

Iván Mejía-Guevara

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Education

- B.S., Actuarial Sciences, UNAM, June 1997.
- M.A., Economics, The College of Mexico, 1999.
- Ph.D., Computer Sciences, Research Institute for Applied Mathematics and Systems (IIMAS), National Autonomous University of Mexico (UNAM), 2007.
Director: Dr. Ángel Kuri-Morales
- Postdoctoral Scholar (Economic Demography), University of California at Berkeley, 2010.
Director: Dr. Ronald D. Lee

Academic Positions

- **Sr. Research Scientist-Basic Life Science**, Department of Biology, and School of Medicine Population Health Sciences (PHS), **Stanford University**, September 2016 – present.
- **Research Associate**, Harvard Center for Population and Development Studies, **Harvard School of Public Health**, October 2012- August 2016.
- **Associate Specialist I**, Department of Demography, **University of California at Berkeley**, February 2011- March 2012.

Non-Academic Positions

- **Freelance Research-Consultant**
 - United Nations Economic Commission for Latin America and the Caribbean (ECLAC), March 2008- October 2009, December 2017-October 2018.
Projects:
 - Intergenerational Transfers, Population Ageing and Social protection in Latin America, Phase I (March 2008- October 2009), Phase II (June 2010- March 2012)
 - Opportunities and challenges to achieve the SDGs in Latin America and the Caribbean (10th Tranche of the UN Development Account) (December 2017- October 2018)
 - United Nations University (UNU-WIDER), August 2015-April 2016. Project Leaders: Yoko Akachi and Jocelyn Finlay, Research Fellow
Project: Analysis of the proximate determinants of fertility by socioeconomic status in Sub-Saharan Africa
 - Laboratory of Economic and Social Demography, Max Planck Institute for Demographic Research, June 1- July 31, 2012.
Projects: An update of the Generational Accounting Model for the United States.
 - National Population Council (CONAPO), Mexico
Projects: National Transfer Accounts Project (NTA), March-August 2009, April-October 2010, June 2011 – April 2012. Site link: www.ntaccounts.org
- **Associate Consultant**, BHMC Consulting (Mexico), 2004-2005, 2008-2012.

Projects: Economic evaluation of social programs (statistical sampling design; statistical and econometric analysis) from SEDESOL (Ministry of Social Development of Mexico)

- **Sub-director of Regulation and Industrial Organization**, Federal Telecommunications Commission (CFT), Mexico, February 2001- March 2004.
 - Estimation and regulation of interconnection rates, and financial price cap model for the Incumbent Concessionaire in Mexico (Telmex).
- **Department Head**, Ministry of Finance (SHCP), Mexico, November 199- January 2001.

Honors and Affiliations

- Secretary, Executive Council (2018-2020), National Transfer Accounts Network
- Member of the National System of Researchers –Level I (Sistema Nacional de Investigadores –SNI; National Council of Sciences and Technology (CONACyT), Mexico), September 2016--
- Richard Kalish Innovative Publication Award, 2015.
- Fellowship, Postdoctoral Training, University of California, Berkeley. Sponsor: UC-MEXUS/CONACYT, 2010.
- Graduated with Honors, Ph.D. Dissertation, April 2008.
- Fellowship, Ph.D. Computer Sciences. Sponsor: CONACYT (Mexico), 2004-2007.
- Fellowship, M.A. Economics. Sponsor: CONACYT, 1997-1999.

Publications

Peer-Reviewed

1. Gausman J, **Mejía-Guevara I**, Subramanian SV, Razak F. Distributional change of women's adult height in low- and middle-income countries over the past half century: An observational study using cross-sectional survey data. *PLoS Medicine* 2018;15(6): e1002588. doi: 10.1371/journal.pmed.1002588
2. Green MA, Corsi DJ, **Mejía-Guevara I**, Subramanian SV. Distinct clusters of stunted children in India: An observational study. *Maternal & Child Nutrition* 2018;14: e12592. doi: 10.1111/mcn.12592
3. **Mejía-Guevara I**, Corsi DJ, Perkins JM, et al. Variation in Anthropometric Status and Growth Failure in Low- and Middle-Income Countries. *Pediatrics* 2018;141(3): e20172183. doi: 10.1542/peds.2017-2183
4. Gausman J, Perkins JM, Lee H-Y, **Mejía-Guevara I**, Nam Y-S, Lee J-K, Oh J, Subramanian SV. Ecological and social patterns of child dietary diversity in India: a population-based study. *Nutrition* 2018;53: 77–84. doi: 10.1016/j.nut.2018.01.006
5. Krishna* A, **Mejía-Guevara I***, McGovern M, Aguayo V, Subramanian SV. Trends in Inequalities in Child Stunting in South Asia. *Maternal & Child Nutrition* 2017: e12517. doi: 10.1111/mcn.12517 [*contributed equally]
6. Kim* R, **Mejía-Guevara I***, Corsi DJ, Aguayo VM, Subramanian SV. Relative importance of 13 correlates of child stunting in South Asia: Insights from nationally representative data from Afghanistan, Bangladesh, India, Nepal, and Pakistan. *Social Science & Medicine* 2017;187: 144-154. doi: 10.1016/j.socscimed.2017.06.017 [*contributed equally]

7. Finlay JE, Norton MK, **Mejía-Guevara I**. Adolescent Fertility and Child Health: The Interaction of Maternal Age, Parity and Birth Intervals in Determining Child Health Outcomes (2017). *International Journal of Child Health and Nutrition* 2017;6: 16-33. ISSN: 1929-4247
8. Rentería E, Souto G, **Mejía-Guevara I**, Patxot C. The impact of education on the demographic dividend in Mexico and Spain. *Population & Development Review* 2016;42(4): 651-671. doi: 10.1111/padr.12017
9. Glymour MM, Walter S, **Mejía-Guevara I**. Association of a Genetic Risk Score with Body Mass Index Across Different Birth Cohorts. *Journal of the American Medical Association (JAMA)* 2016;316(17): 1826-1827. doi: 10.1001/jama.2016.14939
10. Walter S, **Mejía-Guevara I**, Estrada K, Liu SY, Glymour MM. Association of a Genetic Risk Score with Body Mass Index Across Different Birth Cohorts. *Journal of the American Medical Association (JAMA)* 2016;316(1): 63-69. doi: 10.1001/jama.2016.8729.
11. van Hedel K, **Mejía-Guevara I**, Avendano M, Sabbath EL, Berkman LF, Mackenbach JP, van Lenthe FJ. Work-family trajectories and the higher cardiovascular risk of American women relative to women in 13 European countries. *American Journal of Public Health. American Journal of Public Health* 2016;106(8): 1449-1456. doi: 10.2105/AJPH.2016.303264
12. Subramanian SV, **Mejía-Guevara I**, Krishna A. Rethinking Policy Perspectives on Childhood Stunting: Time to formulate a Structural and Multifactorial Strategy. *Maternal & Child Nutrition* 2016;12(S1): 219-236. doi: 10.1111/mcn.12254
13. Corsi DJ, **Mejía-Guevara I**, Subramanian SV. Improving household-level nutrition-specific and nutrition-sensitive conditions key to reducing child undernutrition in India. *Social Science & Medicine* 2016;157: 189-192. doi: 10.1016/j.socscimed.2016.02.039
14. Corsi DJ, **Mejía-Guevara I**, Subramanian SV. Risk Factors for Child Chronic Undernutrition in India: Estimating Relative Importance, Population Attributable Risk and Fractions. *Social Science & Medicine* 2016;157: 165-185. doi: 10.1016/j.socscimed.2015.11.014
15. Lu C, **Mejía-Guevara I**, Hill K, Farmer P, Subramanian SV, Binagwaho A. Community-Based Health Financing and Child Stunting in Rural Rwanda. *American Journal of Public Health* 2016;106(1): 49-55. doi: 10.2105/AJPH.2015.302913
16. Sabbath E, **Mejía-Guevara I**, Noelke C, Berkman L. The long-term mortality impact of combined job strain and family circumstances: A life course analysis of working American mothers. *Social Science & Medicine* 2015;146: 111-119. doi: 10.1016/j.socscimed.201
17. **Mejía-Guevara I**, Hill K, Subramanian SV, Lu C. Assessing the association between community-based health financing program and medical care utilizing for under-five children in rural Rwanda with repeated cross-sectional data. *BMJ Open* 2015;5: e008814. doi:10.1136/bmjopen-2015-008814.
18. **Mejía-Guevara I**, Krishna A, Corsi DJ, Subramanian SV. Individual and ecological variation in child undernutrition in India: a multilevel analysis. *Journal of South Asian Development* 2015;10(2): 1-31. doi: 10.1177/0973174115588841
19. **Mejía-Guevara I**. Economic Inequality and Intergenerational Transfers: Evidence from Mexico. *Journal of the Economics of Ageing* 2015;5: 23-32. doi: 10.1016/j.jeoa.2014.09.012

20. Sabbath EL, **Mejía-Guevara I**, Glymour MM, Berkman LF. Lifecourse work-family profiles predict mortality risk among American women. *American Journal of Public Health* 2015;105(4): e96-e102. doi: 10.2105/AJPH.2014.302471 [Richard Kalish Innovative Publication Award]
21. Lee R, Mason A, Amporfu E, An C-B, Rosero-Bixby L, Bravo J, Bucheli M, Chen Q, Comelatto P, Coy D, d'Albis H, Donehower G, Dramani L, Fürnkranz-Prskawetz A, Gal RI, Holz M, Lan Huong NT, Kluge F, Ladusingh L, Lee S-H, Lindh T, Ling L, Long GT, Matsukura R, McCarthy D, **Mejía-Guevara I**, Mergo T, Miller T, Mwabu G, Narayana MR, Nor V, Norte GM, Ogawa N, Olaniyan OA, Olivera J, Oosthuizen M, Phananimamai M, Lanza Queiroz B, Racelis RH, Rentería E, Rice JM, Sambt J, Seçkin A, Sefton J, Soyibo A, Tovar JA, Tung A-C, Turra CM, Urdinola BP, Vaittinen R, Vanne R, Zannella M, Zhang Q. Is low fertility really a problem? Population aging, dependency, and consumption. *Science* 2014;346(6206): 229-234. doi: 10.1126/science.1250542
22. Wang Q, **Mejía-Guevara I**, Rist PM, Walter S, Capistrant BD, Glymour MM. Changes in Memory before and after Stroke Differ by Age and Sex, but Not by Race. *Cerebrovasc Dis* 2014;37: 235-243.
23. **Mejía-Guevara I**, Vélez Fernández-Varela F, García-López JE. The First Demographic Dividend and Social Protection Systems in Mexico {Original in Spanish}. *Notas de Población* 2009;90. ECLAC, United Nations.
24. **Mejía-Guevara I**, Kuri-Morales A. Genetic Support Vector Classification and Feature Selection. Proc. 2008 Seventh Mexican International Conference on Artificial Intelligence (MICAI 2008), *IEEE Computer Society* 2008: 75-81. [Conference proceedings]
25. **Mejía-Guevara I**, Kuri-Morales A. Evolutionary Feature and Parameter Selection in Support Vector Regression. *Lecture Notes in Artificial Intelligence (LNAI)* 2007;4827: 399-408. [Conference proceedings]
26. **Mejía-Guevara I**, Kuri-Morales A. MP-Polynomial Kernel for Training Support Vector Machines. *Lecture Notes in Computer Science (LNCS)* 2007;4756: 584-593. [Conference proceedings]
27. Kuri-Morales A, **Mejía-Guevara I**. Analysis of Algebraic Expressions derived from Genetic Multivariate Polynomials and Support Vector Machines: a case study. *LNCS* 2006;4225: 974-984. [Conference proceedings]
28. Kuri-Morales A, **Mejía-Guevara I**. Evolutionary Training of SVM for Multiple Category Classification Problems with Self-Adaptive Parameters. *LNCS 2006*;4140: 329-338. [Conference proceedings]
29. Kuri-Morales A, **Mejía-Guevara I**. Determination of the Regularization Parameter for Support Vector Machines via Vasconcelos' Genetic Algorithm. *WSEAS Transactions on Circuits and Systems* 2005;4(4): 281-286.

Non peer-reviewed

30. **Mejía-Guevara I**, Giorguli SE. Public Education in Mexico: Is All the Spending for the Benefit of Children? *Policy in Focus*, International Policy Centre for Inclusive Growth, UNDP, 2014.
31. **Mejía-Guevara I**, Murguía Salas V. Labor Force Participation and Demographic Dividends {Original in Spanish}. *Revista Coyuntura Demográfica* (2), SOMEDE, Mexico, 2012.
32. **Mejía-Guevara I**. Population Dynamics and the Lifecycle Demand for Wealth in Mexico {Original in Spanish}. *La Situación Demográfica de México*, Consejo Nacional de Población (CONAPO), Mexico City, 2010.
33. **Mejía-Guevara I**. Economic Lifecycle in Mexico {Original in Spanish}. *La Situación Demográfica de México*, CONAPO, Mexico City, 2008.

34. Kuri-Morales A, **Mejía-Guevara I**. Evolutionary Training of SVM for Classification Problems with Self-Adaptive Parameters. Research on Computer Science: *Advances in Artificial Intelligence Theory* 16, Instituto Politécnico Nacional (IPN), 2005:1665-1675.

Book chapters

35. Bravo J, Lai MS, Donehower G, **Mejía-Guevara I**. Ageing and Retirement Security: United States of America, Mexico and Mexican Americans. In W. Vega, K.S. Markides, J.L. Angel, and F.M. Torres-Gil (Eds.), *Challenges of Latino Aging in the Americas*. Springer, 2015:77-89.
36. **Mejía-Guevara I**, Partida Bush V. Demographic Transition and Economic Dividend in Mexico {Original in Spanish}. In J. L. Ávila, H. H. Hernández Bringas, and J. Narro Robles (Eds.), *Cambio Demográfico y Desarrollo de México*. UNAM, México, 2014.
37. **Mejía-Guevara I**. Economic Life Cycle Deficit in Mexico: 1992-2010 {Original in Spanish}. In Cecilia Rabell Romero (edit.) *La Población de México*. Fondo de Cultura Económica. México, 2014.
38. **Mejía-Guevara I**. Economic Lifecycle and Intergenerational Redistribution in Mexico. In R. Lee and A. Mason (Eds.) *Population Aging and the Generational Economy: A global perspective*. Edward Elgar Publishing, U.K., 2011:283-296.
39. Mojarro O, **Mejía-Guevara I**. The Effect of Changes in the Population Age Structure on Saving and Investment in Mexico {Original in Spanish}. in Elena Zuñiga Herrera (Edit.), *México ante los desafíos de desarrollo del Milenio, Serie Metas del Milenio*, CONAPO, México, 2005:79-97.

Working Papers and Research in Progress

Manuscripts under editorial review

1. **Mejía-Guevara I**, Zuo W, Bendavid E, Li N, Tuljapurkar S. Age Distribution, Trends, and Forecasts of Under-5 Mortality in Sub-Saharan Africa. *PLoS Medicine* (submitted)
2. Finlay JE, **Mejía-Guevara I**, Akachi Y. Delayed marriage, contraceptive use, and breastfeeding: Fertility patterns over time and wealth quintiles in sub-Saharan Africa. *PLoS One* (in review)

Working Papers

3. Wild H, Glowacki L, Maples S, **Mejía-Guevara I**, Hiruy A, Krystosik A, Bonds MH, LaBeaud AD, Barry M. Making Pastoralists Count: Health Surveillance of a Nomadic Population Using a Geospatially Derived Sampling Frame.
4. Finlay JE, **Mejía-Guevara I**, Akachi Y. Delayed marriage, contraceptive use, and breastfeeding: Fertility patterns over time and wealth quintiles in sub-Saharan Africa. *UN-WIDER Working Paper*, 2016.
5. Alsan M, Atella V, Bhattacharya J, Conti V, **Mejía-Guevara I**, Miller G. Technological progress and health convergence: The case of penicillin in post-war Italy, 2018.
6. How gender norms shape health: insights from survey data (With G Darmstadt, Ann Weber, B Cislighi, M Cullen, et al.)

Research in Progress

7. **Mejía-Guevara I**, Tuljapurkar S. Inequalities in Sub-Saharan Africa: Compression and convergence of under-5 mortality.
8. **Mejía-Guevara I**, Rivero E, Nava I. Female Labor Force Participation, Education, and Economic Growth in an Ageing Society: Evidence from Mexico
9. Quantifying uncertainty for probabilistic population projections of age-specific mortality (with JA Palacios and AE Raftery)
10. Multi-state Markov modeling and sequence clustering of teaching tasks (with MA Ruiz-Primo and JA Palacios)
11. **Mejía-Guevara I**, Vega A. International Migration and the Demographic Dividend: Evidence from Mexico.

Academic Presentations

Invited talks

- “National Transfer Accounts in Mexico: Policy implications in the labor market”, 12th Global Meeting of the NTA Network: Opportunities and Challenges of the Demographic Transition for Meeting the 2030 Agenda and the Sustainable Development Goals, Mexico City, July 23-27, 2018
- “Sequence Clustering: Analysis of Life Course work-family and Fertility Trajectories”, Stanford University, March 25, 2016.
- “Individual and Ecological Variation in Child Undernutrition: A Multilevel Approach”, University of Massachusetts at Amherst, January 29, 2016.
- “Decomposing the Demographic Dividend for Subpopulations”. *NTA Workshop*, CEDA. UC Berkeley, December 14, 2015.
- “Contributions of Economic Demography in Population Policy”. *Diálogos y Reflexiones sobre población, ciudad y medio ambiente*. Celebrating 50 Years of CEDUA [Center for Urban and Demographic Studies], El Colegio de México, A.C., November 21, 2014, México City.
- **Plenary presentation:** "Analysis by Age and Socioeconomic Status of the Public Transfers in Mexico". Eighth Meeting of the Working Group on Macroeconomic Aspects of Intergenerational Transfers (Eighth NTA Meeting 2011), Belo Horizonte, Brazil, 2011.

Selected oral abstracts

- “Female Labor Force Participation, Education, and Economic Growth in an Ageing Society: Evidence from Mexico”, 12th Global Meeting of the NTA Network: Opportunities and Challenges of the Demographic Transition for Meeting the 2030 Agenda and the Sustainable Development Goals, Mexico City, July 23-27, 2018 (with E Rivero and I Nava)
- "Delayed Marriage, Contraceptive Use and Breastfeeding: Fertility Patterns Over Time and Wealth Quintiles in Sub-Saharan Africa", Population Association of America 2017 Meeting (PAA 2017), Chicago, IL. (with Jocelyn Finlay and Yoko Akachi)
- Introducing education in the demographic dividend - the case of Mexico and Spain. Population Association of America 2014 Meeting (PAA 2016), Washington D.C. (with E Rentería, Guadalupe Souto and Concepció Patxot)

- “Do Work-Family Patterns over the Life-Course Influence Health at Old Age? A Sequence Analysis Approach across 13 European Countries and the United States”. Population Association of America 2014 Meeting (PAA 2014), Boston, MA. (with K van Hedel, M Avendaño, LF Berkman)
- “Economic Inequality and Intergenerational Transfers: Evidence from Mexico”. Ninth Meeting of the Working Group on Macroeconomic Aspects of Intergenerational Transfers (NTA Meeting 2013): Barcelona, Spain, 3 - 8 June 2013.
- "Opportunity costs: The fiscal cost of (not) educating Mexican immigrant minors in the U.S.". European Population Conference 2012 (EPC 2012). (with A Vega)
- "Everybody works: gender, age and economic activity". EPC 2012, Stockholm, Sweden. (with G Donehower)
- "Does International Migration Benefit the Sender Country? The Mexico-U.S. case". Population Association of America 2012 Meeting (PAA 2012), San Francisco, CA. (with A Vega)
- "Unpaid Non-market Productive Activities by Age and Sex: Measurement and valuation for the United States". Eighth NTA Meeting 2011, Belo Horizonte, Brazil. (with Gretchen Donehower)

Workshops

- "Spatial Statistics in Epidemiology and Public Health", 6th Summer Institute in Statistics and Modeling in Infectious Diseases, Seattle, Washington, July 16-18, 2014.
- “EWC Summer Seminar on Population. Workshop 1: Population Aging and the Generational Economy”, East-West Center, Honolulu, Hawaii, June 6-19, 2010.
- Fellow, Forty-fourth Sampling Program for Survey Statisticians in the Sixty-second Summer Institute in Survey Research Techniques, University of Michigan, Ann Arbor, Michigan, USA, June-July 2009.
- “Thirty-Ninth Summer Seminar Workshop on Population Development, and Policy: A Follow-Up Workshop”, East-West Center, Honolulu, Hawaii, June 3 - July 3, 2008.
- “Thirty-Eighth Summer Seminar Workshop on Population Development and Policy: The Economic Payoffs of Population Change”, East-West Center, Honolulu, Hawaii, May 29-June 28, 2007.
- “Statistical Learning and Data Mining II: Tools for Tall and Wide Data”, State-of-the-Art Statistical Methods for Data Analysis, Dr. Trevor Hastie and Dr. Robert Tibshirani (Stanford University), Sheraton Palo Alto, California, March 8-9, 2007.
- “Training Course for the Logic Support COSITU”, On Behalf of the Mexican Government (Federal Telecommunications Commission - CFT), International Telecommunication Union (ITU), Managua, Nicaragua, November 4-7, 2003.

Membership in Professional Organizations

- National Transfer Accounts Project (NTA), 2008 – present
 - Leader and voting member of NTA Mexico, 2008 – present
- Population Association of America (PAA), 2008 – present
- International Union for the Scientific Study in Population (IUSSP), 2008 – present
- Latin-American Population Association (ALAP), 2008 – present

Professional Service

- *Ad Hoc Reviewer: Demographic Research* (2014), *GENUS* (2016), *PLoS One* (2018), *Maternal & Child Nutrition* (2018).

Mentorship and Supervision

- Lecturer. PhD Dissertation in Population Studies (in Progress): “Intergenerational Transfers, Education and Economic Inequality in Mexico: 1994, 2006 Y 2014”, Elvira Zedillo, The College of Mexico, August 2017 – present
- Advisor of 6 Bachelors’ theses in Actuarial Sciences, FES ACATLAN, UNAM. Actuarial Sciences Undergraduate Program, 2002-2006.

Teaching

- Lecturer. Workshop on National Transfer Accounts and Demographic Transformations [*Taller Sobre Transferencias Intergeneracionales y Transformaciones Demográficas*]. CEDUA – El Colegio de México, July 2013.
- Lecturer. Actuarial Sciences Undergraduate Program, UNAM, 1999-2006: “Stochastic Processes I” (Fall 99, Fall 00), “Stochastic Processes II” (Spring 00), “Statistics I” (Fall 02, Spring 04), “Statistics II” (Spring 03), “Microeconomics” (Spring 01, Spring 02, Spring 03, Spring 04, Spring 05), “Macroeconomics” (Fall 04), “Simulation Models” (Spring 06), “International Finance” (Spring 06);
- Lecturer. Economics Undergraduate Program, ITESM (*Tecnológico de Monterrey*): “Public Finance” (Fall 2005).
- Lecturer. International Business Graduate Program, Autonomous University of Tamaulipas, March-May 2005: “Analysis of the Mexican Economy”.
- TA. Economics Graduate Program, *El Colegio de México, A.C.*: “Introductory Mathematics” (June-August 1998), “Mathematics” (Fall 1998, Fall 1999).