Sofia Gil-Clavel

Max Planck Institute for Demographic Research   sofiag1l.github.io
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Interests: Demography, Computational Social Science, Computer Science

EDUCATION

Max Planck Institute for Demographic Research, Germany

Ph.D. Student, Digital and Computational Demography Laboratory.	September, 2018-.
Affiliated to University of Groningen.	January, 2020-.
Part of the International Max Planck Research School for Population, Health and Data Science (IMPRS-PHDS).	September, 2019-.

Supervisors:
    Prof. Dr. Emilio Zagheni (MPIDR, Germany)
    Prof. Dr. Clara H. Mulder (University of Groningen, The Netherlands)

Center of Mathematics Research (CIMAT), Mexico

Master of Science with Specialization on Computing and Industrial Mathematics.	2015-2017

Supervisors:
    Dr. Johan Van Horebeek (CIMAT, Mexico)
    Dr. Rafael Garduño Rivera (CIDE, Mexico)

National Autonomous University of Mexico (UNAM), Mexico

Bachelor of Science in Actuarial Science.	2009-2014

Supervisor:
    Dr. Víctor Manuel García Guerrero (COLMEX, Mexico)

WORK EXPERIENCE

National Population Council (CONAPO)

Head of the Demographic Analysis Department.
Activities to develop: Creation of computational tools for visualizing and analyzing Mexican conciliation data (1950-2015) and the Mexican projected population (2016-2050). Demographic data analysis of population, deaths, births, and migration.

2017-2018

Center of Demographic, Urban, and Environmental Studies (CEDUA) of COLMEX

Research support.
Activities to develop: Development of the R package "DemosR: Package for the Stochastic Population Forecast"[1]. Analysis and handling of big data for demographic research.

2014-2015

PUBLICATIONS

- Grow, A., Perrotta, D., Del Fava, E., Cimentada, J., Rampazzo, F., **Gil-Clavel, S.**, & Zagheni, E. (2020). Addressing Public Health Emergencies via Facebook Surveys: Advantages, Challenges, and Practical Considerations.

- Del Fava, E., Cimentada, J., Perrotta, D., Grow, A., Rampazzo, F., **Gil-Clavel, S.**, & Zagheni, E. (2020). The differential impact of physical distancing strategies on social contacts relevant for the spread of COVID-19. medRxiv.

- Perrotta, D., Grow, A., Rampazzo, F., Cimentada, J., Del Fava, E., **Gil-Clavel, S.**, & Zagheni, E. (2020). Behaviors and attitudes in response to the COVID-19 pandemic: Insights from a cross-national Facebook survey. medRxiv.

- **Sofia Gil-Clavel** and Emilio Zagheni, *Demographic Differentials in Facebook Usage Around the World*, Proceedings of the Thirteenth International AAAI Conference on Web and Social Media (ICWSM 2019): 11-14 June 2019, Munich, Germany, 647–650. Palo Alto, CA: AAAI Press. (2019)

- Alburez-Gutierrez, D., Aref, S.**, Gil-Clavel**, **S**., Grow, A., Negraia, D. V., Zagheni, E., *Demography in the digital era: new data sources for population research*, Smart statistics for smart applications : book of short papers SIS2019, 23–30, Pearson. (2019)

PRESENTATIONS AT CONFERENCES

- *Sofia Gil-Clavel*, Valeria Bordone and Emilio Zagheni, "Determinants of Online and Offline Close Social Networks Among Older Adults". Accepted presentation for EPC session: Health and Wellbeing in a Digital World. June 2020. Cancelled due to COVID-19.

- *Sofia Gil-Clavel*, Valeria Bordone and Emilio Zagheni, "Determinants of Online and Offline Close Social Networks Among Older Adults". Accepted presentation for PAA Flash session: Use of Big Data to Model Health Outcomes and Mortality. April 2020. Cancelled due to COVID-19.

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[1]   COLMEX internal use.

- Iván Williams and *Sofía Gil-Clavel*, "Online obituaries for the study of death coverage in small areas. An inicial exploration". Accepted presentation for IV Coloquio Internacional Estudiantil de Población, Ciudad y Ambiente. April 2020. Cancelled due to COVID-19.

- *Iván Williams* and **Sofía Gil-Clavel**, "Online obituaries for the study of death coverage in small areas. An inicial exploration.", presented at XV Jornadas Argentinas de Estudios de Población - II Congreso Internacional de Población del Cono Sur (AEPA-2019). September 2019.

- *Sofia Gil-Clavel* and Emilio Zagheni, "Demographic Differentials in Facebook Usage Around the World", poster presented at The International AAAI Conference on Web and Social Media (ICWSM-2019). June 2019.

- *Sofia Gil-Clavel* and Emilio Zagheni, "Demographic Differentials in Facebook Usage Around the World", presented at IUSSP Digital Demography in the Era of Big Data. June 2019.

- *Sofia Gil-Clavel* and Emilio Zagheni, "Demographic Differentials in Facebook Usage Around the World", poster presented at Population Fest 2019 (PopFest2019). May 2019.

- *Sofia Gil-Clavel*, "Estimation of the infant mortality rate in Mexico in 2015 at municipal level using numerical techniques", presented at the XIV National Meeting of the Mexican Society of Demography (SOMEDE). June 2018.

PROFESSIONAL ACTIVITIES

- Give a [training Workshop](link) at IUSSP Digital Demography in the Era of Big Data Pre-Workshop: *Demography Today Training (link)*. June 2019.
- Organizer at the ICWSM 2019 Workshop: *Demographic Research with Web and Social Media Data (link)*. June 2019.

OTHER PROFESSIONAL ACTIVITIES

- Elected PhD External Representative at the MPIDR. June, 2020 -.
- Elected PhD Core Representative at the IMPRS-PHDS. November, 2019 -.

TRAINING AND COURSES

- Fundamentals of Digital and Computational Demography. Part of IMPRS-PHDS 2019 courses.
- Population Health. Part of IMPRS-PHDS 2019 courses.
- Demographic Methods. Part of IMPRS-PHDS 2019 courses.
- Using the GWDG Scientific Compute Clusters – An Introduction. October 2018.
- Parallel Programming with MPI (Including MPI for Pyhton). October 2018.
- Attendance at the "France-Mexico School on Data-Analysis" organized by the French Embassy in Mexico and the Mathematic Institute of UNAM. December 2017.

- Attendance at the "France-Mexico Meeting on Data Analysis" organized by the French Embassy in Mexico and the Mathematic Institute of UNAM. November 2016.

SKILLS

Use of Application Programming Interfaces (APIs): Facebook and Twitter
Programming: C++, VBA, Python, R
Data visualization and exploration: R (shiny, ggplot, plotly), Gephi.
Text processing: LATEX

LANGUAGES

Spanish (native), **English** (advanced), **German** (intermediate)

PROFESSIONAL MEMBERSHIPS

International Union for the Scientific Study of Population (IUSSP)
European Association for Population Studies (EAPS)
Population Association of America (PAA)