github R codes, MPIDR preprint

19. van Raalte, A.A., U. Basellini, C.G. Camarda, M. Nepomuceno and M. Myrskylä (2024). Response to Carl Schmertmann Commentary – Drawing Cohort Profiles From Period Data: Improvements and Risks. *Demography*, **61**(4), 973–977. Online link, OSF R codes

18. Basellini U., C.G. Camarda and H. Booth (2023). Thirty years on: A review of the Lee-Carter method for forecasting mortality. *International Journal of Forecasting*, **39**(3), 1033–1049. Online link, Github R codes, SocArXiv preprint

17. van Raalte, A.A., U. Basellini, C.G. Camarda, M. Nepomuceno and M. Myrskylä (2023). The dangers of drawing cohort profiles from period data: a research note. *Demography*, **60**(6), 1689–1698. Online link, OSF R codes, SocArXiv preprint

16. Aburto, J.M., U. Basellini, A. Baudish and F. Villavicencio (2022). Drewnowski's index to measure lifespan variation: Revisiting the Gini coefficient of the life table. *Theoretical Population Biology*, **148**, 1–10. Online link, Github R codes, arXiv preprint

15. Basellini U. and C.G. Camarda (2022). Explaining regional differences in mortality during the first wave of Covid-19 in Italy. *Population Studies*, **76**(1), 99–118. Online link, OSF R codes, SocArXiv preprint

14. Nigri, A., J.M. Aburto, U. Basellini and M. Bonetti (2022). Evaluation of age-specific causes of death in the context of the Italian longevity transition. *Scientific Reports*, **12**, 22624. Online link, OSF R codes, SocArXiv preprint

13. Vanella, P., U. Basellini and B. Lange (2021). Assessing Excess Mortality in Times of Pandemics Based on Principal Component Analysis of Weekly Mortality Data – The Case of COVID-19. *Genus*, **77**, 16. Online link, ArXiv preprint

12. Riffe, T., E. Acosta, U. Basellini, the COVerAGE-DB team (2021). Data Resource Profile: COVerAGE-DB: a global demographic database of COVID-19 cases and deaths. *International Journal of Epidemiology*, **50**(2), 390-390f. Online link, OSF R codes, medRxiv preprint

11. Basellini U., D. Alburez-Gutierrez, E. Del Fava, D. Perrotta, M. Bonetti, C.G. Camarda and E. Zagheni (2021). Linking excess mortality to mobility data during the COVID-19 pandemic in England and Wales. *SSM - Population Health*, **14**, 100799. Online link, OSF R codes, SocArXiv preprint

10. Camarda, C.G. and U. Basellini (2021). Smoothing, Decomposing and Forecasting Mortality Rates. *European Journal of Population*, **37**, 569–602. Online link, OSF R codes

9. Bonetti, M. and U. Basellini (2021). Epilocal: A real-time tool for local epidemic monitoring. *Demographic Research*, **44**(12), 307–332. Online link, Dedicated shinyapp, ArXiv preprint

8. Pascariu, M.D., U. Basellini, J.M. Aburto and V. Canudas-Romo (2020). The Linear Link: Deriving Age-Specific Death Rates from Life Expectancy. *Risks*, 8, 109. Online link, GitHub R codes

7. Basellini U., S. Kjærgaard and C.G. Camarda (2020). An age-at-death distribution approach to forecast cohort mortality. *Insurance: Mathematics and Economics*, **91**, 129–143. Online link, GitHub R codes

6. Aburto, J.M., F. Villavicencio, U. Basellini, S. Kjærgaard and J.W. Vaupel (2020). Dynamics of life expectancy and life span equality. *Proceedings of the National Academy of Sciences of the United States of America*, **117**(10), 5250–5259. Online link, Zenodo R codes

5. Basellini U. and C.G. Camarda (2019). Modelling and forecasting adult age-at-death distributions. *Population Studies*, **73**(1), 119–138. Online link, GitHub R codes

4. Basellini U., V. Canudas-Romo and A. Lenart (2019). Location–Scale Models in Demography: A Useful Re-parameterization of Mortality Models. *European Journal of Population*, **35**, 645–673. Online link, GitHub codes

3. Sutter, A., S. Barton, M.D. Sharma, U. Basellini, D. Hosken and C.R. Archer (2018). Senescent declines in elite tennis players are similar across the sexes. *Behavioral Ecology*, **29**(6), 1351–1358. Online link

2. Archer, C.R., U. Basellini, J. Hunt, S.J. Simpson, K.P. Lee and A. Baudish (2018). Diet has independent effects on the pace and shape of aging in *Drosophila melanogaster*. *Biogerontology*, **19**(1), 1–12. Online link

1. Gigliarano, C., U. Basellini and M. Bonetti (2017). Longevity and concentration in survival times: the log-scale-location family of failure time models. *Lifetime Data Analysis*, **23**(2), 254–274. Online link, Dondena Working Paper

Book chapters (peer-reviewed)

4. Bonetti, M., C. Gigliarano and U. Basellini (2021). The Gini concentration index for the study of survival. In N. Mukhopadhyay and P.P. Sengupta (eds.), *Gini inequality index: methods and applications*. Boca Raton, Chapman and Hall/CRC. Online link

3. Basellini U. and C.G. Camarda (2020). A Three-component Approach to Model and Forecast Age-at-death Distributions. In S. Mazzuco and N. Keilman (eds.), *Developments in Demographic Forecasting*, 105–129, Springer, Cham. Online link, GitHub R codes

2. Bergeron-Boucher, M.P., S. Kjærgaard, M. Pascariu, J.M. Aburto, J.Alvarez, U. Basellini, S. Rizzi and J.W. Vaupel (2020). Alternative forecasts of Danish life expectancy. In S. Mazzuco and N. Keilman (eds.), *Developments in Demographic Forecasting*, 131–151, Springer, Cham. Online link

1. Riffe, T., M.R. Nepomuceno and U. Basellini (2020). Mortality modeling. In D. Gu and M.E. Dupre (eds.), *Encyclopedia of Gerontology and Population Aging*. Springer, Cham. Online link

Working papers & other publications

6. Miranda, M., C. Turra and U. Basellini (2024). Forecasting life expectancy in São Paulo City, Brazil, amidst the COVID-19 pandemic. *MPIDR Working Paper*. Online link

5. Gomez Ugarte, A.C., E. Acosta, U. Basellini and D. Alburez-Gutierrez (2024). The effect of war on Palestinian life expectancy in 2023. *SocArXiv*. Online link

4. Gomez Ugarte, A.C., U. Basellini, C.G. Camarda, F. Janssen and E. Zagheni (2024). Reassessing socioeconomic inequalities in mortality via distributional similarities. *MPIDR Working Paper*. Online link

3. Badolato, L., A. Decter-Frain, N.J. Irons, M. Miranda, E. Walk, E. Zhalieva, M. Alexander, U. Basellini and E. Zagheni (2023). Predicting individual-level mortality with traditional and machine learning methods. *MPIDR Working Paper*. Online link

2. Basellini U. (2020). New Approaches in Mortality Modelling and Forecasting. PhD thesis. Odense : Syddansk Universitet / University of Southern Denmark. Online link

1. Basellini U. and C.G. Camarda (2018). A Three-Component Lee-Carter approach to decompose and forecast human mortality. *Proceedings of the 33rd International Workshop on Statistical Modelling*, Bristol (UK), 17–22. Proceedings link

Invited and contributed talks

Invited Lectures

2024	**University of Rostock,** MSc Demography (Course material)	*Rostock, Germany*
2023	**Escola Nacional de Ciências Estatísticas,** MSc and PhD programs (Course material)	*Rio de Janeiro, Bra.*

Invited Talks

2024	**Workshop on Pension and Insurance**	*Barcelona*
2023	**Centre for Population Change - Connecting Generations Webinar** (Youtube recording)	*Online*
2022	**Workshop Climbing Mortality Models** (Program)	*Misurina, Italy*
2022	**Brazilian Association of Population Studies Webinar** (YouTube recording)	*Online*
2022	**Dondena Centre for Research on Social Dynamics and Public Policy** (Slides)	*Milan, Italy*
2021	**Annual Meeting of the Population Association of America,** Discussant (PAA final program; slides)	*Online*
2020	**IUSSP Webinar** "Digital and computational approaches to study determinants and consequences of the spread of COVID-19"(Program and video recording)	*Online*
2018	**Workshop** "Forecasting Danish Life Expectancy and Age at Retirement" (Talk)	*Odense, Denmark*
2018	**Workshop** "Inequality and Uncertainty in Length of Life"(Talk)	*Tel Aviv, Israel*
2017	**Conference** "MaxNetAging Annual Meeting" (Talk)	*Rostock, Germany*
2017	**IUSSP Seminar** "Mortality analysis and forecasting"(Talk)	*New Delhi, India*

Conferences and workshops

Since 2016, I have regularly presented my work at the following peer-reviewed conferences: European Population Conference, Annual Meeting of the Population Association of America, Italian Population Days Conference, IUSSP International Population Conference. I have also occasionally presented my work at the following conferences, workshops or events: INED Doctoral Research Day, International Workshop on Statistical Modelling, International Longevity Risk and Capital Markets Solutions Conference, Human Mortality Database Symposium, Italian Statistical Society Conference, Nordic-Baltic Biometric Conference.

Awards

2022	**Günther Beyer Award** Best Paper by Early Career Scholar at EPC, joint with D. Alburez-Gutierrez (EPC link)	*Groningen, Neth.*
2022	**German Society for Demography Annual Conference** Best Paper Award to Patrizio Vanella for our paper (DGD link)	*Online*
2021	**Jan M. Hoem Paper Award,** Best Paper by a Junior Researcher at the MPIDR (MPIDR link)	*Rostock, Germany*
2021	**PAA Blue Ribbon Poster Award**	*Online*
2009-11	**Bocconi Merit Awards Scholarship** Full waiver of tuition fees (20,000€) and yearly stipend (3,500€)	*Milan, Italy*

Teaching

Demographic Forecasting — *INED, Paris*
European Doctoral School of Demography, Cohort 2023-2024 (Course material 2024) — *2024*

Presentations in LaTeX — *various*
European Doctoral School of Demography, Cohorts 2017-18, 2018-19 & 2023-2024 (Course material) — *2018, 2019, 2024*

Foundations in Statistical Demography — *MPIDR, Rostock*
International advanced studies in DEMography (IDEM) & International Max Planck Research School for Population, Health and Data Science (IMPRS-PHDS). Jointly taught with Carlo G. Camarda. — *2024*

Population Projections — *Online & Barcelona*
European Doctoral School of Demography, Cohort 2019-2020, 2020-2021 (Online course) & 2021-2022, 2022-2023 (In presence). (Course material 2020, 2021, 2022, 2023) — *2020, 2021, 2022, 2023*

Advances in Mortality Forecasting *Online course*

International advanced studies in DEMography (IDEM) & International Max Planck Research School for
Population, Health and Data Science (IMPRS-PHDS). Jointly taught with Carlo G. Camarda (Course material) *2021, 2022*

Survival Analysis in Medical Research *Odense, Denmark*

Teaching assistant, University of Southern Denmark, PhD in Health Sciences *2015*

Services to the Institute

Ombudsperson	Elected Ombudsperson of the MPIDR, responsible to handle cases of scientific misconducts. 2023 - present
Open Science Ambassador	Responsible for spreading Open Access knowledge and practices at the MPIDR. 2023 - present
Deputy Head	Research-administrative role in support of a group of five researchers and four doctoral students. 2023 - present
Faculty	Faculty member of the PhD program "International Max Planck Research School for Population, Health and Data Science" (IMPRS-PHDS). 2022 - present
Lecturer	Lecturer of the "European Doctoral School of Demography" (EDSD). 2018 - present
Research Area Chair	Research-administrative role in support of a group of three researchers and three doctoral students. 2021 - 2023.
Workshop Chair	Organization, chairing and moderation of 15+ scientific workshops during the MPIDR Summer Incubator. 2022, 2024
Seminar Series Chair	Organization, chairing and moderation of weekly invited external or internal talks of the Laboratory. 2021 - 2022

Academic Supervision

2023 -

Mentor of postdoc
Yuxi Wang (with C.G. Camarda), post-doc and Marie-Curie Fellowship recepient since 2023. *MPIDR*

2022 -

Mentor of the MPIDR Summer Incubator Program
1. First edition (2022): 6 PhD and MSc students (with M. Alexander & E. Zagheni).
   Working Paper (WP): 10.4054/MPIDR-WP-2023-008
2. Second edition (2023): 6 PhD and MSc students (with A. Akbaritabar & E. Zagheni).
   WP: available upon request
3. Third edition (2024): 4 PhD and MSc students (with I. Chen & M. Alexander) *MPIDR*

2022 -

Mentor of PhD student
1. Ana Cristina Gomez Ugarte (with C.G. Camarda, F. Janssen & E. Zagheni), PhD student at the MPIDR since 2022. **WP** (first PhD thesis chapter): 10.4054/MPIDR-WP-2024-007
2. Maria Laura Miranda (with E. Zagheni), PhD student at the MPIDR since 2023. *MPIDR*

2022 - 23

External advisor of MSc student
Maria Laura Miranda (with C. Turra) successfully defended her MSc thesis, University of Minas Gerais, Brazil. *MPIDR*
WP (MSc thesis): 10.4054/MPIDR-WP-2024-017

2021 - 23

Mentor of visiting PhD student
1. Risto Conte Keivabu (European University Institute). **Paper:** 10.1016/j.oneear.2024.08.013
2. Emanuele Depaoli (University of Padova)
3. Daniel Zazueta Borboa (Netherlands Interdisciplinary Demographic Institute). **WP:** available upon request
4. Ainhoa-Elena Leger (University of Southern Denmark). **WP:** available upon request *MPIDR*

2020 - 23

Mentor of EDSD pre-doctoral student
1. Silvio Cabral Patricio (with E. Zagheni) successfully defended his thesis "Is that a mortality deceleration or just a misspecified model?"
2. Dorothee Beckendorff (with S. Lohmann) successfully defended her thesis "Who gets to go and who must stay? Examining the links between climate change induced migration and educational attainment in Chile"
3. Maria Laura Miranda (with E. Acosta and E. Zagheni) successfully defended her thesis "The different measures of period shocks on mortality – the case of COVID-19" *MPIDR*

Reviewing Services

Associate Editor	*Demographic Research*, April 2022 - present. Responsible for approx. 8 manuscript per year, feedback on Special Issues proposals, participation in Editorial Board meetings
Journal Review	Reviewed for 25 different journals (also multiple times), including *eLife*, *The Lancet Regional Health - Europe*, *Demography*, *Population Studies*, *BMJ Open*, *BMC Public Health*, *ASTIN Bulletin*, *European Journal of Population*, and *Demographic Research*
PhD thesis	External assessor for Paola Vazquez-Castillo PhD midterm evaluation, University of Southern Denmark (2023)
Conferences	Review of papers for the 29th IUSSP International Population Conference (2021)

Committees and Administrative Experiences

Open Science Workshop	Chair of the Organizing Committee for the Second Rostock Open Science Workshop
MPIDR Summer Incubator	Co-organizer of the 2022, 2023 and 2024 Population and Social Data Science Summer Incubator Program
Recruitment	Member of the Search Committee for the recruitment of postdocs (2021 & 2023), PhD students (2021 & 2022), visiting PhD/MSc students (2022 & 2024), EDSD students (2022 & 2024), research assistants (2021 & 2023)
Best Paper Award	Member of the Scientific Committee for the Jan M. Hoem Paper Award (2023)
Elections	Member of the Election Committee for the Academic Staff Representative and Ombudsperson at the MPIDR (2020)

Other activities

Participation to research groups & projects

- Member of the Laboratory "Population Dynamics and Sustainable Well-Being", MPIDR. January 2023 - present. Collaboration with national and international colleagues on five projects: "Forecasting Population-level Mortality"; "Forecasting Individual-level Mortality"; "Formal and Statistical Approaches to the Study of Inequalities in Mortality"; "Demographic Perspectives on Kin Availability and Kin Loss"; "Analyzing and Monitoring the Early Spread of COVID-19: A Demographic Perspective"
- Member of the Research Area "Aging and Generational Processes", Laboratory of Digital and Computational Demography, MPIDR. January 2020 - December 2022. Collaboration with national and international colleagues on four projects: "New Perspectives in Mortality Forecasting"; "Formal Demographic Approaches to the Study of Inequalities in Mortality and Kinship Resources"; "Estimating and Projecting Offspring Mortality over the Life Course for all Countries of the World"; "Analyzing and Monitoring the Spread of COVID-19 in Italian Regions and Provinces: A Demographic Perspective"
- Member of the Mortality, Health and Epidemiology Unit, INED. September 2016 - December 2022. Collaboration with national and international colleagues on the project: "Geographical disparities in mortality: analysing causes of death to inform health transition"
- Member of the "Forecasting" cluster, Max-Planck Odense Center on the Biodemography of Aging, University of Southern Denmark. November 2014 - February 2015. Collaboration with national colleagues

Parental leave

Four months of parental leave in 2021

Post-graduate education

2021	**Topics in Digital and Computational Demography** International Advanced Studies in Demography (IDEM). Instructors: Prof. E. Zagheni et al.	*Online*
2021	**Advanced Methods for Causal Inference with Observational Data** International Advanced Studies in Demography (IDEM). Instructors: Dr. P. Eibich, Dr. A. Lorenti	*Online*
2020	**Data visualization: the art/skill cocktail** International Advanced Studies in Demography (IDEM). Instructor: Dr. I. Kashnitsky	*Online*
2020	**Multistate Models: Analysis from event histories and panel data** IDEM. Instructors: Dr. J. Gampe, Prof. H. Putter, Prof. A. van den Hout	*Rostock, Germany*
2017	**Smoothing Demographic Data** International Advanced Studies in Demography (IDEM). Instructor: Dr. C.G. Camarda	*Rostock, Germany*
2014	**Probabilistic Population Projections: Theory and Practice** International Advanced Studies in Demography (IDEM). Instructors: Prof. A. Raftery and Prof. H. Sevcikova	*Rostock, Germany*
2013	**Statistical methods for population-based cancer survival analysis** Summer School on Modern Methods in Biostatistics and Epidemiology. Instructors: Prof. P.W. Dickman and Prof. P.C. Lambert	*Treviso, Italy*

Skills

Programming	R, LaTeX, STATA, SAS, EViews, SPSS, Matlab
Mathematics	97th percentile (grade: 800/800) in the quantitative GRE exam
Languages	Italian (mother tongue), English (fluent), Portuguese (intermediate), French & Spanish (basic)