#### José Manuel Aburto

Contact University of Southern Denmark

Information J.B. Winsløws Vej 9

DK-5000 Odense C +45 65 50 94 16

jmaburto@health.sdu.dk

RESEARCH INTERESTS Demography, demographic methods, health, mortality, statistical modeling,

lifespan equality, biodemography.

FORMAL EDUCATION

PhD candidate in Demography, Max Planck Center on the Biodemography of Aging, Max Planck Institute for Demographic Research & University of Southern Denmark, 2016-19.

Topic: "On the relationship between life expectancy and lifespan equality" Main supervisor: James W. Vaupel

**European Doctoral School of Demography**, Sapienza University of Rome & Max Planck Institute for Demographic Research, 2015-16.

Mentors: Alyson van Raalte and Tim Riffe

M.Sc. Demography, El Colegio de Mexico, Mexico City, 2012-14. Supervisors: Hiram Beltrán-Sánchez and Victor M. García Guerrero

**B.S., Actuarial sciences**, Universidad Autonoma de Guadalajara, Guadalajara, Mexico, 2005-09.

TEACHING RESEARCH EXPERIENCE **Lecturer**. Mathematical Demography: Decomposition techniques for health research. University of Southern Denmark, European Doctoral School of Demography

Cohort 2017-2018

**Teaching Assistant**. Biostatistics I. University of Southern Denmark Fall term 2017

**Lecturer**. Demography & Economics. University of Southern Denmark Fall term 2017

**Teaching Assistant**. Mathematical Analysis. Universidad Autonoma de Guadalajara.

July 2008 - February 2009

Professional Experience

Professional Consultancy. World Bank; Health Profile for Saudi Arabia

**Consultancy**. World Bank; Age- and Cause-Decomposition of the Difference in Life-Expectancy in Latin American and Caribbean Countries 2017

2018

Research Assistant. Max-Planck Odense Center on Biodemography of Aging; IST - EBB/Epidemiology, Biostatistics and Biodemography. University of Southern Denmark 2016-2017

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

Research Assistant. "Derecho a la Identidad: la cobertura del registro de nacimiento en Mexico en 1999 y 2009". INEGI-UNICEF 2011-2012

Risk Account Analyst. AON Risk Services (Guadalajara) 2007-2009

### Published Articles

**Aburto, J.M.**, Riffe, T., Canudas-Romo, V. "Trends in avoidable mortality over the life course in Mexico, 1990-2015: A cross-sectional demographic analysis" Accepted in BMJ Open

**Aburto, J.M.**, van Raalte, A. "Lifespan dispersion in times of life expectancy fluctuation: the case of Central and Eastern Europe" Accepted in *Demography* 

**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

Canudas-Romo, V., **Aburto**, **J.M.** (2017). "Biodemography of Aging Determinants of Healthy Life Span and Longevity". Book Review. *European Journal of Population*. https://goo.gl/KZbPSu.

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

**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.

**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.

BOOK Chapters 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.

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.

## Working Papers

Pascariu, MD., Basellini, U., **Aburto, J.M.**, Canudas-Romo, V. 'The Linear Link: Deriving Age-Specific Death Rates from Life Expectancy' Revise and Resubmit in Population Studies

**Aburto, J.M.**, Beltrán-Sánchez H. "Homicides in Mexico increased inequality of lifespans and slowed down life expectancy gains in 2005-2015" Under review in American Journal of Public Health

Alvarez-Martínez, J., **Aburto**, **J.M.**, Canudas-Romo, V. "Latin American convergence and divergence towards the mortality profiles of developed countries" Under review in Population Studies

García, J., **Aburto**, **J.M.** "The impact of violence on Venezuelan life expectancy and lifespan inequality" Under review in International Journal of Epidemiology

Riffe, T., **Aburto**, **J.M.** "Lexis fields" Under review in Demographic Research

Kashnitsky, I., **Aburto, J.M.**. "Geofaceting align small-multiples for regions in a spatially meaningful way". Under review in Demographic Research.

Canudas-Romo, V., **Aburto, J.M.** "The disparities in survival in Latin America and the Caribbean: Youth lost to homicides". Under review in British Medical Journal.

**Aburto, J.M.**, Basellini, U., Kjærgaard, S., Vaupel, J.W. "Life Expectancy and Lifespan Equality: a Long-run Relationship with recent interruptions" Intended for PNAS.

**Aburto**, **J.M.**, Villavicencio, F., Vaupel, J.W. "Dynamics of life expectancy and lifespan equality" Intended for interdisciplinary journal.

Aburto, J.M., Villavicencio, F., Vaupel, J.W. "The threshold age of

the life table Entropy and the Gini coefficient" Intended for Demographic Research's formal relationships.

**Aburto, J.M.**, Queiroz, B., Calazans, J., Luhar, S., Canudas-Romo, V. "The effect of homicides on life expectancy in Brazil by race" Intended for Health Affairs.

AWARDS AND FELLOWSHIPS

Best poster award PAA 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

National Council of Science and Technology (CONACYT) funding for a research stay.

Spring 2014

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

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

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

Review **BMJ** 

PAPERS FOR International Journal of Epidemiology

Health Affairs F1000Research Injury Prevention

Theoretical Population Biology

Genus

Papeles de Población

RESEARCH University of Wisconsin-Madison. STAYS

Spring 2014

Mathematics Research Center (CIMAT).

Fall 2009

Invited
Presenta-
TIONS

The impact of violence on lifespan inequality in Mexico. Tel Aviv University.

La epidemia de violencia en México y su impacto en la salud de la población. 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

# ACADEMIC PRESENTA-TIONS

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

Potential gains in life expectancy by reducing inequality of lifespans in Denmark: a cause of death analysis. Oral Presentation. PAA. Denver, USA.

**Homicides in Mexico increased inequality of lifespans**. Poster Session. PAA. Denver, USA. 2018

Macro patterns in the evolution of human aging. BSPS Annual Conference. Liverpool, UK. 2017

Homicides increase variation in lifespans in Mexico and its States, 2005-2015. BSPS Annual Conference. Liverpool, UK. 2017

Lifespan inequalities in Mexico and its states 1995-2015. International Seminar on Mortaliy, Unicamp, Brazil. 2017

**Human Mortality Database Symposium**. Oral Presentation. Berlin, Germany.

Life expectancy and lifespan equality: a long run relationship.
Oral Presentation. PAA. Chicago, USA.

**Lifespan variation in Central and Eastern Europe**. Poster Session. PAA. Chicago, USA. 2017

	<b>Lifespan variation in Central and Eastern Europe</b> . 9th Y Demographers Conference. Prague, Czech Republic.	oung 2017
	<b>Lifespan dispersion in Eastern Europe</b> . European Population C rence. Mainz, Germany.	onfe- 2016
	Homicide, Health, and Deviations from Best Practices Mortal Mortality in Mexican States, 1990-2010. Poster Session. Popula Association of America. Washington, D.C.	•
	Estimación de la Mortalidad Mexicana por el Método de Carter y por el Modelo Aditivo Doble Multiplicativo Propu por Wilmoth. SOMEDE at Aguascalientes, Mexico.	
	Diagnóstico de la cobertura de los registros de nacimiento	
Professional Training	Workshop in "Matrix approaches in health demography", Planck Institute for Demographic Research	Max 2017
	Workshop in "Advanced statistics in biomedicine", Universit Southern Denmark	ty of 2016
	Workshop in "Intergenerational transfers and demographic tr formations", El Colegio de Mexico. Iván Mejía Guevara	<b>ans-</b> 2013
	Workshop in "Remote sensing applications to social science re El Colegio de Mexico. José Luis Silván	esearch", 2013
	Workshop in "Multistate models", El Colegio de Mexico. All Palloni	perto 2011
	Redatam Data Base Creation, Instituto Nacional de Estadísti Geografía	ca y 2011
	<b>Applied Analytics Using SAS Enterprise Miner</b> , Instituto Nac de Estadística y Geografía	ional 2011
	Generating Statistical Information, Instituto Nacional de Estadi y Geografía	stica 2011

 ${\bf Redatam\ Process},$ Instituto Nacional de Estadística y Geografía 2010

School of mathematical and vector analysis, Centro de Investigación en Matemáticas 2009

X School of probability and statistics, Centro de Investigación en Matemáticas 2009

First summer of research in probability and statistics, Centro de Investigación en Matemáticas 2008

Project: "Simultaneous Multiresponse Optimization"

## Press Coverage

Homicides In Mexico Reversed Life Expectancy Gains For Men And Slowed Them For Women, 2000-10. 2016, *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 Manner

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

### Language abilities

Spanish: native speaker.

English: fluent.

Portuguese: good command.

Italian: good command.