

# Enrique Acosta, Ph.D.

Curriculum vitae

February 2021

- Personal Information** [acosta@demogr.mpg.de](mailto:acosta@demogr.mpg.de) and [kikepaila@gmail.com](mailto:kikepaila@gmail.com)  
[Google Scholar](#); [Research Gate](#); [MPIDR personal page](#); [OSF](#).  
ORCID ID: [0000-0001-6250-4018](#)
- Current Position** **Research Scientist**  
Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany  
Research Group: Population Health. Research Group Leader: Mikko Myrskylä, Ph.D.  
**Postdoctoral Fellow**  
Social Sciences and Humanities Research Council of Canada (SSHRC) – (2020-2021)  
Fonde de Recherche de Québec – Société et Culture (FRQSC) – (2020-2021)
- Education** **Ph.D. in Demography (2019) \***  
Université de Montréal, Canada  
Advisors: Alain Gagnon, Ph.D. and Nadine Ouellette, Ph.D.  
**M.Sc. in Demography (2013) \*\*\***  
Université de Montréal, Canada  
**B.A. (Hons) in Sociology (2008) \*\***  
Universidad Nacional de Colombia, Colombia  
**B.Eng. (Hons) in Industrial Engineering (2007) \***  
Universidad Distrital de Bogotá, Colombia
- \* with highest distinction  
\*\* with distinction  
\*\*\* accelerated in the doctoral program
- Research Interests** Mortality trends, Epidemics and Pandemics (COVID-19, influenza, drug overdoses), Age-Period-Cohort effects, Extrinsic and Behavioral causes of death, Demography of violence.
- Peer-reviewed Publications** **2021** Riffe Tim\*, **Enrique Acosta\***, and the COVERAGE-DB Team. “[COVeAGE-DB: A Global Database of Age-structured COVID-19 Cases and Deaths.](#)” *International Journal of Epidemiology* (In Press).  
\* [Riffe and Acosta contributed equally]  
**2021** Pifarré i Arolas, Héctor, **Enrique Acosta**, Guillem López Casasnovas, Adeline Lo, Catia Nicodemo, Tim Riffe, and Mikko Myrskylä. “[Global Years of Life Lost to COVID-19.](#)” *Scientific Reports*.  
**2020** Dudel, Christian, Tim Riffe, **Enrique Acosta**, Alyson A. van Raalte, Cosmo Strozza, and Mikko Myrskylä. “[Monitoring Trends and Differences in COVID-19 Case Fatality Rates Using Decomposition Methods: Contributions of Age Structure and Age-Specific Fatality.](#)” *PLOS ONE*.  
**2020** Nepomuceno, Marília R.\*, **Enrique Acosta\***, Diego Alburez-Gutierrez, José Manuel Aburto, Alain Gagnon, and Cássio M. Turra. “[Besides Population Age Structure, Health and Other Demographic Factors Can Contribute to Understanding the COVID-19 Burden.](#)” *Proceedings of the National Academy of Sciences (PNAS)* 117(25).  
\* [Nepomuceno and Acosta contributed equally]  
**2020** Gagnon, Alain, **Enrique Acosta**, and M.S. Miller. “[Age-specific incidence of influenza A responds to change in virus subtype dominance.](#)” *Clinical Infectious Diseases*, (ciaa075).  
**2019** **Acosta, Enrique**, S.A. Hallman, N. Ouellette, R. Bourbeau, D.A. Herring, K. Inwood, L. Dillon, D.J. Earn, J. Madrenas, M.S. Miller, A. Gagnon. “[Determinants of Influenza Mortality Trends. Age-Period-Cohort Analysis of Influenza Mortality in the United States 1959-2016.](#)” *Demography*, 56 (5).  
**2019** **Acosta, Enrique**, Alyson van Raalte. “[APC-Curvature Plots: Displaying Nonlinear Age-Period-Cohort Patterns on Lexis Plots.](#)” *Demographic Research*, 41 (42).

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**2018** Gagnon, Alain, **Enrique Acosta**, S. Hallman, R.R. Bourbeau, L. Dillon, D.J. Earn, D.A. Herring, K. Inwood, J. Madrenas, and M.S. Miller. "[Pandemic paradox: Early life pandemic influenza infection enhanced susceptibility to death during the 2009 H1N1 pandemic.](#)" *mBio*, 9 (1).

\* [Gagnon, Acosta, and Miller contributed equally]

**2018** Gagnon, Alain, **Enrique Acosta**, and M.S. Miller. "[Reporting and evaluating influenza virus surveillance data: An argument for incidence by single year of age.](#)" *Vaccine* 36 (42).

**2015** Gagnon, Alain, **Enrique Acosta**, J. Madrenas and M.S. Miller. "[Is Antigenic Sin always "original?": Re-examining the evidence regarding circulation of a human H1 influenza virus immediately prior to the 1918 Spanish Flu.](#)" *PLOS Pathogens* 11(3).

## Under Review

**Acosta, Enrique**, Alain Gagnon, Nadine Ouellette, Robert Bourbeau, Marília Nepomuceno, Alyson van Raalte. "[The boomer penalty: excess mortality among baby boomers in Canada and the United States.](#)" *MPIDR Working Paper Series WP-2020-003*.

**Acosta, Enrique**. (Book chapter) "Surmortalité des baby-boomers au Canada et aux États-Unis."

## Working Papers

**Acosta, Enrique**, Marcus Ebeling, Neil Mehta, and Mikko Myrskylä. "Cardiovascular Mortality Gap between the United States and other High Life Expectancy Countries during the Period 2000-2018"

**Acosta, Enrique**, Alyson van Raalte, Alain Gagnon, Simona Bignami, Catalina Torres, Viorela Diaconu, and Rafael Silva-Ramírez. "COVID-19 in Canada: International and Subnational Comparative Analysis of the Pandemic during 2020"

**Acosta, Enrique**, Catalina Torres, Rafael Silva-Ramírez, Robert Bourbeau. "Violence and External Mortality in Colombia: Analysis of Demographic Costs During the Period 1979-2016."

Nepomuceno, Marília, Alyson van Raalte, and **Enrique Acosta**. "Rising midlife mortality among US Whites: A cohort survival comparison."

## Data Bases

Riffe Tim\*, **Acosta Enrique\***, et al. (2020) [COVerAGE-DB: A database of COVID-19 cases and deaths by age.](#)

\* [Coordinated by Riffe and Acosta]

## Invited Talks

January 2021. Global trends in COVID-19 infections among young people. WHO-UNICEF. Global Transmission Discussion on SARS-COV-2 in children.

January 2021. Indirect measures for adjusting COVID-19 demographic data. Shanghai University, Asian Demographic Research Institute.

December 2020. Excess Mortality in Young and Children in High Income Countries. Technical Advisory Group of the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME).

October 2020. Age and COVID-19. Université de Montréal, Department of Demography.

May 2020. Cohort effects on Influenza mortality during epidemics and pandemics. Universidade Federal de Minas de Gerais, CEDEPLAR, Brazil.

May 2020. Impactos de las pandemias de Influenza y COVID-19 en América Latina. Universidad de la República. Programa de Población, Uruguay (Digital talk).

February 2020. *Keynote Speaker*. Age-Period-Cohort Analysis: Limitations and Possibilities. 11th Demographic Conference of Young Demographers. Faculty of Science, Charles University, Czech Republic.

## Guest Editor

Canadian Studies in Population, [Special Issue on Population Health and COVID-19](#) (2020)

## Conference Presentations

Full list is available on request. I have given oral and poster presentations at large international, European, and Northern American demography conferences, including

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the International Population Conference (**IPC**) of the International Union for the Scientific Study of Population (**IUSSP**), the Population Association of America Annual Meeting (**PAA**), the Congreso Internacional de la Asociación Latinoamericana de Población (**ALAP**), Réseau espérance de vie en santé (**REVES**), The Colloque de l'Association des démographes du Québec (**ADQ**), the Federation of Canadian Demographers Conference (**FCD**), and the Conference of the European Society of Historical Demography (**ESHD**).

## Grants and Fellowships

Postdoctoral Grant, Fonds de Recherche de Québec – Société et Culture (FRQSC) (2020-2022). \* Amount: 110,000 CAD.

\* First place. Merged with SSHRC postdoctoral Fellowship.

Postdoctoral Grant, Social Sciences and Humanities Research Council (SSHRC) of Canada (2020-2022). Amount: 90,000 CAD.

Doctoral Grant Joseph-Armand Bombardier, Social Sciences and Humanities Research Council (SSHRC) of Canada (2015-2018). Amount: 105,000 CAD.

Doctoral Fellowship, Max Planck for Demographic Research, Laboratories Lifespan Inequalities and Population Health (2018-2019). Amount: 36,000 EUR.

Entrance Scholarship, Quebec inter-University Centre for Social Statistics (QICSS), (2017). Amount: 2,000 CAD.

Scholarships to attend International Advanced Studies in Demography at MPIDR (2016-2017). Amount: 1,800 EUR.

Excellence admission scholarship, Faculté des études supérieures, Université de Montréal, (2014). Amount: 4,000 CAD.

Scholarship for transfer from Masters to Ph.D. (2014-2015). Amount: 14,000 CAD.

Competitive travel grants for students, Population Change and Life course Strategic Knowledge Cluster (2014). Amount: 2,000 CAD.

Excellence Scholarship for full Master studies - Universidad Distrital de Bogotá (2009-2011). Amount: 15,000 USD.

## Awards and Honors

Excellence award for best doctoral student – Department of demography, Université de Montréal (2020).

Dean's list of honor - Université de Montréal (2020).

Doctoral thesis [selected](#) as the best within the Arts, human and social sciences category to represent the Université de Montréal for the Canada's Distinguished Dissertation Awards ACES/UMI (2020).

Doctoral dissertation with the mention of “exceptional” – the highest distinction – Department of Demography, Université de Montréal (2019).

Top ten graduating Industrial Engineers in Colombia among 4,420 students (top 0.2% of Colombian graduates) - Distinction of the National Government of Colombia (2007).

Best graduating student from Industrial Engineering from the cohort - Universidad Distrital de Bogotá (2007).

Honours thesis in B.Eng. Industrial Engineering with the mention of “meritorious” – Distinction of the Universidad Distrital de Bogotá (2007).

Thesis in B.A. Sociology postulated by the jury upon the best memories of the Faculty of Humanities and Social Sciences - Universidad Nacional de Colombia - (2007-2008).

## Research Experience

### Ph.D. Research Fellow (2019)

Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany.  
Research Group: Population Health.

Research Group Leader: Mikko Myrskylä, Ph.D

### Ph.D. Research Fellow (2018 – 2019)

Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany  
Project: Lifespan Inequalities: Why the age-at-death distribution varies between countries and socioeconomic groups - LIFEINEQ.

Research Group Leader: Alyson van Raalte, Ph.D.

### Research Assistant (2016 – 2018)

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Project: The lasting effects of influenza: Defining the causes and consequences of early life exposures on age-specific mortality later in life, 1890-2015.

Canadian Institutes for Health Research.

Research Group Leader: Alain Gagnon, Ph.D.

### Research Assistant (2013 – 2016)

Project: Mortality risks in later life from exposure to pandemic influenza in early life: the 1890 and 1918 influenza pandemics in Canada.

Canadian Institutes for Health Research.

Research Group Leader: Alain Gagnon, Ph.D.

### Teaching Experience

#### Lecturer

International Max Planck Research School for Population, Health and Data Science (PHDS)

- Lecturer in *Mortality Trends* – November 2020

- Lecturer in *Mortality Trends* – November 2019

Departamento Administrativo Nacional de Estadística – DANE, Equipo de Proyecciones de Población y Análisis Demográfico

- Workshop on *Methods for Mortality Estimation* – April 2016

#### Substitute Lecturer

Université de Montréal - Department of Demography, Montreal, Canada

- Several sessions of the course *Statistical Methods for Demography* (DMO6371) – Fall 2017

#### Teaching Assistant

Université de Montréal - Department of Demography, Canada

- *Methods in Historical Demography* (DMO6330) – Winter 2017

Professor: Lisa Dillon, Ph.D.

- *Statistical Methods for Demography* (DMO6371) – Fall 2015

Professor: Thomas Legrand, Ph.D.

- *Economy and Population* (DMO3450) – Fall 2015

Professor: Thomas Legrand, Ph.D.

- *Statistical Methods for Demography* (DMO6371) – Fall 2014

Instructor: James Lachaud, Ph.D.

- *Survival Analysis* (DMO6405) – Winter 2014

Professor: Alain Gagnon, Ph.D.

### Other Relevant Training

*Life Table and Decomposition Analysis for Population Health Research (using R)*. Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany. June 2018.

*Smoothing Demographic Data: Flexible Models in Population Studies*. Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany. June 2017.

*Visualizing Data*. Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany. June 2017.

*Statistical Analysis in the Lexis Diagram: Age-Period-Cohort Models*. Max Planck Institute for Demographic Research (MPIDR), Rostock, Germany. May 2016.

*Analyse des micro-données des recensements historiques canadiens*. Centre interuniversitaire québécois de statistiques sociales (CIQSS), Montreal, Canada. May 2015.

*Research Course in historical demography*. Center for economic demography, Lund University, Lund, Sweden. August 2014.

### Press Coverage

**Liberation:** "[Le Covid tue-t-il «essentiellement des gens qui seraient morts dans l'année» ?](#)" 2020.

**The Guardian** "[More than 250 epidemiologists and public health experts have called for a drastic increase in Covid-19 testing in Latin America and the Caribbean to tackle the spread of the coronavirus.](#)" 2020.

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**Nature Medicine:** "[Low- and middle-income countries face up to COVID-19](#)" May 2020.

**Les Echos.** "[L'impossible bilan comparatif des morts du Covid-19.](#)" April 2020.

**Alternatives Économiques :** "[ENTRETIEN « En Amérique latine, l'ampleur de l'épidémie est largement sous-estimée](#)" April 2020.

**El País.** "[¿Y si el coronavirus hubiese llegado a todos los países por igual?](#)", June 2020.

**El Espectador:** "[Expertos advierten la necesidad de ampliar la cobertura de pruebas COVID-19 en América Latina.](#)" April 2020. <https://bit.ly/321OtGx>

**Nexo.** "[A importância de testar a população para enfrentar a covid-19.](#)" April 2020.

**The New York Times.** "[Venezuela's Go-To Test for Fighting Virus Raising Questions](#)" April 2020.

**Associated Press.** "[In Ecuador, Families Wait With Their Dead as Bodies Pile Up.](#)" March 2020.

**UdeM Nouvelles.** "[What was your first flu?](#)" January 31, 2020.

### Scientific Evaluation

BRAIN-be 2.0 research programme, Belgian Science Policy Office (2020).

### Journals Reviewed for

Demography, International Journal of Epidemiology, American Journal of Epidemiology, European Journal of Population, Health Affairs, Epidemiology and Infection, BMJ Open, PLOS One, Canadian Studies in Population, PeerJ.

### Languages

English (Fluent); French (Fluent); Spanish (Native)

### Software Skills

R, STATA, Excel, and Visual Basic

### Other Experience

Demographic consultant team member for mortality estimation methodology proposed by the Administrative National Department of Statistics of Colombia (DANE). (2016). Under the direction of Robert Bourbeau, Ph.D. and Simona Bignami, Ph.D. Management Process Reporting and Data Bases Coordinator (2010-2011). National University of Colombia, Colombia  
Project Coordinator on empowerment of the vulnerable population for social and economic integration (2008-2010). City Hall of Bogota, Institute for Social Economy-IPES, Colombia

### Academic References

Available upon request