

# EMILIO ZAGHENI

*Curriculum Vitae, July 2023*

**Director, Max Planck Institute for Demographic Research**  
**Head, Department of Digital and Computational Demography**

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## Education

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- 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.**            **Bocconi University**, December 2004 - *Economics, Statistics and Social Sciences*. 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

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- 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
- 10/2014-present            **Affiliate**  
Center for Statistics and the Social Sciences, 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
- 09/2016-06/2018            **Director of Training**  
Center for Studies in Demography and Ecology, UW Seattle
- 09/2014-09/2018            **Data Science Fellow**  
eScience Institute, 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

## Short-term Visits

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

## Selected Professional Service

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**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-

**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

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2016	<b>Trailblazer Award for Demographic Analysis</b> European Association for Population Studies (EAPS)
2010	<b>Eugene A. and Joan S. Hammel Dissertation Prize</b> <b>in Demographic Studies</b>
2009	<b>Poster Award</b> , Population Association of America Annual Meeting
2008-2009	<b>Outstanding Graduate Student Instructor Award</b> , UC Berkeley
2008-2009	<b>Dean’s Normative Time Fellowship</b> , UC Berkeley
2005-2007	<b>Regents-Intern Fellowship</b> , UC Berkeley
2005	<b>William V. Power Graduate Award</b> , UC Berkeley
2001-2003	<b>ISU Bocconi Scholarship</b> , Bocconi University
2003	<b>ISU Bocconi Grant for International Internship</b> , Bocconi University
2002	<b>ISU Bocconi Grant for International Exchange</b> , Bocconi University

## Major Areas of Professional Interest

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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

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### Peer-reviewed Articles

(10 selected publications in bold)

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*.
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. (2022). 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.
65. 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 Out-migration 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.
29. 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 Myrskylä 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.
2. 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 Società Italiana di Statistica “Statistics and Environment”*, Messina, September 21-23 2005.

#### Articles in Scientific Magazines

2. 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

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##### *At MPIDR*

**Topics in Digital and Computational Demography**, (Ph.D. level) Nov 2022  
(course co-taught with Aliakbar Akbaritabar, Jisu Kim, Tom Theile, and Gordon Rinderknecht as part of the IMPRS-PHDS training program)

**Topics in Digital and Computational Demography**, (Ph.D. level) Nov 2021  
(course co-taught with Daniela Perrotta, Diego Alburez-Gutierrez, Sophie Lohmann and Jisu Kim as part of the IMPRS-PHDS training program)

**Topics in Digital and Computational Demography**, (Ph.D. level) Nov 2020  
(course co-taught with Diego Alburez-Gutierrez, Samin Aref and André Grow as part of the IMPRS-PHDS training program)

**Fundamentals of Digital and Computational Demography**, (Ph.D. level) Dec 2019  
(course co-taught with Samin Aref and Kiran Garimella as part of the IMPRS-PHDS training program)

##### *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

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- 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.

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## 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

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### Invited Talks

- 2023
- 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, Oct 24  
Milan, 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
- 2018
- 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 *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

- 2015 - *Rostocker Ring, Max Planck Institute for Demographic Research*, Aug 31  
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.

## Conference Presentations

- 2023 - *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*  
Online, Dec 5-10  
- *Population Association of America Annual Meeting*  
Online, May 5-8
- 2020 - *Joint Statistical Meetings*  
Webinar, Aug 4  
*UN International Forum on Migration Statistics*, Jan 22  
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*  
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.
- 2006 - *European Population Conference*  
 Liverpool, UK, Jun 22.  
 - *Population Association of America Annual Meeting*  
 Los Angeles, California, Mar 30.