

## José Manuel Aburto [updated June 2020]

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FORMAL            **PhD in Public Health and Demography**  
EDUCATION      University of Southern Denmark and Max Planck Institute for Demographic  
                      Research. Topic: “On the relationship between life expectancy and lifespan  
                      equality”. Main supervisor: Professor James W. Vaupel.  
                      01/12/2016-12/02/2020

**European Doctoral School of Demography**, Sapienza University of  
Rome & Max Planck Institute for Demographic Research.  
15/09/2015-30/06/2016.

**M.A. Demography**, El Colegio de México, Mexico City.  
15/08/2012-30/06/2014.

**B.Sc. Actuarial sciences and mathematics**, Universidad Autónoma  
de Guadalajara, Guadalajara, Mexico.  
01/08/2005-30/06/2009.

POSITIONS AND 31/03/2020-Present. **Newton International Fellow**. Department of  
PROFESSIONAL Sociology and Leverhulme Centre for Demographic Science, University of  
EXPERIENCE    Oxford.

01/06/2020-Present. **Assistant Professor** (with leave). Interdisciplinary  
Centre on Population Dynamics, University of Southern Denmark.

01/06/2020-Present. **Non-stipendiary Fellow**. Nuffield College.

01/09/2015-Present. **Guest researcher**. Max Planck Institute for Demographic  
Research.

01/07/2017-Present. **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.

13/02/2020-13/05/2020. **Post-doctoral research associate**. Interdisciplinary  
Centre on Population Dynamics, University of Southern Denmark.

01/07/2017-01/10/2018. **Consultant**. 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.

01/08/2016-30/11/2016. **Research Assistant.** Max-Planck Odense Center on Biodemography of Aging. University of Southern Denmark.

01/02/2010-01/08/2012. **Assistant Director.** Demographic Analysis-Census Division. National Institute of Statistics and Geography (INEGI), Mexico.

5/06/2011-15/06/2012. **Research Assistant.** “Derecho a la Identidad: la cobertura del registro de nacimiento en Mexico en 1999 y 2009”. INEGI-UNICEF.

15/08/2007-01/06/2009. **Risk Account Analyst.** AON Risk Services (Mexico)

RESEARCH  
SUPPORT

**Marie Skłodowska-Curie Individual Fellowship.** From EU Commission Horizon 2020. 224,933.76 EU 2020

**Newton International Fellowship.** From the Royal Society/British Academy. 100,500£ 2019

**Life length and life disparity research network.** Danish Ministry of Education. Co-PI. 38,350EU 2019

**Funding for research stay at Universidad Autónoma de Barcelona.** Faculty of Health Sciences. 2,403EU September-October 2019

**Funding for research stay at INED.** French National Institute for Demographic Studies. 2,040EU December 2018

**Title: Health Status of the Population of Saudi Arabia.** Description: To compare mortality trends across time in SA as well as construct a burden of disease study. Agency: World Bank. Role: Co-PI. 19,515USD Term: 2018

**Title: Longevity in Latin America and the Caribbean (LAC).** Description: To compare mortality trends across time and the LAC region versus EU. Agency: World Bank. Role: Co-PI. 12,762USD Term: 2017

**Health Sciences Faculty fellowship, University of Southern Denmark.** (369,109.24DKK) 49,215EU. 2016

**National Council of Science and Technology (CONACYT) funding**

for a research stay at University of Wisconsin-Madison. Spring 2014

National Council of Science and Technology (CONACYT) Studentship to pursue Master degree. 2012-2014

National Program of Fellowships (PRONABE) Studentship to pursue BSc degree. 2005-2009

#### AWARDS & FELLOWSHIPS

Marie Skłodowska-Curie Individual Fellowship. 2020

Newton International Fellowship. 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 EDSO. 2019

Best poster award Population Association of America 2018  
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*.  
<http://jech.bmj.com/content/71/2> 2017

Actuarial Sciences cohort 2005-2009 BD *Summa Cum Laude*,  
Universidad Autonoma de Guadalajara 2009

#### PUBLICATIONS

##### Peer Reviewed published articles

20. Nepomuceno, M.R., Acosta, E., Alburez-Gutierrez, D., **Aburto, J.M.**, Gagnon, A., Turra, C.M., (Forthcoming) “Besides population age-structure, health and other demographic factors can contribute to understanding the COVID-19 burden (letter)”. *Proceedings of the National Academy of Sciences*.

19. Bergeron-Boucher, M.P., **Aburto, J.M.**, van Raalte, A. (Forthcoming) “Diversification in causes of death in low-mortality countries: Emerging patterns and implications”. *BMJ Global Health*.

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 lifetable 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. (Forthcoming). “The human longevity record may hold for decades”. In *Exceptional Lifespans*. Edited by H. Maier, B. Jeune, and J. W. Vaupel. Preprint: <https://arxiv.org/abs/1812.01952>

2. Bergeron-Boucher, MP., Kjærgaard, S., Pascariu, M., **Aburto, J.M.**, Alvarez, J., Basellini, U., Rizzi, S., Vaupel, J.W. (Forthcoming) Alternative forecasts of Danish life expectancy. Edited by Stefano Mazzucco.

1. Villavicencio, F., **Aburto, J.M.** (Forthcoming). “Does the force of mortality increase after age 110?”. In *Exceptional Lifespans*. Edited by H. Maier, B. Jeune, and J. W. Vaupel. Preprint: <https://arxiv.org/abs/1809.03732>

## 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/wjgjdyq>.

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

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] Under review in Salud Pública de México.

**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" Under review in JECH.

Nepomuceno, M., Cui, Q., van Raalte, A., **Aburto, J.M.**, Canudas-Romo, V. "The cross-sectional average inequality in lifespan (CAL<sup>†</sup>): A lifespan variation measure that reflects the mortality histories of cohorts". Under review in Demography.

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”. Under review in Demography.

Glei, D.A., Barajas Paz, A., **Aburto, J.M.**, Barbieri, M.. “Mexican mortality 1990-2016: Comparison of unadjusted and adjusted estimates ”. Under review in Demographic Research.

## Working papers

**Aburto, J.M.**, di Lego, V., Torrissi, O., Riffe, T., van Raalte A., Kashyap, R. “The contribution of violence to life uncertainty on a global scale”.

**Aburto, J.M.**, Kashyap, R. van Raalte, A., Zarulli, V. “Sex differences in life expectancy and lifespan dispersion: long-term patterns and emerging crossovers”.

**Aburto, J.M.**, Basellini, U., Villavicencio, F. “The Gini coefficient of the life table: a re-examination”.

Baudisch, A., Castro, A., **Aburto, J.M.**. “A pace and shape perspective on human fertility”.

Colchero, F., **Aburto, J.M.**, Altmann, J., ... , Wrangham, R., Alberts, S. “The evolutionary landscape of primate longevity”. Intended for Science.

Oeppen, J., Bergeron-Boucher, M.P., **Aburto, J.M.** “Optimisation in Life-Saving Models of Mortality”.

Permanyer. I., Kashnitsky, I., **Aburto, J.M.** “Equality-efficiency tradeoffs in population health”.

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/](https://wb-lac.shinyapps.io/lac_diversity/)

TEACHING EXPERIENCE	02/09/2019 - Present. <b>Lecturer.</b> Basic Mathematics for Demographers. Max Planck Institute for Demographic Research.
	European Doctoral School of Demography.
	13/05/2018 - Present. <b>Lecturer.</b> Mathematical Demography: Decomposition techniques for health research. University of Southern Denmark, European Doctoral School of Demography.
	01/08/2018 - 15/12/2018. <b>Teaching Assistant.</b> Biostatistics I. University of Southern Denmark.
	10/09/2018 - 12/09/2018. <b>Lecturer.</b> An introduction to Shiny apps for health and demographic research. Workshop at Australian National University.
MENTORING EXPERIENCE	01/08/2017 - 15/12/2017. <b>Teaching Assistant.</b> Biostatistics I. University of Southern Denmark.
	01/08/2018 - 15/12/2018 <b>Lecturer.</b> Demography & Economics. University of Southern Denmark.
	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>
WORKSHOPS & CONFERENCE ORGANIZATION	Orsola Torrisi. 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>
	14/09/2020-16/09/2020 Workshop & Seminar on mortality. SDU and University of Campinas and University of Minas Gerais in Brazil. (Postponed due to Covid-19)
	05/05/2020-07/05/2020 Workshop & Seminar on Inequalities in health, longevity and aging. SDU and Tel Aviv University in Israel. (Postponed due to Covid-19)



22/04/2020-05/04/2020 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)

REVIEWING ACTIVITIES	ERC Starting Grant panel (remote reviewer), BMJ, International Journal of Epidemiology, American Journal of Public Health, Health Affairs, Demography, BMJ Global Health, BMC Public Health, Journal of Epidemiology and Community Health, 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, Papeles de Población.
RESEARCH STAYS	01/10/2019-30/11/2019. <b>Visiting Scholar.</b> Demographic Center Studies (CED), Universidad Autónoma de Barcelona.  01/12/2018-04/01/2019. <b>Visiting Scholar.</b> Institut national d'études démographiques.  01/10/2018-05/11/2018. <b>Visiting Scholar.</b> Australian National University.  01/03/2014-01/05/2014. <b>Visiting student.</b> University of Wisconsin-Madison.  01/08/2009-15/12/2009. <b>Visiting student.</b> Mathematics Research Center (CIMAT).
INVITED PRESENTA- TIONS	<b>Global contribution of violence to lifetime uncertainty.</b> Department of Sociology, University of Oxford. 2020  <b>Global contribution of violence to lifetime uncertainty.</b> Universidad Autónoma de Barcelona 2019  <b>Latin America's epidemic of violence.</b> INED 2018  <b>Latin America's epidemic of violence.</b> Australian National University 2018  <b>The impact of violence on lifespan inequality in Mexico.</b> Tel Aviv University. 2018  <b>La epidemia de violencia en México y su impacto en la salud de la población.</b> CIDE Region Centro, México. 2018

**Life expectancy and lifespan equality: a long run relationship.** Max Planck Institute for Demographic Research, MaxNet aging. 2017

**Pace and Shape of real vs lifetable's age at death distributions.** Max Planck Institute for Demographic Research, MaxNet aging. 2017

**Violence in Mexico in the first decade of the XXI century.** Sapienza University of Rome, with Vladimir Canudas-Romo. 2015

PRESS  
COVERAGE

**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 gennemsnitslevealderen.*  
<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://cnn.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://cnn.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**

**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

**Lifespan Inequality in Denmark, Sweden and Norway: How Long until Denmark Reduces the Gap?.** Oral Presentation. EPC. Brussels, Belgium. 2018