## EMILIO ZAGHENI

Curriculum Vitae, July 2024

## Director, Max Planck Institute for Demographic Research Head, Department of Digital and Computational Demography Lab of Migration and Mobility

## Lab of Population Dynamics and Sustainable Well-being

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### Education

Ph.D.	University of California, Berkeley, Spring 2010 - Demography
	Dissertation Title: The Impact of the HIV/AIDS Epidemic on
	Orphanhood Probabilities and Kinship Structure in Zimbabwe
	Dissertation Committee: Kenneth W. Wachter (Chair), Ronald D. Lee,
	Nicholas Jewell, James H. Jones
M.A.	University of California, Berkeley, May 2008 - Statistics
M.A.	University of California, Berkeley, Dec 2006 - Demography
B.A.	<b>Bocconi University</b> , December 2004 - <i>Economics</i> , <i>Statistics</i> and <i>Social Sciences</i> . Graduation grade: 110/110 Summa cum laude
Maturità Scientifica	Liceo Scientifico "Leonardo Da Vinci" High School , Crema (CR) Italy, July 2000. Graduation grade: 100/100 Summa cum laude

## **Academic Positions**

readeline r obtitons	
09/2018-present	Director
, -	Max Planck Institute for Demographic Research
09/2018-present	Affiliate Associate Professor of Sociology
, -	University of Washington (UW), Seattle
12/2014-present	Research Affiliate
, -	Center for Studies in Demography and Ecology, UW Seattle
07/2019-present	External Affiliate
, -	Duke Population Research Institute
09/2013-present	External Affiliate
, -	Center on the Economics and Demography of Aging - UC Berkeley
09/2016-08/2018	Associate Professor of Sociology
,	University of Washington (UW), Seattle
09/2016-08/2018	Director of Training
,	Center for Studies in Demography and Ecology, UW Seattle
09/2014-08/2018	Data Science Fellow
,	eScience Institute, UW Seattle
10/2014-08/2018	Faculty Affiliate
,	Center for Statistics and the Social Sciences, UW Seattle
09/2014-09/2016	Assistant Professor of Sociology
,	University of Washington, Seattle
08/2012-08/2014	Assistant Professor of Sociology
,	Queens College - CUNY
08/2012-08/2014	Faculty Associate
,	CUNY Institute for Demographic Research
08/2010-07/2012	Research Scientist
, ,	Max Planck Institute for Demographic Research
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## Short-term Visits

2013-2014	International Institute for Applied Systems Analysis
2010 2011	Laxenburg, Austria, Fall semester
08/2011	Yahoo! Research Labs
	Barcelona, Spain
02/2011	"Dondena" Centre for Research on Social Dynamics
	Bocconi University, Milan
2003	UNIDO (United Nations Industrial Development Organization)
	Summer Internship at the Montreal Protocol Branch; Vienna, Austria.
2002	HEC Montreal, Undergraduate Exchange Student Program

### Selected Professional Service

President, European Association for Population Studies (EAPS), 2024-2026

Vice-President, European Association for Population Studies (EAPS), 2022-2024

Deputy Editor, Demography, 2022-

Chair, Panel on Digital Demography of the International Union for the Scientific Study of Population (IUSSP), 2019-2022

Chair, Panel on Big Data and Population Processes of the International Union for the Scientific Study of Population (IUSSP), 2015-2018

Board Member, European Doctoral School of Demography (EDSD), 2019-2021

Board of Trustees Member, Population Europe, 2018-

Publisher, Demographic Research, 2021-2024

Associate Editor, Genus, 2015-2018.

Member of the Scientific Advisory Board: AGENTA project - Ageing Europe: An Application of National Transfer Accounts for Explaining and Projecting Trends in Public Finances (2014-2017).

## Awards

2016	Trailblazer Award for Demographic Analysis European Association for Population Studies (EAPS)
2010	Eugene A. and Joan S. Hammel Dissertation Prize in Demographic Studies
2009	Poster Award, Population Association of America Annual Meeting
2008-2009	Outstanding Graduate Student Instructor Award, UC Berkeley
2008-2009	Dean's Normative Time Fellowship, UC Berkeley
2005-2007	Regents-Intern Fellowship, UC Berkeley
2005	William V. Power Graduate Award, UC Berkeley
2001-2003	ISU Bocconi Scholarship and Grants for International Exchanges

## Major Areas of Professional Interest

I use formal, computational and data-intensive approaches to study the causes and consequences of population dynamics. Motivated by the ambition to improve people's lives through the scientific study of our societies, I leverage interdisciplinary approaches to monitor demographic change, to explain population processes, and to predict future demographic outcomes. More specifically, my research addresses three main inter-related topics: (i) combining digital trace data with traditional sources to track and understand migrations; (ii) assessing patterns in population aging and demographic change with a life course perspective; (iii) modeling the relationships between population processes, the environment and disease dynamics. A common thread across my substantive interests is a consistent drive to develop methods and to analyze data in creative ways that further advance our understanding of social phenomena.

### **Publications**

#### Peer-reviewed Articles

(10 selected publications in bold)

- 86. Sanliturk E., Aref S., Zagheni E., and Billari, F.C. (forthcoming). Homecoming after Brexit: Evidence on Academic Migration from Bibliometric Data. *Demography*
- 85. Anastasiadou A., Kim J., Sanliturk A.E., de Valk H., and Zagheni E. (forthcoming) Gender Differences in the Migration Process: A Narrative Literature Review. *Population and Development Review*
- 84. Conte Keivabu R., Basellini U., and Zagheni E. (forthcoming). Racial Disparities in Deaths Related to Extreme Temperatures in the United States. *One Earth*
- 83. Alburez-Gutierrez D., Basellini U., and Zagheni, E. (2024). When do Mothers Bury a Child? Heterogeneity in the Maternal Age at Offspring Loss. *Population Studies*
- 82. Alburez-Gutierrez D., Acosta E., Zagheni E., and Williams N.E. (2024). The Long-lasting Effect of Armed Conflicts Deaths on the Living: Quantifying Family Bereavement. *Science Advances*, 10(30), eado6951.
- 81. Akbaritabar A., Theile T., and Zagheni E. (2024). Bilateral Flows and Rates of International Migration of Scholars for 210 Countries for the Period 1998-2020. *Scientific Data*, 11(1), 816.
- 80. Danko M.J., Wisniowski A., Jasilionis D., Jdanov D.A., and Zagheni E. (2024). Assessing the Quality of Data on International Migration Flows in Europe: The Case of Undercounting. *Migration Studies*, 12(2), mnae014.
- 79. Yildiz D., Wisniowski A., Abel G.J., Weber I., Zagheni E., Gendronneau C., and Hoorens S. (2024). Integrating Traditional and Social Media Data to Predict Bilateral Migrant Stocks in the European Union. *International Migration Review*, 01979183241249969.
- 78. Elejalde E., Ferres L., Navarro V., Bravo L., and Zagheni E. (2024). The Social Stratification of Internal Migration and Daily Mobility during the COVID-19 Pandemic. *Scientific Reports* 14(1):12140.
- 77. Klein J. D., Weber I., and Zagheni E. (2024). Stop, in the Name of COVID! Using Social Media Data to Estimate the Effects of COVID-19-Related Travel Restrictions on Migration. *Demography* 61(2):493-511.

- 76. Rampazzo F., Bijak J., Vitali A., Weber I., and Zagheni, E. (2024). Assessing timely migration trends through digital traces: a case study of the UK before Brexit. *International Migration Review*, 01979183241247009.
- 75. Coimbra Vieira C., Lohmann S., and Zagheni E. (2024). The Value of Cultural Similarity for Predicting Migration: Evidence from Food and Drink Interests in Digital Trace Data. *Population and Development Review*, 50(1), 149-176.
- 74. Lohmann S. and Zagheni E. (2023) Diversity of Social Media Use: Self-selection Explains Associations between Using Many Platforms and Well-being. *Plos Digital Health*.
- 73. Kim J., Sonne S.E.W., Garimella K., Grow A., Weber I., and Zagheni E. (2023). Online Social Integration of Migrants: Evidence from Twitter. *Migration Studies* 11(4):544-571
- 72. Khatua A., Zagheni E., and Weber, I. (2023). Host-Centric Social Connectedness of Migrants in Europe on Facebook. *Proceedings of the International AAAI Conference on Web and Social Media* 17:1143-1147
- 71. Qian W., Hexel O., Zagheni E., Kashyap R., and Weber I. (2023). Demographic Inequalities in Digital Spaces in China: The Case of Weibo. Workshop Proceedings of the 17th International AAAI Conference on Web and Social Media (ICWSM)
- 70. Zhao X., Akbaritabar A., Kashyap R., and Zagheni E. (2023). A Gender Perspective on the Global Migration of Scholars. *Proceedings of the National Academy of Sciences* 120(10), e2214664120.
- 69. Sanliturk E., Zagheni E., Danko M.J., Theile, T., and Akbaritabar A. (2023). Global Patterns of Migration of Scholars with Economic Development. *Proceedings of the National Academy of Sciences* 120(4), e2217937120.
- 68. Grow A., Perrotta D., Del Fava E., Cimentada J., Rampazzo F., Gil-Clavel S., Zagheni E., Flores R., Ventura I. and Weber I. (2023). Is Facebook's Advertising Data Accurate Enough for Use in Social Science Research? Insights from a Cross-National Online Survey. *Journal of the Royal Statistical Society: Series A* 185(S2):343-363.
- 67. Drouhot L., Deutschmann E., Zuccotti C. and Zagheni E. (2023). Computational Approaches to Migration and Integration Research: Promises and Challenges. *Journal of Ethnic and Migration Studies* 49(2):389-407.
- 66. Hsiao Y., Fiorio L., Wakefield J., and Zagheni E. (2023). Modeling the Bias of Digital Data: An Approach to Combining Digital with Official Statistics to Estimate and Predict Migration Trends. Sociological Methods & Research, 00491241221140144.
- Dukhovnov D., Ryan J. and Zagheni E. (2022). The Impact of Demographic Change on Transfers of Care and Associated Well-being. *Population Research and Policy Review* 41:2419-2446.
- 64. Snyder M., Alburez-Gutierrez D., Williams I. and Zagheni E. (2022). Estimates from 31 Countries Show the Significant Impact of COVID-19 Excess Mortality on the Incidence of Family Bereavement. *Proceedings of the National Academy of Sciences* 119(26): e2202686119
- 63. Perrotta D., Johnson S., Theile T, Grow A., de Valk H. and Zagheni E. (2022). Openness to Migrate Internationally for a Job: Evidence from LinkedIn Data in Europe. *Proceedings of the International AAAI Conference on Web and Social Media (ICWSM)* 16:759-769

- 62. Zhao X., Aref S., Zagheni E. and Stecklov G. (2022). Return Migration of German-affiliated Researchers: Analyzing Departure and Return by Gender, Cohort, and Discipline using Scopus bibliometric Data 1996–2020. *Scientometrics*, 1-23
- 61. Gil S., Zagheni E. and Bordone V. (2022). Close Social Networks among Older Adults: The Online and Offline Perspectives. *Population Research and Policy Review* 41(3):1111-1135
- 60. Vieira C., Lohmann S., Zagheni E., Vaz de Melo P., Benevenuto F., Ribeiro F. (2022). The Interplay of Migration and Cultural Similarity between Countries: Evidence from Facebook Data on Food and Drink Interests. *Plos One* 17(2):e0262947
- 59. Rampazzo F., Bijak J., Vitali A., Weber I. and Zagheni E. (2021). A Framework for Estimating Migrant Stocks using Digital Traces and Survey Data: An application in the United Kingdom. *Demography* 58(6):2193-2218
- 58. Del Fava E., Cimentada J., Perrotta D., Grow A., Rampazzo F., Gil S. and Zagheni E. (2021) Differential Impact of Physical Distancing Strategies on Social Contacts Relevant for the Spread of SARS-CoV-2: Evidence from a Cross-national Online Survey, March-April 2020. *BMJ open* 11(10): e050651
- 57. Liu C.Y., Berlin J., Kiti M.C., Del Fava E., Grow A., Zagheni E., Melegaro A., Jenness S.M., Omer S.B., Lopman B., and Nelson, K. (2021). Rapid Review of Social Contact Patterns During the COVID-19 Pandemic. *Epidemiology* 32(6):781-791
- 56. Alburez-Gutierrez D., Kolk M. and Zagheni E. (2021). Women's Experience of Child Death over the Life Course: A Global Demographic Perspective. *Demography* 58(5): 1715-1735
- 55. Alburez-Gutierrez D., Mason C. and Zagheni E. (2021). The "Sandwich Generation" Revisited: Global Demographic Drivers of Care Time Demands. *Population and Development Review* 47(4): 997-1023
- 54. Smith-Greenaway E., Alburez-Gutierrez D., Trinitapoli J. and Zagheni E. (2021) Global Burden of Maternal Bereavement: Indicators of the Cumulative Prevalence of Child Loss *BMJ Global Health* 6(4), e004837
- 53. Perrotta D., Del Fava E., and Zagheni, E. (2021). The Role of Vulnerability in Mediating the Relationship between Threat Perception and the Use of Face Masks in the Context of COVID-19. Workshop Proceedings of the International Conference on Web and Social Media (ICWSM21)
- 52. Zhao X., Aref S., Zagheni E. and Stecklov G. (2021). International Migration in Academia and Citation Performance: An Analysis of German-affiliated Researchers by Gender and Discipline using Scopus Publications 1996-2020. Proceedings of the 18th International Conference on Scientometrics and Informetrics (ISSI 2021)
- 51. Basellini U., Alburez-Gutierrez D., Del Fava E., Perrotta D., Bonetti M., Camarda G.C. and Zagheni E. (2021). Linking Excess Mortality to Mobility Data during the first Wave of COVID-19 in England and Wales. *Social Science and Medicine Population Health* 14, 100799.
- 50. Perrotta D., Grow A., Rampazzo F., Cimentada J., Del Fava E., Gil-Clavel S. and Zagheni E. (2021). Behaviours and Attitudes in Response to the COVID-19 Pandemic: Insights from a Cross-national Facebook Survey. EPJ Data Science 10(1):1-13.

- 49. Fiorio L., Zagheni E., Abel G., Hill J., Pestre G., Letouzé E. and Cai J. (2021). Analyzing the Effect of Time in Migration Measurement Using Geo-referenced Digital Trace Data. *Demography* 58(1):51-74.
- 48. Zagheni, E. (2021) Covid-19: A Tsunami that Amplifies Existing Trends in Demographic Research. *Population and Development Review*, special issue on 'Covid-19 and the Global Demographic Agenda', edited by Landis MacKellar and Rachel Friedman.
- 47. Grow A., Perrotta D., Del Fava E., Cimentada J., Rampazzo F., Gil-Clavel S. and Zagheni E. (2020). Addressing Public Health Emergencies via Facebook Surveys: Advantages, Challenges, and Practical Considerations. *Journal of Medical Internet Research*22(12), e20653.
- 46. Alexander M., Polimis K., and Zagheni E. (2020). Combining Social Media and Survey Data to Nowcast Migrant Stocks in the United States. *Population Research and Policy Review*
- 45. Miranda-González A., Aref S., Theile T. and Zagheni, E. (2020). Scholarly Migration within Mexico: Analyzing Internal Migration among Researchers Using Scopus Longitudinal Bibliometric Data. *EPJ Data Science* 9(1), 34.
- 44. Ribeiro F., Benevenuto F., and Zagheni E. (2020). How Biased is the Population of Facebook Users? Comparing the Demographics of Facebook Users with Census Data to Generate Correction Factors *Proceedings of Web Science 2020*
- 43. Verkroost F.C.J., Kashyap R., Garimella K., Weber I., and Zagheni E. (2020). Tracking Global Gender Gaps in Information Technology using Online Data. *Digital Skills Insights*, International Communication Union (ITU) Academy.
- 42. Vieira C., Ribeiro F., Vaz de Melo P., Benevenuto F., and Zagheni E. (2020). Using Facebook Data to Measure Cultural Distance between Countries: The case of Brazilian Cuisine. *Proceedings of the Web Conference 2020*
- 41. Pestre G., Letouzé E. and Zagheni E. (2020). The ABCDE of Big Data: Assessing Biases in Call-Detail Records for Development Estimates. *The World Bank Economic Review* https://doi.org/10.1093/wber/lhz039
- 40. Spyratos S., Vespe M., Natale F., Weber I., Zagheni E. and Rango M. (2019). Quantifying International Human Mobility Patterns using Facebook Network Data. *Plos One* 14(10).
- 39. Dukhovnov D. and Zagheni E. (2019). Transfers of Informal Care Time in the United States: The Role of Demographic Differentials in Intergenerational Flows by Age, Sex, and Racial and National Background *Vienna Yearbook of Population Research* 17:163-197.
- 38. Aref S., Zagheni E. and West J. (2019). The Demography of the Peripatetic Scientist: Evidence on Highly Mobile Scholars from Web of Science. *Social Informatics* (SocInfo19), pp. 50-65, Springer.
- 37. Alexander M., Polimis K. and Zagheni E. (2019). The Impact of Hurricane Maria on Outmigration from Puerto Rico: Evidence from Facebook data *Population and Development Review* 45(3):617-630.
- 36. Estiri H. and Zagheni E. (2019). Age Matters: Ageing and Household Energy Demand in the United States. *Energy Research and Social Science* 55:62-70.
- 35. Gil-Clavel, S. and Zagheni, E. (2019). Demographic Differentials in Facebook Usage around the World. *Proceedings of the International AAAI Conference on Web and Social Media* (ICWSM19) 13(01):647-650.

- 34. Stewart I., Flores R., Riffe T., Weber I., and Zagheni E. (2019) Rock, Rap, or Reggaeton?: Assessing Mexican Immigrants' Cultural Assimilation Using Facebook Data. *Proceedings of the Web Conference* (WWW19).
- 33. Cesare N., Lee H., McCormick T., Spiro E. and Zagheni E. (2018). Promises and Pitfalls of Using Digital Traces for Demographic Research. *Demography* 55(5):1979-1999.
- 32. Weber I., Kashyap R., and Zagheni E. (2018). Using Advertising Audience Estimates to Improve Global Development Statistics. *ITU Journal: ICT Discoveries* 1(2).
- 31. Dubois A., Zagheni E., Garimella K., and Weber I. (2018). Studying Migrant Assimilation through Facebook Interests. *Social Informatics* (2):51-60.
- 30. Abel G., Muttarak R., Bordone V., and Zagheni E. (2018). Bowling Together: Scientific Collaboration Networks of Demographers at European Population Conferences. *European Journal of Population* 1-20.
- Rampazzo, F., Zagheni E, Weber I., Billari F. and Testa M.R. (2018). Global Fertility Patterns: What can Facebook Advertising Data Tell Us? Proceedings of the International Conference on Web and Social Media (ICWSM) 2018
- 28. Haranko K., Zagheni E., Garimella K. and Weber I. (2018). Professional Gender Gaps Across US Cities. *Proceedings of the International Conference on Web and Social Media* (ICWSM) 2018
- 27. Zagheni, E., Weber, I., and Gummadi, K. 2017. Leveraging Facebook's Advertising Platform to Monitor Stocks of Migrants. *Population and Development Review* 43(4):721-734.
- 26. Alexander M., Zagheni E. and Barbieri M. 2017. A Flexible Bayesian Model for Estimating Subnational Mortality. *Demography* 54(6):2025-2041
- 25. Fiorio, L., Abel, G, Jixuan, C., Zagheni, E. and Vinue, G. 2017. Using Twitter Data to Estimate the Relationships between Short-term Mobility and Long-term Migration. *Web Science 2017* 103-110.
- 24. Ojala J., Zagheni E., Billari F.C. and Weber I. 2017. Fertility and its Meaning: Evidence from Search Behavior. *Proceedings of ICWSM 2017 International Conference on Web and Social Media*. Association for the Advancement of Artificial Intelligence.
- 23. Messias J., Benevenuto F., Weber I. and Zagheni E. 2016. From Migration Corridors to Clusters: The Value of Google+ Data for Migration Studies. *Proceedings of the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*.
- 22. Tan P.L., Morgan P. and Zagheni E. 2016. A Case for "Reverse One-Child" Policies in East Asia? Examining the Link between Education Costs and Lowest-Low Fertility". *Population Research and Policy Review*.
- 21. Zagheni E., Muttarak R., and Striessnig E. 2015. Differential Mortality Patterns from Hydro-meteorological Disasters: Evidence from Cause of Death Data by Age and Sex". *Vienna Yearbook of Population Research* 13:47-70.
- 20. Zagheni E. 2015. Modeling Transfers of Unpaid Resources by Age and Sex within the Framework of input-output Models. *Genus* 71(2-3):103-111
- 19. Zagheni E. and Wagner B. 2015. The Impact of Demographic Change on Intergenerational Transfers via Bequests. *Demographic Research* 33(18):525-534

- 18. Dukhovnov D. and Zagheni E. 2015. Who Takes Care of Whom in the United States? Time Transfers by Age and Sex. *Population and Development Review* 41(2):183-206
- 17. Zagheni E. and Weber I. 2015. Demographic Research with Non-Representative Internet Data. *International Journal of Manpower* 36(1):13-25.
- 16. State B., Rodriguez M., Helbing D. and Zagheni E. 2014. Migration of Professionals to the US. Evidence from LinkedIn Data. *Proceedings of SocInfo 2014*. Springer's Lecture Note Series in Computer Science, 531-543
- 15. Kluesener S. and Zagheni E. 2014. The East-West Gradient in Spatial Population Development within Germany. *Historical Methods* 47(4):167-179.
- 14. Kluge F., Zagheni E., Loichinger E., and Vogt T. 2014. The Advantages of Demographic Change after the Wave: Fewer and Older, but Healthier, Greener, and more Productive? *Plos One* 9(9):e1085501.
- 13. Schmertmann C., Zagheni E., Goldstein J. and Myrskyla M. 2014. Bayesian Forecasting of Cohort Fertility. *Journal of the American Statistical Association* 109(506):500-513.
- 12. De Cao E., Zagheni E., Manfredi P. and Melegaro A. 2014. The Relative Importance of Frequency of Contacts and Time of Exposure for the Spread of Directly Transmitted Infections. *Biostatistics* 15(3):470-483.
- 11. Zagheni E., Garimella V.R.K., Weber I. and State B. 2014. Inferring International and Internal Migration Patterns from Twitter Data. WWW Companion 2014 439-444.
- 10. Zagheni E. and Zannella M. 2013. The Life Cycle Dimension of Time Transfers in Europe. Demographic Research 29(35):937-948.
- 9. State B., Weber I. and Zagheni E. 2013. Studying Inter-National Mobility through IP Geolocation. *Proceedings of ACM Web Search and Data Mining 2013*.
- 8. Zagheni E. and Weber I. 2012. You are where you E-mail: Using E-mail Data to Estimate International Migration Rates. *Proceedings of ACM Web Science* 2012, Association for Computing Machinery press.
- 7. Zagheni E. 2011. The Impact of the HIV/AIDS Epidemic on Kinship Resources for Orphans in Zimbabwe. *Population and Development Review* 37(4):761-783.
- 6. Melegaro A., Jit M., Gay N., Zagheni E. and Edmunds W.J. 2011. What Types of Contacts are Important for the Spread of Infections? Using Contact Survey Data to Explore European Mixing Patterns. *Epidemics* 3(3):143-151.
- 5. Zagheni E. 2011. The Leverage of Demographic Dynamics on Carbon Dioxide Emissions. Does Age Structure Matter? *Demography* 48(1):371-399.
- 4. Van Hoek A.J., Melegaro A., Zagheni E., Edmunds W.J. and Gay N. 2011. Modelling the Impact of a Combined Varicella and Zoster Vaccination Programme on the Epidemiology of Varicella Zoster Virus in England. *Vaccine* 29:2411-2420.
- 3. Iozzi F., Trusiano F., Chinazzi M., Billari F., Zagheni E., Merler S., Ajelli M., Del Fava E. and Manfredi P. 2010. Little Italy: An Agent-based Approach to the Estimation of Social Contact Patterns. Fitting Predicted Matrices to Serological Data. *PloS Computational Biology* 6(12): e1001021.

- Zagheni E., Billari F.C., Manfredi P., Melegaro A., Mossong J. and Edmunds J.W. 2008.
   Using Time Use Data to Parameterize Models for the Spread of Close-contact Infectious Diseases. American Journal of Epidemiology 168(9):1082-1090.
- 1. Zagheni E. and Billari F.C. 2007. A Cost Valuation Model Based on a Stochastic Representation of the IPAT Equation. *Population and Environment* 29(2):68-82.

#### **Books**

1. Zagheni E., Zannella M., Movsesyan M., and Wagner B. 2014. A Comparative Analysis of European Time Transfers between Generations and Genders. *Springer*.

### **Book Chapters**

- 12. Kashyap R. and Zagheni E. (2023). 'Leveraging Digital and Computational Demography for Policy Insights'. in *Handbook of Computational Social Science for Policy* (327-344), edited by Eleonora Bertoni, Matteo Fontana, Lorenzo Gabrielli, Serena Signorelli and Michele Vespe. Springer Nature.
- 11. Kashyap R., Rinderknecht G., Akbaritabar A., Alburez-Gutierrez D., Gil-Clavel S., Grow A., Kim J., Leasure D., Lohmann S., Negraia D., Perrotta D., Rampazzo F., Tsai C., Verhagen M., Zagheni E. and Zhao X. (2023). 'Digital and Computational Demography' in *Research Handbook of Digital Sociology* 48-86, edited by Jan Skopek, Edward Elgar Publishing Ltd.
- 10. Kim J., Zagheni E. and Weber I. (2023) 'Improving Migration Statistics Using Social Media', In *Practitioners' Guide on Harnessing Data Innovation for Migration Policy*. International Organization for Migration (IOM).
- 9. Vieira C., Fatehkia M., Garimella K., Weber I. and Zagheni E. (2022) 'Using Facebook and LinkedIn Data to Study International Mobility' in *Data Science for Migration and Mobility*, edited by Albert Ali Salah, Emre Eren Korkmaz, and Tuba Bircan. Oxford University Press.
- 8. Gendronneau C., Wisniowski A., Yildiz D., Zagheni E., Fiorio L., Hsiao Y., Stepanek M., Weber I., Abel G. and Hoorens, S. (2019). 'Measuring Labour Mobility and Migration Using Big Data: Exploring the potential of social-media data for measuring EU mobility flows and stocks of EU movers'. Publications Office of the European Union.
- 7. Marquez N., Garimella K., Toomet O., Weber I., and Zagheni E. (2019). 'Segregation and Sentiment: Estimating Refugee Segregation and its Effects Using Digital Trace Data'. In Guide to Mobile Data Analytics in Refugee Scenarios (pp. 265-282). Springer.
- 6. Alburez-Gutierrez D., Aref S., Gil-Clavel S., Grow A., Negraia D.V. and Zagheni E. (2019). 'Demography in the Digital Era: New Data Sources for Population Research' in Arbia G., Peluso S., Pini A., Rivellini G. (eds.) Book of Short Papers SIS2019. Pearson.
- 5. Billari F.C. and Zagheni E. 2017. "Big Data and Population Processes: A Revolution?", In Alessandra Petrucci, Rosanna Verde (edited by), SIS 2017. Statistics and Data Science: new challenges, new generations. 28-30 June 2017 Florence (Italy). Proceedings of the Conference of the Italian Statistical Society, Firenze University Press, 2017, pp. 167?178, CC BY 4.0
- 4. Hughes C., Zagheni E., Abel G.J., Wisniowski A., Sorichetta A., Weber I., and Tatem A.J. 2016. Inferring Migrations: Traditional Methods and New Approaches based on Mobile Phone, Social Media, and other Big Data. *European Commission Report*.

- 3. Zagheni E. 2015. "Microsimulation in Demographic Research." In: James D. Wright (editor-in-chief), *International Encyclopedia of the Social and Behavioral Sciences*, 2nd edition, Vol 15. Oxford: Elsevier. pp. 343-346.
- 2. Zagheni E. 2009. "The Demographic Dimension of Climate Change." Pp. 191-209 in Environmentalism, Environmental Strategies, and Environmental Sustainability, edited by E. Kahraman and A. Baig: Nova Science Publishers, Hauppauge, NY.
- 1. Zagheni E. and Billari F.C. 2005. An IPAT-type Model of Environmental Impact Based on Stochastic Differential Equations. Atti del Convegno Intermedio della Societá Italiana di Statistica "Statistics and Environment", Messina, September 21-23 2005.

### Articles in Scientific Magazines

- Alburez-Gutierrez D., Chandrasekharan E., Chunara R., Gil-Clavel S., Hannak A., Interdonato R., Joseph K., Kalimeri K., Malik M., Mayer K., Mejova Y., Paolotti D. and Zagheni E. (2019). Reports of the Workshops Held at the 2019 International AAAI Conference on Web and Social Media. AI Magazine 40(4), 78-82. https://doi.org/10.1609/aimag.v40i4.5287
- 1. Zagheni E. 2003. Grafting Replaces Methyl Bromide. Appropriate Technology 30(4).

### **Teaching**

At MPIDR

Topics in Digital and Computational Demography, (Ph.D. level, co-instructor) Nov. 2019, Nov. 2020, Nov. 2021, Nov. 2022, Nov. 2023

Migration and Society, (M.A. level, co-instructor), Spring 2024

At the University of Washington, Seattle

Quantitative Techniques in Sociology, (Ph.D. level) Spring 2017

Introduction to Demographic Methods, (Ph.D. level) Winter 2017 & Winter 2018

Data Science and Population Processes, (Ph.D. level) Autumn 2016 & Autumn 2017

Population & Society, Spring 2015 & Spring 2016

Big Data & Population Processes, (Ph.D. level), Winter 2015 & Autumn 2015.

At CUNY Graduate Center

Big Data & Population Processes, (Ph.D. level), Spring 2014.

At Queens College - CUNY

Social Statistics, Fall 2012, Spring 2013.

At UC Berkeley (Graduate Student Instructor)

Introduction to Multivariate Statistics (Ph.D. level), with Maureen Lahiff, Fall 2009 Introduction to Biostatistics, with Maureen Lahiff, Summer 2009.

Economic Demography, with Ronald D. Lee, Spring 2008.

Social Consequences of Population Dynamics, with John R. Wilmoth, Fall 2007.

At Bocconi University (Teaching Assistant)

Applied Research, with Barbara Chizzolini and Jane Klobas, Spring 2005.

Short courses

Social Media, Data Science and Big Data Research, Summer course at *Pompeu Fabra University*, Barcelona, Spain, July 2016

**Demographic Microsimulation**, (Ph.D. level), at *Universidade Federal de Minas Gerais*, Aug 2013 & Wittgenstein Center for Demography and Global Human Capital (IIASA, VID/ÖAW, WU), Fall 2013

Training Workshop on Social Media and Demographic Methods, at: International Population Conference of IUSSP, Cape Town, South Africa, Oct 29, 2017; McGill University, Montreal, QC, May 18, 2017; Annual Meeting of the Population Association of America, Chicago, IL, April 26, 2017; Bocconi University, Feb 6, 2017; Latin American Population Association and Brazilian Population Studies Association, Foz do Iguacu, Brazil, October 17, 2016; European Population Conference, Mainz, Germany, August 31, 2016; Annual Meeting of the Population Association of America, Washington, D.C., March 30, 2016.

## Grants and Research Support

- European Commission, Horizon Europe. Policy Recommendations to Maximise the Beneficial Impact of Unexplored Mobilities in and beyond the European Union (PREMIUM EU) 2023-2026. Role: Co-P.I.
- International Max Planck Research School (IMPRS) for Population, Health and Data Science. 2019-2024. Role: Co-P.I.
- La Caixa Banking Foundation, Community-Driven Big Data Intelligence to Fight Mosquito-Borne Disease (Big Mosquito Bytes). 2019-2022. Role: Co-P.I. Project Leader: Frederic Bartumeus Ferré CEAB
- European Commission 2017-18. *Measuring Labour Mobility and Migration Using Big Data*, Tender VT/2017/020. Role: Investigator; P.I.:Hoorens
- Austrian Academy of Sciences Anniversary Fund of the City of Vienna. 2015-2016. Combining Traditional and Emerging Big Data Sources to Model Population Movement Patterns. Role: Co-P.I. with Guy Abel, Alessandro Sorichetta, Andrew Tatem, Arkadiusz Wisniowski.
- Population Association of America Workshop on *Social Media and Demographic Methods*, held in Washington D.C. at the PAA 2016 Annual Meeting, March 30, 2006. Travel grant for instructor and teaching assistants.
- Panel Study on Income Dynamics/NIH. 2015-2016. The Impact of Population Aging on Time Transfers and Wellbeing. Role: P.I.
- European Commission 2015. Inferring Mobility and Migration in the EU from Big Data and Social Media Data, Tender VT/2014/093. Role: P.I.
- Center on the Economics and Demography of Aging Pilot Grant. 2014-2015. *Empirical Bayes Approaches for Imperfect Mortality Data*. Role: Co-investigator. Other investigators: John Wilmoth, Kenneth Wachter, Magali Barbieri, Joshua Goldstein.

- NIH National Institute on Aging Research Grant (R03), 2013-2014. Consequences of Demographic Change on Caregiving and other Time Transfers, Grant No. 1R03AG045385-01, Role: P.I.

### Organization of scientific events and peer-review

Research workshop organizer or co-organizer: Demographic microsimulation in R using SOCSIM, & Inauguration of the Scholarly Migration Database, at the Annual Meeting of the Population Association of America 2023; Demographic Research with Web and Social Media Data, at the International Conference on Web and Social Media 2019; Digital Demography in the Era of Big Data (Sevilla, 2019); Symposium on Digital Demography at MPIDR, 2018; Making Sense of Online Data for Population Research, at the International Conference on Web and Social Media 2018; Demographic Research in the Digital Age, at the Annual Meeting of the Population Association of America 2018; Social Media and Demographic Methods, at the Annual Meeting of the Population Association of America 2016 & 2017; Social Media and Demographic Research, at the International Conference on Web and Social Media 2016 & 2017; Web, Social Media and Cellphone Data for Demographic Research, at Social Informatics 2016.

Program Committee Chair: Social Informatics 2019

Workshop Chair: Social Informatics 2016

**Theme convener:** Development and Environment (*European Population Conference* 2014)

**Program committee member:** Social Informatics 2014, 2015, 2016; International Conference on Web and Social Media 2015, 2016, 2017, 2018, 2022.

Journal Referee for: Advances in Life Course Research; Demographic Research; Demography; Environmental Modeling & Assessment; Environmental Modelling & Software; EPJ Data Science; Epidemiology and Infection; Genus; Journal of Gerontology: Social Sciences; International Migration Review; IZA Journal of Labor Economics; Nature; Nature Climate Change; Nature Human Behavior; Population and Development Review; Population and Environment; Population Research and Policy Review; Population, Space and Place; Proceedings of the National Academy of Sciences U.S.A.; Science; Sustainability; Theoretical Population Biology

### **Presentations**

#### **Invited Talks**

2024 - University of Washington CSSS 25th Anniversary, May 17th Seattle, WA

- Duke Population Research Institute, March 7 Durham, NC

- UC Berkeley Demography Brownbag Seminar, Feb. 28 online
- Keynote at Hochschulrektorenkonferenz (HRK) Advance, Feb. 19 Cologne, Germany
- CAnD3 Seminar Series, Jan. 10 online
- 2023 Max Planck Institute for Innovation and Competition, Nov. 8 Munich, Germany

- European Data User Conference, INE, CSIC, ADEH, Oct. 30 Madrid, Spain
- Keynote at the inauguration of the Interdisciplinary Institute for Societal Computing Sept. 8, Saarbruecken, Germany
- Keynote at the meeting of the Italian Statistical Society, June 23 Ancona, Italy
- Italian Embassy Research Day in the World, May 9

Berlin, Germany

- GenPopClima Seminar at the University of Bologna, Mar 2 Bologna, Italy
- European Day of Demography Panel, Feb 15

Population Europe, online

- Launch of the ESRC Digital Footprints Advisory Board, Jan 13 London, UK
- 2022 Wissenschaftszentrum Berlin fuer Sozialforschung (WZB), Dec 5 Berlin, Germany
  - Dondena Center Seminar at Bocconi University, Oct24Milan, Italy
  - Symposium on Mortality Models, Aug 31 Misurina, Italy
  - University of Pennsylvania, SICSS Seminar, Jun 21
  - Alan Turing Institute, Seminar on Spatial Data Science, Mar 15
  - University of Manchester, Social Statistics Seminar, Mar 1
- 2021 Facebook Core Data Science Team Seminar, Dec 16
  - CUNY Institute for Demographic Research, Dec 10
  - Tuesday Dialogues for an Einstein Center, Dec 7
  - The 2nd Workshop on Migration and Mobility Research in the Digital Era, Conference on Complex Systems, Oct 27
  - Office of Population Research, Princeton University, Oct 26
  - Keynote speech at DZHW Workshop on Spatial Mobility, Sept 28
  - Keynote presentation, Conference on New Data for Population and Society, Sept 22 University of Padova (Webinar)
  - Knomad Seminar on International Migration, June 17
  - Berlin Global Demography Forum, Mar 24
  - Keynote speech at European Consortium for Sociological Research School, Mar 22
  - Keynote speech at Deutsche Gesellschaft fuer Demographie, Mar 18
  - Population Studies and Training Center, Brown University, Mar 18
  - CEDEPLAR at UFMG (Belo Horizonte, Brazil), Mar 10
  - Center for Information Technology Policy, Princeton University, Mar 2
  - Center for Population Change, University of St. Andrews, Feb 4
  - The French Institute for Demographic Research (INED), Feb 1
  - Max Planck Symposium on Computing and Society, Jan 8
- 2020 International Organization for Migration, Nov 3
  - Freie Universitaet, Feb 17

Berlin, Germany

- Cornell Population Center Seminar, Feb 7

Ithaca, NY

- Introduction to Digital and Computational Demography (Workshop), Feb 6 Ithaca, NY  $\,$
- Plenary Session at the UN International Forum on Migration Statistics, Jan 21 Cairo, Egypt
- 2019 European Commission's Joint Research Centre, Oct 15

Ispra, Italy

- Keynote at Digital Societies Conference (Academy of Sociology), Sept 27 Konstanz, Germany

- Keynote at BIGSSS Summer School in Computational Social Science, June 18 Pula - Sardinia, Italy

- Keynote at Human Mortality Database Symposium, May 13 Berlin, Germany

- Max Planck Institute for Informatics - Colloquium, May 2 Saarbruecken, Germany

- Seminar Series at the Population Studies Center, April 15 University of Michigan, Ann Arbor, MI

- Seminar Series at the Center for Economic Demography, March  $26\,$ 

Lund University, Sweden

- Schlossgespraech, Jan 21

Berlin, Germany

 - Keynote presentation at the European Symposium on Societal Challenges in Computational Social Science, Dec 7 Cologne, Germany

- Keynote at Eurostat-UNECE Work Session on Migration Statistics, Oct 25 UNECE, Geneva
- Plenary Session 'Laureate Trailblazer Award' at the *Europ. Pop. Conference*, June 7 Brussels, Belgium
- Plenary Session at the *International Forum on Migration Statistics*, Jan 16 Organization for Economic Cooperation and Development (OECD), Paris, France

2017 - DUPRI Seminar Series, Nov 16

Duke University, Durham, NC

- Notestein Seminar Series, Oct 17

Princeton University, Princeton, NJ

- Keynote address at the  ${\it German~Association~for~Demography},$  Sept 20

Rostock, Germany

- Database Workshop, June 29

University of Washington, Seattle,

- Nuffield College Seminar Series, June 7

Oxford University, UK

- StaTalk, February 7

University of Florence, Italy

- Dondena Seminar Series, February 6

Bocconi University, Milan

- eScience Community Seminar, February 2

University of Washington, Seattle

2016 - Center for Studies in Demography and Ecology Seminar Series, Nov 18 University of Washington, Seattle

- Applied, Bayesian and Computational Statistics Working Group, Nov 4 University of Washington, Seattle
- Panel Study of Income Dynamics User Conference, June 10

University of Michigan, Ann Arbor

- Suessmilch Lecture, Max Planck Institute for Demographic Research, May 2 Rostock, Germany
- El Colegio de Mexico, Symposium on Big Data in the Social Sciences, April 29 Mexico City, Mexico
- European Commission, Feb 25 video-conference seminar

Rostock, Germany - Formal Demography Workshop and mini-conference, Aug 21 Berkeley, CA - Data Science to Data Sense, Fred Hutch, May 27 Seattle, WA - Applied, Bayesian and Computational Statistics Working Group, Feb 13 University of Washington, Seattle - UNFPA Big Data Bootcamp, Feb 3-5 Barcelona, Spain - Center for Statistics and the Social Sciences Seminar Series, Jan 7 University of Washington, Seattle 2014 - Plenary Session at the Brazilian Population Association, Nov 27 Sao Pedro, SP, Brazil - University of Michigan, Ann Arbor, Mar 26 Robert Wood Johnson Foundation - Health & Society Scholars Seminar Series - CUNY Institute for Demographic Research, New York, Feb 21 - Columbia University, New York, Feb 19 2013 - University of Washington, Seattle Center for Statistics and the Social Sciences, May 29 Department of Sociology, May 29. - Keyfitz Centennial Symposium on Mathematical Demography Ohio State University, Columbus, Jun 26 - University of Washington, Seattle Center for Studies in Demography and Ecology, Mar 8 Department of Sociology, Mar 7. - Vienna Institute of Demography, Jan 22 2012 - Queens College, NY Sociology Seminar, Nov 19. - Institute for Future Studies, Stockholm, Sweden European NTA workshop on time transfers, Nov 8. 2011 - Universidade Federal de Minas Gerais, Belo Horizonte CEDEPLAR Seminar, Dec 6. - Bocconi University, Milan Dondena Research Meeting, Feb 24. 2010 - Stanford University, Palo Alto Workshop in formal demography, Dec 14. - Queens College, CUNY, Department of Sociology Queens, New York, Apr 26. - UC Berkeley, Demography Department, Brownbag Seminar Berkeley, California, Feb 10. 2009 - Max Planck Institute for Demographic Research, Rostock, Oct 20 - Bocconi University, Milan, Feb 5 - Meeting of the National Transfer Accounts Project Berkeley, California, Jan 10. 2008 - Polymod Workshop: Estimating Contact Patterns and their Implications for Infectious Disease Modelling, Antwerp, Belgium, Jun 9. 2007 - UC Berkeley, Demography Department, Brownbag Seminar Berkeley, California, Jan 24.

- Rostocker Ring, Max Planck Institute for Demographic Research, Aug 31

2015

# Conference Presentations

2024	- European Population Conference
	Edinburgh, June 12-15
	- Population Association of America Annual Meeting
	Columbus, Ohio Apr 17-20
2023	- International Conference on Computational Social Science (IC2S2)
	Copenhagen, July 19
	- Population Association of America Annual Meeting
	New Orleans, Apr 12-15
2022	- European Population Conference
	Groningen, Netherlands, 29 Jun- 2 Jul
	- Population Association of America Annual Meeting
	Online, Apr 6-9
2021	- IUSSP International Population Conference
2021	Online, Dec 5-10
	- Population Association of America Annual Meeting
2020	Online, May 5-8
2020	- Joint Statistical Meetings
	Webinar, Aug 4
	UN International Forum on Migration Statistics, Jan 22
2010	Cairo, Egypt
2019	- Social Informatics - Migration Workshop
	Doha, Qatar, Nov 18
	- International Conference on Web and Social Media
	Munich, Germany June 11-14
	- Research Workshop on Digital Demography
	Sevilla, Italy, June 5
	- Population Association of America Annual Meeting
	Austin, TX Apr 12
	- Population Days - Italian Association for Population Studies
	Milano, Italy, Jan 24-26
2018	- International Conference on Web and Social Media
	Palo Alto, CA June 25-28
	- European Population Conference
	Brussels, Belgium June 7-9
	- Population Association of America Annual Meeting
	Denver, CO Apr 25-28
2017	- International Population Conference (IUSSP)
	Cape Town, South Africa Oct 29-Nov 3
	- International Conference on Web and Social Media
	Montreal, QC May 15-17
	- Population Association of America Annual Meeting
	Chicago, IL Apr 27-29
	- Population Days - Italian Association for Population Studies
	Florence, Italy, Feb 8-10
2016	- Social Informatics
2010	Bellevue, WA Nov 14
	- Latin American Population Conference
	Foz do Iguacu, Brazil Oct 18-20
	- European Population Conference
	Mainz, Germany Aug 31-Sep 3
	- International Conference on Web and Social Media
	Cologne, Germany May 17
	- Population Association of America Annual Meeting

Washington, D.C. Mar 30-Apr 2 2015 - National Transfer Accounts Workshop Berkeley, CA, Dec 14. - Meeting of the Italian Society of Statistics Treviso, Italy, September 9-11. - Population Association of America Annual Meeting San Diego, CA, April 30-May 2. 2014 - European Population Conference Budapest, Jun 25-28. - Population Association of America Annual Meeting Boston, May 1-3. - IUSSP Seminar on Demographic Differential Vulnerability to Natural Disasters in the Context of Climate Change Adaptation. Khao Lak (Phang Nga), Thailand, Apr 23-25. 2013 - ISA/RC06 Demographic and Institutional Change in Global Families Academia Sinica, Taipei, Taiwan, Mar 30. - Population Association of America Annual Meeting New Orleans, Apr 11-13. 2012 - European Population Conference Stockholm, Jun 13-16. - Population Association of America Annual Meeting San Francisco, May 4. - Alp-Pop Conference La Thuile, Italy, Jan 16. 2011 - National Transfer Accounts Conference Belo Horizonte, Dec 8. - Joint Statistical Meetings Miami Beach, Aug 4. - Population Association of America Annual Meeting Washington D.C., Mar 31. - Alp-Pop Conference La Thuile, Italy, Jan 12. 2010 - IUSSP Seminar on Intergenerational Ties and Transitions to Adulthood Milan, Nov 9. - European Population Conference (poster) Vienna, Sep 2. - Population Association of America Annual Meeting Dallas, Apr 15. 2009 - American Time Use Research Conference (poster), University of Maryland College Park, Maryland, Jun 25. - Population Association of America Annual Meeting (poster) Detroit, Michigan, Apr 30. 2008 - Southern Demographic Association Annual Meeting Greenville, South Carolina, Nov 1. - Population Association of America Annual Meeting New Orleans, Louisiana, Apr 18. 2007 - European Public Health Association Meeting Helsinki, Finland, Oct 11. - Population Association of America Annual Meeting (poster) New York, Mar 30.

- European Population Conference

Liverpool, UK, Jun 22.

2006

- Population Association of America Annual Meeting Los Angeles, California, Mar 30.