

José Manuel Aburto [updated March 1 2021]

CONTACT INFORMATION University of Oxford
Leverhulme Centre for Demographic Science
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FORMAL EDUCATION **PhD in Demography and Health Sciences**
University of Southern Denmark and Max Planck Institute for Demographic Research. 12/02/2020
European Doctoral School of Demography, Sapienza University of Rome & Max Planck Institute for Demographic Research. 30/06/2016.
M.A. Demography, El Colegio de México, Mexico City. 30/06/2014.
B.Sc. Actuarial sciences and mathematics, Universidad Autónoma de Guadalajara, Guadalajara, Mexico. Summa cum Laude, 30/06/2009.

POSITIONS, PROFESSIONAL EXPERIENCE **Newton International Fellow.** Department of Sociology, Leverhulme Centre for Demographic Science and Nuffield College, University of Oxford. 31/03/2020-Present.
Assistant Professor. Interdisciplinary Centre on Population Dynamics, University of Southern Denmark. 01/06/2020-Present.
Guest researcher. Max Planck Institute for Demographic Research. 2015-2020.
Consultant (regular basis). World Bank. Projects: Health Profile for Saudi Arabia and Age- and Cause-Decomposition of the Difference in Life Expectancy in Latin American and Caribbean Countries. 2016-2020.
Research Assistant. Max-Planck Odense Center on Biodemography of Aging. University of Southern Denmark. 2016-2017.
Assistant Director. Demographic Analysis/Census Division. National Institute of Statistics and Geography (INEGI), Mexico. 2010-2012.
Risk Account Analyst. AON Risk Services (Mexico). 2006-2009.

RESEARCH SUPPORT	Marie Skłodowska-Curie Individual Fellowship (PI). From EU Commission Horizon 2020. 224,933.76€	2020
	Newton International Fellowship (PI). From the Royal Society and British Academy. 100,500£	2019
	Life length and life disparity research network (PI). Danish Ministry of Education. 38,350€	2019
	Funding for research stay at Universidad Autónoma de Barcelona (PI). Faculty of Health Sciences. 2,403€	2019
	Funding for research stay at INED (PI). French National Institute for Demographic Studies. 2,040€	2018
	World Bank (co-PI). Commissioned. Title: Health Status of the Population of Saudi Arabia. 19,515\$	2018
	World Bank (co-PI). Commissioned. Title: Longevity in Latin America and the Caribbean (LAC). 12,762\$	2017
	Health sciences fellowship (PI). University of Southern Denmark. (369,109.24DKK) 49,215€.	2016
	National Council of Science and Technology (CONACYT). Funding for a research stay at University of Wisconsin-Madison.	2014
	National Council of Science and Technology (CONACYT) Student- ship to pursue MA.	2012
AWARDS & FELLOWSHIPS	National Program of Fellowships (PRONABE). Studentship to pursue BSc degree.	2005-2009
	2021 European Demographer Award. Promising and upcoming researcher by Population Europe.	2021
	Marie Skłodowska-Curie Individual Fellowship. Major research fellowships created by the European Union.	2020
	Newton International Fellowship. Established by the Royal Society and British Academy.	2019
	Best poster award WIC Conference on Demographic Aspects of	

Human Wellbeing for the paper “Beyond differences in means: rising mortality stratification among income groups in Finland, 1996-2014” led by Jiaxin Shi and mentored by me during EDSD. 2019

Best poster award Population Association of America
Homicides in Mexico increased inequality of lifespans. 2018

Editor’s choice for the paper: “Mexico’s Epidemic of Violence and its Public Health Significance on Average Length of Life” In *Journal of Epidemiology and Community Health*. 2017

PUBLICATIONS

Peer Reviewed published articles

28. Riffe, T., Acosta. E., **Aburto, J.M.**, et al. “COVerAGE-DB: A database of age-structured COVID-19 cases and deaths”. (forthcoming) *International Journal of Epidemiology*.

Preprint:

<https://www.medrxiv.org/content/10.1101/2020.09.18.20197228v1>

27. Gleit, D.A., Barajas Paz, A., **Aburto, J.M.**, Barbieri, M.. “Mexican mortality 1990-2016: Comparison of unadjusted and adjusted estimates ”. (Forthcoming) *Demographic Research*.

26. **Aburto, J.M.**, Calazans, J., Queiroz, B., Luhar, S., Canudas-Romo, V. “The uneven state-distribution of homicides in Brazil and their effect on life expectancy, 2000-15”. (2021) *BMJ Open*.

25. **Aburto, J.M.**, Kashyap, R., Scholey, J., Angus, C., Ermisch, J., Mills, M., Dowd, J.B., “Estimating the burden of COVID-19 on mortality, life expectancy and lifespan inequality in England and Wales: A population-level study”. (2021). *Journal of Epidemiology and Community Health*. <http://dx.doi.org/10.1136/jech-2020-215505>.

24. Boertien, D., **Aburto, J.M.**, Permanyer, I., López Gay, A., Esteve, A. “El rol de los hogares y su estructura en la potencial vulnerabilidad al Covid-19 en México” [The role of household structure on the potential vulnerability to Covid-19 in Mexico]. (2021) *Coyuntura Demográfica*.

23. **Aburto, J.M.**, Kristensen (Main author), F., Sharp, P. “Black-White Disparities During an Epidemic: Life Expectancy and Lifespan Disparity in the US, 1980-2000”. (2021) *Economics and Human Biology*. <https://doi.org/10.1016/j.ehb.2020.100937>

22. Pascariu, M., Basellini, U., **Aburto, J. M.**, Canudas-Romo, V. (2020). “The Linear Link: Deriving Age-Specific Death Rates from Life Expectancy”. *Risks*. <https://doi.org/10.3390/risks8040109>
21. Kashnitsky, I., **Aburto, J.M.**. (2020). “COVID-19 in unequally ageing European regions”. *World Development*. <https://doi.org/10.1016/j.worlddev.2020.105170>
20. Nepomuceno, M.R., Acosta, E., Alburez-Gutierrez, D., **Aburto, J.M.**, Gagnon, A., Turra, C.M., (2020) “Besides population age-structure, health and other demographic factors can contribute to understanding the COVID-19 burden”. *Proceedings of the National Academy of Sciences*, 117(25). <https://doi.org/10.1073/pnas.2008760117>
19. Bergeron-Boucher, MP., **Aburto, J.M.**., van Raalte, A. (2020) “Diversification in causes of death in low-mortality countries: Emerging patterns and implications”. *BMJ Global Health*. <http://dx.doi.org/10.1136/bmjgh-2020-002414>
18. **Aburto, J.M.**, Villavicencio, F., Basellini, U., Kjærgaard, S., Vaupel, J.W. (2020) “Dynamics of life expectancy and lifespan equality”. *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.1915884117>
17. Alvarez-Martínez, J., **Aburto, J.M.**, Canudas-Romo, V. (2020). “Latin American convergence and divergence towards the mortality profiles of developed countries”. *Population Studies*, 74(1). <https://doi.org/10.1080/00324728.2019.1614651>
16. Riffe, T., **Aburto, J.M.**. (2020) “Lexis fields”. *Demographic Research*. <https://dx.doi.org/10.4054/DemRes.2020.42.24>
15. García, J., **Aburto, J.M.** (2019, Co-first author). “The impact of violence on Venezuelan life expectancy and lifespan inequality” *International Journal of Epidemiology*, 48(5), 1593-1601. doi:10.1093/ije/dyz072
14. **Aburto, J.M.**, Beltrán-Sánchez H. (2019) “The upsurge of homicides and its impact on life expectancy and lifespan inequality in Mexico, 2005-2015”. *American Journal of Public Health*, 109(3), 483-489. doi:10.2105/AJPH.
13. Canudas-Romo, V., **Aburto, J.M.** (2019, Co-first author) “Youth lost to homicides: The disparities in survival in Latin America and the Caribbean”. *BMJ Global Health*, 4(2), e001275.

doi:10.1136/bmjgh-2018-001275

12. **Aburto, J.M.**, Alvarez-Martínez, J.A., Villavicencio, F., Vaupel, J.W. (2019) “The threshold age of the life table entropy”. *Demographic Research*. doi:10.4054/DemRes.2019.41.4
11. Kashnitsky, I., **Aburto, J.M.**. (2019) “Geofaceting – align small-multiples for regions in a spatially meaningful way”. *Demographic Research*. doi:10.4054/DemRes.2019.41.17
10. **Aburto, J.M.**, van Raalte, A. (2018) “Lifespan dispersion in times of life expectancy fluctuation: the case of Central and Eastern Europe”. *Demography*, 55(6), 2071-2096. doi:10.1007/s13524-018-0729-9
9. **Aburto, J.M.**, Wensink, M., van Raalte, A., Lindahl-Jacobsen, R. (2018). “Potential gains in life expectancy by reducing inequality of lifespans in Denmark: An international comparison and cause-of-death analysis”. *BMC Public Health*, 18(1), 831. doi:0.1186/s12889-018-5730-0
8. **Aburto, J.M.**, Riffe, T., Canudas-Romo, V. (2018) “Trends in avoidable mortality over the life course in Mexico, 1990-2015: A cross-sectional demographic analysis”. *BMJ Open* 2018;8:e022350. doi: 10.1136/bmjopen-2018-022350
7. Canudas-Romo, V., **Aburto, J.M.**, García-Guerrero, V., Beltrán-Sánchez, H. (2017), “Mexico’s Epidemic of Violence and its Public Health Significance on Average Length of Life”. *Journal of Epidemiology and Community Health*, 71(2), 188-193. doi:10.1136/jech-2015-207015
6. Canudas-Romo, V., **Aburto, J.M.** (Co-first author) (2017). “Biodemography of Aging Determinants of Healthy Life Span and Longevity”. Book Review. *European Journal of Population*. <https://goo.gl/KZbPSu>.
5. **Aburto, J.M.**, Beltrán-Sánchez, H., García-Guerrero, V., Canudas-Romo, V. (2016), “Homicides In Mexico Reversed Life Expectancy Gains For Men And Slowed Them For Women, 2000-10”. *Health Affairs*, 35(1),88-95.
4. **Aburto, J.M.**, García Guerrero, V.M. (2015) “El modelo aditivo doble multiplicativo. Una aplicación a la mortalidad mexicana”. *Papeles de población*, 21(84), 9-44.

Peer Reviewed book chapters

3. Lenart, A., **Aburto, J.M.**, Stockmarr, A., Vaupel, J.W. (2021). “The human longevity record may hold for decades”. In *Exceptional Lifespans*. Edited by H. Maier, B. Jeune, and J. W. Vaupel. doi: 10.1007/978-3-030-49970-9_5
2. Villavicencio, F., **Aburto, J.M.** (2021). “Does the force of mortality increase after age 110?”. In *Exceptional Lifespans*. Edited by H. Maier, B. Jeune, and J. W. Vaupel. doi: 10.1007/978-3-030-49970-9_4
1. Bergeron-Boucher, MP., Kjærgaard, S., Pascariu, M., **Aburto, J.M.**, Alvarez, J., Basellini, U., Rizzi, S., Vaupel, J.W. (2020). Alternative forecasts of Danish life expectancy. In *Developments in Demographic Forecasting* (Springer). Edited by Stefano Mazzucco and Nico Keilman. doi: 10.1007/978-3-030-42472-5_7

Other published outputs (outreach)

8. Acosta, E., **Aburto, J.M.**, Alburez, D., Guimaraes, R., Nepomuceno, M. Latin American and Caribbean governments must increase the COVID-19 test coverage drastically to mitigate the humanitarian impact of the pandemic. doi: 10.17605/OSF.IO/WG3B2. <https://osf.io/wg3b2/>
7. Alburez, D., **Aburto, J.M.**, Nepomuceno, M. Coronavirus: América Latina y el Caribe deben aumentar drásticamente las pruebas de COVID-19. The Conversation Spain. <http://tiny.cc/n9momz>
6. **Aburto, J.M.**, Floridi, G., Fegitz, E. Implications of the (changing) relationship between life expectancy and lifespan inequality. N-IUSSP. <https://tinyurl.com/y8us4rbk>
5. Alburez, D., **Aburto, J.M.**, Nepomuceno, M. Coronavirus: a warning to Latin America and the Caribbean to dramatically increase COVID-19 testing. The Conversation UK. <http://tiny.cc/n9momz>
4. Kashnitsky, I., **Aburto, J.M.** The pandemic threatens aged rural regions most. Population Association of America, Applied Demography newsletter. <https://tinyurl.com/wjgjdq>.
3. **Aburto, J.M.**, Canudas-Romo, V. Homicides in Latin America: A Global Health challenge. N-IUSSP. <https://bit.ly/2Izgz27>.
2. **Aburto, J.M.**, García, J. Venezuela’s soaring murder rate has plunged

the nation into a public health crisis. The Conversation UK.
<https://bit.ly/2WkwH0s>.

1. **Aburto, J.M.**, Enciso, F. Mexican war on drugs has, in places, decreased life expectancy. The Conversation UK. <https://bit.ly/2GwZjvS>.

Submitted publications with peer review process

Colchero, F., **Aburto, J.M.**, Altmann, J., ... , Wrangham, R., Alberts, S. “The evolutionary landscape of primate longevity”. Minor revisions in Nature Communications.

Nepomuceno, M., Cui, Q., van Raalte, A., **Aburto, J.M.**, Canudas-Romo, V. “The cross-sectional average inequality in lifespan (CAL[†]): A lifespan variation measure that reflects the mortality histories of cohorts”. RR in Demography.

Kashnitsky, I., **Aburto, J.M.**. “Regional variation in population ageing across Europe: A ternary approach to measuring convergence in population age structures”. Under review in Demographic Research.

Aburto, J.M., Scholey, J., Zhang, L., Kashnitsky, I., Rahal, C., Missov, T., Mills, M., Dowd, J.B., Kashyap, R., “Recent Gains in Life Expectancy Reversed by the COVID-19 Pandemic”. Submitted to PNAS.

Shi, J., **Aburto, J.M.**, Martikainen, P., Tarkiainen, L., van Raalte, A. “Beyond Differences in Means: Rising Mortality Stratification among Income Groups in Finland, 1996-2014”. Submitted to Population and Development Review. Preprint: <https://doi.org/10.31235/osf.io/wb9pm>

SOFTWARE DEVELOPMENT AND WEB APPLICATIONS

Aburto, J.M., Tim Riffe (PI), Ilya Kashnitsky, Monica Alexander, and Marius Pascariu. (2018-Ongoing) **R package DemoTools**. Project developed for the United Nations Population Division.

Canudas-Romo, V., **Aburto, J.M.** (2018- Ongoing). Saudi Arabia Health Profile Interactive Application. Available at:
<https://population-health.shinyapps.io/saudi-arabia-health-profile/>

Canudas-Romo, V., **Aburto, J.M.** (2017). Age- and Cause-Decomposition of the Difference in Life-Expectancy in Latin American and Caribbean Countries. Available at: https://wb-lac.shinyapps.io/lac_diversity/

TEACHING EXPERIENCE	2020 - Present. Lecturer. Demographic Analysis. University of Oxford.
	2019 - Present. Lecturer. Basic Mathematics for Demographers. Max Planck Institute for Demographic Research. European Doctoral School of Demography.
	2018 - Present. Lecturer. Mathematical Demography: Decomposition techniques for health research. University of Southern Denmark, European Doctoral School of Demography.
	2018. Lecturer. Demography & Economics. University of Southern Denmark.
	2018. Lecturer. An introduction to Shiny apps for health and demographic research. Workshop at Australian National University.
	2017-2018. Teaching Assistant. Biostatistics I. University of Southern Denmark.
MENTORING EXPERIENCE	Jesús Daniel Zazueta. University of Southern Denmark. <i>European Doctoral School of Demography 2019-20.</i>
	Serena Vigezzi. INED. <i>European Doctoral School of Demography 2019-20.</i>
	Jiaxin Shi. Max Planck Institute for Demographic Research. <i>European Doctoral School of Demography 2018-19.</i> Project: Beyond differences in means: rising mortality stratification among income groups in Finland, 1996-2017. Winner of the poster session at the conference <i>Demographic Aspects of Human Wellbeing</i> .
	Orsola Torrissi. London School of Economics. <i>European Doctoral School of Demography 2018-19.</i> Project: Armed conflict and the timing of childbearing in Azerbaijan. Published in <i>Population Development Review</i> .
	Victoria San Juan. Universidad Autónoma de Barcelona. <i>European Doctoral School of Demography 2017-18.</i> Project: Amores imposibles: la brecha entre universitarios y el resto de grupos educativos en los mercados matrimoniales de América Latina, 1970-2010. Published in <i>Notas de Población</i> .
EDITORIAL BOARDS	01/07/2020- present <i>Demography</i>
WORKSHOPS & CONFERENCE ORGANIZATION	2021 Organizer of the session “Lifespan inequalities around the globe’ at the Population Association of America conference in St Louis, USA.
	2021 Organizer of the webinar “New perspectives on lifespan inequality’ University of Oxford, UK.

2020 Session Organizer. Violence in Latin America. Asociación Latinamericana de Población virtual meeting.

2020 Workshop & Seminar on mortality. SDU and University of Campinas and University of Minas Gerais in Brazil. (Postponed due to Covid-19)

2020 Workshop & Seminar on Inequalities in health, longevity and aging. SDU and Tel Aviv University in Israel.(Postponed due to Covid-19)

2020 Organizer of the sessions “Life expectancy and lifespan inequality” and “Life expectancy trends in the USA” at the Population Association of America conference in Washington DC, USA. (Cancelled due to Covid-19)

- INVITED TALKS
14. *Forthcoming. Keynote at the Young Demographers Conference.* Charles University, Prague. 2021
 13. *Forthcoming. Inaugural Lecture – Program of Demography.* University of Campinas, Brazil. 2021
 12. **Covid-19 and Violence: The challenges ahead.** Plenary session for the Latin American Population Association (ALAP) conference. 2020
 11. **Leveraging formal demography to understand lifespan inequality trends.** Brownbag Demography Seminar. Department of Demography, University of California, Berkeley. 2020
 10. **The double burden of violence on longevity: shorter and more variable lifespans.** Department of Zoology, University of Oxford. 2020
 9. **Global contribution of violence to lifetime uncertainty.** Department of Sociology, University of Oxford. 2020
 8. **Global contribution of violence to lifetime uncertainty.** Universidad Autónoma de Barcelona 2019
 7. **Latin America’s epidemic of violence.** INED 2018
 6. **Latin America’s epidemic of violence.** Australian National University 2018
 5. **The impact of violence on lifespan inequality in Mexico.** Tel Aviv University. 2018
 4. **La epidemia de violencia en México y su impacto en la salud de la**

	<p>población. CIDE Region Centro, México. 2018</p> <p>3. Life expectancy and lifespan equality: a long run relationship. Max Planck Institute for Demographic Research, MaxNet aging. 2017</p> <p>2. Pace and Shape of real vs lifetable's age at death distributions. Max Planck Institute for Demographic Research, MaxNet aging. 2017</p> <p>1. Violence in Mexico in the first decade of the XXI century. Sapienza University of Rome, with Vladimir Canudas-Romo. 2015</p>
REVIEWING ACTIVITIES	<p>Grants: ERC Starting Grant panel (remote reviewer), Barcelona's La Caixa Foundation.</p> <p>Journals: BMJ, The Lancet Public Health, International Journal of Epidemiology, American Journal of Public Health, Health Affairs, Demography, Population Studies, BMJ Global Health, BMJ Open, BMC Public Health, Journal of Epidemiology and Community Health, Journal of Gerontology: Biological Sciences, Social Science & Medicine, PlosOne, Population Health Metrics, Demographic Research, European Journal of Population, Scandinavian Actuarial Journal, Epidemiology, Journal of Research in Crime and Delinquency, F1000Research, International Journal of Health Policy and Management, Injury Prevention, Theoretical Population Biology, Mathematical Social Sciences, Genus, Estudios Demográficos y Urbanos, Papeles de Población.</p>
RESEARCH STAYS	<p>01/10/2019-30/11/2019. Visiting Scholar. Demographic Center Studies (CED), Universidad Autónoma de Barcelona.</p> <p>01/12/2018-04/01/2019. Visiting Scholar. Institut national d'études démographiques.</p> <p>01/10/2018-05/11/2018. Visiting Scholar. Australian National University.</p> <p>01/03/2014-01/05/2014. Visiting student. University of Wisconsin-Madison.</p> <p>01/08/2009-15/12/2009. Visiting student. Mathematics Research Center (CIMAT).</p>
SELECTED PRESS COVERAGE	<p>Estimating the burden of COVID-19 on mortality, life expectancy and lifespan inequality in England and Wales: A population-level study.</p> <p><i>The Guardian</i> https://bit.ly/2LWYf8u</p> <p><i>Espresso</i> https://tinyurl.com/y5amgt6o</p> <p><i>Daily Mail</i> https://tinyurl.com/yxg7nj2d; http://dailym.ai/35RRI6a</p> <p><i>The Sun</i> https://tinyurl.com/y4owq3k3</p>

Besides population age structure, health and other demographic factors can contribute to understanding the COVID-19 burden.

El País <https://tinyurl.com/y4r45e15>

Latin American and Caribbean governments must increase the COVID-19 test coverage drastically to mitigate the humanitarian impact of the pandemic . *New York Times* <https://tinyurl.com/y7l3hymm>.

Reported also by: Fox News (USA), CGTN (China), Plaza Pública (Guatemala) Daily Mail (UK), Yahoo news (USA), El Espectador (Colombia), RND (Germany), Nexo (Brazil), La Jornada (México).

Dynamics of life expectancy and life span equality, PNAS

videnskab.dk: Flere mennesker dør i dag tættere på gennemsnitslevealdren.

<https://bit.ly/2Wg5hIqo>

Youth lost to homicides: The disparities in survival in Latin America and the Caribbean, BMJ Global Health

Medical Express: Research shows the impact of homicides in Latin America. <https://bit.ly/2HSxldB>

News.com.au: Murder rates so high in Latin America that life expectancy is dropping. <https://bit.ly/30AJ6eS>

Fox News: Latin America accounts for one third of world's homicides, life expectancy dropping in some countries: study. <https://fxn.ws/2Wm3iUq>

CNN Spanish: El alto número de homicidios en México y Venezuela reduce la esperanza de vida de sus ciudadanos, según estudio <https://cnm.it/2ESgQvU>

The impact of violence on Venezuelan life expectancy and lifespan inequality, International Journal of Epidemiology

CNN Spanish: El alto número de homicidios en México y Venezuela reduce la esperanza de vida de sus ciudadanos, según estudio <https://cnm.it/2ESgQvU>

Upsurge of Homicides and Its Impact on Life Expectancy and Life Span Inequality in Mexico, 2005—2015, American Journal of Public Health

El País: 'Eramos niños jugando a ser sicarios': los hijos de la violencia en México <https://bit.ly/2pkiPEu>

Medical Xpress: Increasing murder rate is erasing gains in life expectancy among Mexican men

<https://goo.gl/pRPZLC>

Newsweek: Mexico's murder rate is so high it has altered the life expectancy of men <https://goo.gl/hzS69f>

Homicides In Mexico Reversed Life Expectancy Gains For Men And Slowed Them For Women, 2000-10. 2016,(selected) Health Affairs

New York Times: Reverberations From a Rise in Mexico's Murder Rate

<https://goo.gl/6nrfQR>

(Spanish) <https://goo.gl/Q9A97F>

Der Spiegel: Drogenkrieg senkt Lebenserwartung mexikanischer Männer
<https://goo.gl/SriitK>
The Guardian: Mexico's drug war reverses trend of rising male life expectancy, study finds <https://goo.gl/uFE6M7>
El País: Violence shortening average life expectancy in Mexico
<https://goo.gl/Q6B4vZ>
Vox: The war on drugs is literally killing Mexico <https://goo.gl/UNRBtf>
Independent <https://goo.gl/3LQn9h>
Sin Embargo <https://goo.gl/hnp9Qj>
Aristegui Noticias <https://goo.gl/w78KHD>
El Financiero <https://goo.gl/9bWN2n>

ACADEMIC
PRESENTA-
TIONS

Last 5 of 16

Mathematical Demography round table. Coloquio estudiantil, Colmex, Mexico.	2020
Dynamics of life expectancy and lifespan equality. Nordic Demographic Symposium, Iceland.	2019
Dynamics of life expectancy and lifespan equality. PAA. Austin, USA.	2019
The impact of violence on lifespan inequality in Mexico. Oral Presentation. ALAP. Puebla, Mexico.	2018
Dynamics of life expectancy and lifespan equality. Oral Presentation. ALAP. Puebla, Mexico.	2018