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PROFILE AND QUALIFICATIONS

Demographer, trained in economics and statistics; with eight years of experience in data management and analysis. Experienced in the use of regression and decomposition techniques. Proficient in the use of econometric techniques including autoregressive models and time series analysis. Interested in applied demography, population health, race/ethnicity, biodemography and military health.

EDUCATION

- 2015 Ph.D. Applied Demography, The University of Texas at San Antonio.
Dissertation: *“Inequalities in Human Papillomavirus Vaccinations for female adolescents in the United States”*
Examinations: Demographic Techniques, Statistical Methods, Health Disparities
- 2012 M.A. Economics, University of Puerto Rico, Río Piedras. Thesis: *“Transformations of Public Healthcare Services in Puerto Rico 1993-2010”*.
- 2010 B.A. Economics *Cum Laude*, University of Puerto Rico at Cayey
Minor in Statistics (Completed in May 2012)

POSITIONS HELD

- 2015- Director of Graduate Studies in Applied Demography, Pennsylvania State University
2015- Lecturer in Sociology and Criminology, Pennsylvania State University
2015- Research Affiliate, Population Research Institute, Pennsylvania State University
2015-17 Post-Doctoral Fellow, U.S. Army Institute for Surgical Research
2012-15 Graduate Research Assistant, Institute for Demographic and Socioeconomic Research
2013 Principal Investigator, Group Quarter Population Report, Puerto Rico Institute of Statistics
2013 Health Policy Consultant, Policy Wisdom, LLC

AREAS OF TEACHING OR RESEARCH INTEREST

Demographic Techniques, Race/Ethnicity and Health, Health Disparities, Biodemography, Statistical Methods, Military Health

PUBLICATIONS

Peer-Reviewed Articles

- 2017 **Santos-Lozada, Alexis R.** and Martínez, Matthew J. How are you? or ¿Como estás?: Does language of interview influences self-rated health among Hispanic subgroups? (*Forthcoming Journal of Immigrant and Minority Health*, DOI: 10.1007/s10903-017-0606-4).

Richards, Reg and **Santos, Alexis R.** Burn patient acuity demographics, scar contractures and rehabilitation treatment time related to patient outcomes: The ACT Study (*Journal of Burn Care & Research*, In press).

Richards, Reg, Parry, Ingrid S., **Santos-Lozada, Alexis R.** and Dewey, W. Scott. Burn Hand/Finger Goniometric Measurements: Sum of the Isolated Parts not equal to Composite Whole. *Journal of Burn Care & Research* (Published Ahead of Print).

Richards, Reg; **Santos-Lozada, Alexis R.**, Dewey, W. Scott and Chung, Kevin K. Profile of Patients Without Burn Scar Contracture Development. *Journal of Burn Care & Research* (January/February 2017), Vol. 38 (1), e62-e69.

2016 **Santos-Lozada, Alexis R.** Self-rated mental health and race/ethnicity in the United States: Support for the Epidemiological Paradox. *PeerJ* 4:e2508.

Santos, Alexis and Richards, Reg. Comparison of the National Burn Repository (NBR) to the Acuity, Contracture, Time (ACT) Database. Supplement to *Journal of Burn Care & Research* (May/June 2016), Vol. 37 (3), p. S190.

Richards, Reg and **Santos, Alexis R.** Profile of Patients Without Burn Scar Contracture Development. Supplement to *Journal of Burn Care & Research* (May/June 2016), Vol. 37 (3), p. S120.

Technical Reports

2015 **Santos-Lozada, Alexis R.** and Velázquez-Estrada, Alberto. The Population Decline of Puerto Rico: An Application of Prospective Trends in Cohort-Component Projections. [Working Paper 2015-1](#) for the Puerto Rico Institute of Statistics.

Published Abstracts

2016 **Santos-Lozada, Alexis R.** Competing regression models for the study of population growth for U.S. Counties: Spatial or non-spatial? *Papers and Proceedings of the Applied Geography Conference* (ISSN 0747-5160).

Under review or manuscripts pending review

Santos-Lozada, Alexis R. and Daw, Jonathan. Contribution of Three Dimensions of Allostatic Load to Racial/Ethnic Disparities in Poor/Fair Self-Rated Health. (Submitted: April 25, 2017)

Santos-Lozada, Alexis R. The effect of Allostatic Load in Time-to-Death among U.S. Adults. (Preparing for resubmission after first review)

Santos-Lozada, Alexis R. and Howard, Jeffrey T. Using allostatic load to validate self-rated health for racial/ethnic groups in the United States. (Submitted: March 14, 2017)

Howard, Jeffrey T., Kotwal, Russ S., **Santos, Alexis R.**, Martin, Matthew J. and Stockinger, Zsolt T. Re-Examination of a Battlefield Trauma Golden Hour Policy. (Under Review)

Santos-Lozada, Alexis R. and Sánchez-Soto, Gabriela. Patterns of recent fertility of Puerto Rican women in Puerto Rico and the United States: A comparative analysis (Manuscript available)

Santos-Lozada, Alexis R. Hispanic-White disparities in Self-Rated Health: Implications of Language of Interview for Understanding the Latino Health Puzzle. (Submitted: March 21, 2017)

Santos-Lozada, Alexis R. and Ramírez-Smith, Daniel N. Future population structure, obesity prevalence and healthcare costs in Spain 2016-2031. (*Equal contribution*)

Santos-Lozada, Alexis R. and Caraballo-Orozco, Diego N. Does the Male-Female Health-Survival Paradox apply to Puerto Ricans elders? (Manuscript available)

Santos-Lozada, Alexis R. and Caraballo-Orozco, Diego N. Does the predictive power of comparative health status for subsequent mortality varies by comparison frame among Elder Puerto Ricans? (Manuscript available)

PROFESSIONAL PRESENTATIONS AND MEETING PARTICIPATION

Conference Presentations

2017 **Santos-Lozada, Alexis R.** and Ramírez-Smith, Daniel. Changing population structure as a driving force of the increase in obesity prevalence and healthcare costs in Spain 2016-2031. Paper presentation at the Population Association of America Meeting.

Richards, Reg, Parry, Ingrid S., **Santos-Lozada, Alexis R.** and Dewey, W. Scott. Burn Hand/Finger Goniometric Measurements: Sum of the Isolated Parts not equal to Composite Whole. Abstract accepted for presentation at the American Burn Association Meeting.

2016 **Santos-Lozada, Alexis R.** Competing regression models for the study of population growth for U.S. Counties: Spatial or non-spatial? Paper presentation in the Applied Geography Conference.

Santos, Alexis R. and Howard, Jeffrey T. Allostatic Load as a determinant of Poor-Self Rated Health for Adults in the United States. Poster presentation Interdisciplinary Association for Population Health Science Conference.

Santos, Alexis R. and Richard, Reg. Comparison of the National Burn Repository (NBR) to the Acuity, Contracture, Time (ACT) Database. Poster presentation at the American Burn Association Meeting.

Richard, Reg, **Santos, Alexis R.** and Dewey, W. Scott. Profile of Patients without Burn Scar Contracture Development. Paper presentation at the American Burn Association Meeting.

Santos-Lozada, Alexis R. and Martinez, Matthew J. Validity of Self-Rated Health among Hispanics for Mortality Risk: The Role of Language of Interview. Poster presentation at the Population Association of America Meeting.

Santos-Lozada, Alexis R. and Martinez, Matthew J. Health Lost in Translation: The Determinants of Poor Self-Rated Health Among Hispanic Adults in the United States. Poster presentation at the Population Association of America Meeting.

Harris, Richard J. and **Santos-Lozada, Alexis R.** Determinants of Direct and Indirect Power for U.S. Couples. Poster presentation at the Population Association of America Meeting.

2015 **Santos-Lozada, Alexis R.** Diverging destinies: Puerto Rican Population in Puerto Rico and the United States. Paper presentation at the Southern Demographic Association Meeting.

Santos-Lozada, Alexis R. and Sánchez-Soto, Gabriela. Determinants of recent fertility for Puerto Rican women in Puerto Rico and the United States. Paper presentation at the Southern Demographic Association Meeting.

Santos-Lozada, Alexis R. Measuring Puerto Rican Fertility Levels for Puerto Ricans in Puerto Rico and the United States. Paper presentation at Expo Estadísticas.

Santos-Lozada, Alexis R. and Velázquez-Estrada, Alberto. The Population Decline of Puerto Rico: An Application of Prospective Trends in Cohort-Component Projections. Paper presentation at the Population Association of America Meeting.

Santos-Lozada, Alexis R. A Spatial and Bayesian Approach to Infant Mortality in Puerto Rico: A Study of Risk, Clustering and Determinants. Poster presentation at the Population Association of America Meeting.

2014 **Santos-Lozada, Alexis R.** Does socioeconomic status explains differences in Human Papillomavirus Vaccine Awareness in Parents of Female Adolescents in the United States? Paper presented at the Southern Demographic Association Meeting.

Santos-Lozada, Alexis R. A Spatial and Bayesian Approach to Infant Mortality Risk in Puerto Rico: A study of risk, clustering and determinants. Poster presented at the Southern Demographic Association Meeting.

McKinnon, Mary L., **Santos-Lozada, Alexis R.**, and Potter, Lloyd B. Characteristics associated with sexual assault among women in two different age groups. Paper presentation at the Southern Demographic Association Meeting.

Santos-Lozada, Alexis R. Poverty and Race/Ethnic Differences in Human Papillomavirus Immunization Resistance in Parents of female adolescents in the United States. Poster presentation at the Population Association of America Meeting.

Santos-Lozada, Alexis R. Race/Ethnic disparities in Human Papillomavirus vaccine completion in female adolescents in the United States: A survival analysis approach. Paper presentation at the Southwestern Social Sciences Association Meeting.

Santos-Lozada, Alexis R., Caraballo-Orozco, Diego and Caraballo-Ríos, José Noel. Determinants of Human Papillomavirus Vaccine Initiation in Adolescent Girls in the United States: A Classification and Regression Classification and Regression Tree. Paper presentation at the Applied Demography Conference.

Santos-Lozada, Alexis R. Estimates and Projections for Harris County, Texas 2011-2030. Paper presentation at the Applied Demography Conference.

Serban, Ramona E., **Santos-Lozada, Alexis R.** and Choi, Daesung. Hispanic/Non-Hispanic Lung and Lung Related Cancer Standardized Incidence Ratios for Adult and Older Population in Texas 2000-2008. Poster presentation at the Applied Demography Conference.

2013 Serban, Ramona E., **Santos-Lozada, Alexis R.,** and Sparks, Corey S. Effects of poverty segregation on access to care in Puerto Rico. Poster presentation at the Puerto Rico Population Studies Conference.

Santos-Lozada, Alexis R. and Marazzi, Mario. Annual Group Quarter Population Report: Establishment and Implementation in Puerto Rico. Poster presentation at the Puerto Rico Population Studies Conference.

Santos-Lozada, Alexis R. Race/ethnic disparities in Human Papillomavirus Immunization Initiation in female adolescents in the United States. Paper presentation at the Southern Demographic Association Annual Meeting.

Santos-Lozada, Alexis R., Serban, Ramona E., and Potter, Lloyd B. District and County level determinants of High School Completion and Dropout Rates in Texas in 2010. Paper presentation at the Rural Sociological Society Annual Meeting.

Santos-Lozada, Alexis R. Healthcare services availability in Rural-Mountain Puerto Rico. Paper presentation at the Rural Sociological Society Annual Meeting.

Santos-Lozada, Alexis R. Transformations of public-healthcare services in Puerto Rico 1993-2010. Poster presentation at the Population Association of America Annual Meeting.

2012 **Santos-Lozada, Alexis R.** Transformations of medical-hospital services in Puerto Rico 1993-2010. Poster presentation at the biennial RCMI International Symposium on Health Disparities.

Invited Presentations

2013 **Santos-Lozada, Alexis R.** and Marazzi, Mario. Annual Group Quarter Population Report: Establishment and Implementation in Puerto Rico. Presentation at the Federal-State Cooperative for Population Estimates Spring Meeting (FSCPE).

GRANTS

External Funding

2016 Loan Repayment Grant, National Institutes of Health (*Under review*)
2015 Conference Organization Grant, Puerto Rico Institute of Statistics (\$75,000)
2013 Conference Organization Grant, Puerto Rico Institute of Statistics (\$30,000)

Internal Funding

2015-16 Open Access Publication Grant, University Libraries, Pennsylvania State University
2015 Population Research Institute - Funding for Conference Poster

AWARDS AND RECOGNITIONS

2016- Funding for Population Association of America by the Population Research Institute
2015-17 Oak Ridge Association of Universities Research Fellowship
2015 Carlos and Malú Alvarez Award, University of Texas at San Antonio (\$1,000)
2012-15 Professional Development Award, University of Texas at San Antonio (\$400, each year)
2013 Honors Mention for PhD Paper Competition, University of Texas at San Antonio
2010 Economics Program Medal, University of Puerto Rico at Cayey
2010 Recognition by the Academic Senate for Collaboration as Academic Senator
2009 Recognition by the Academic Senate for Collaboration with Library Services
2006 Puerto Rico House of Representatives Medal of Achievement

TEACHING EXPERIENCE

Pennsylvania State University courses

Principles of Demography (Fall 2017) Graduate course
Demographic Techniques (Fall 2017) Graduate course

Graduate Student Capstone Project Advisor or Thesis Committee Membership

Name	Degree	Year	Role
Diego N. Caraballo	M.S.	2017	Member (University of Puerto Rico)
Wayne Ki Frad	M.GIS	2016	Chair

COURSE DEVELOPMENT

Pennsylvania State University

2016 Applied Demography, Data and G.I.S.
2015-16 Demographic Techniques
2015-16 Principles of Demography

PROFESSIONAL WORKSHOPS

2016 Probabilistic Population Projections: Theory and Practice, University of Washington
2015 The Data Scientist's Toolbox (Data Science Program, Johns Hopkins University)
2015 Formal Demography Workshop, University of California-Berkeley

PROFESSIONAL, UNIVERSITY AND DEPARTMENTAL SERVICE

Demography Program

2017 Judge for the Annual Mini PAA Conference

Department of Sociology and Criminology

2016-17 Member, Diversity Promotion Committee

2015-17 Member, Online Education Committee

Pennsylvania State University

2015- Online Directors of Graduate Studies, College of the Liberal Arts

2015- Coordinators of Online of Online Learning and Teaching (C.O.L.T.)

2017 Judge for the Graduate Exhibition (Poster Session)

2016-17 Commission on Racial/Ethnic Diversity (CORED)

American Burn Association

2017-19 Research Committee

University of Puerto Rico at Cayey

2013 Judge for the Research Symposium

2009-10 Acting President, Student Government

2009 Presidential Search Committee, Institutional and System-wide Search

2008-09 Academic Senator

2006-09 Executive Secretary, Student Government

2008 Acting Administrative Board Representative

2007 Acting University Board Representative

2006-07 Freshman Delegate, Student Government

WORKS IN PROGRESS

Self-Rated Health

- Revisiting the anomaly in the education-health gradient for self-rated mental health through age, sex, and race/ethnicity.
- Assessing the validity of self-rated health among Hispanic Adults in the United States
- Self-Rated Physical Health and Race/Ethnicity in the United States (Results available)
- Prescription Opioid Misuse is associated with worse health status among Adults in the United States (Results available)

Mortality

- **Santos-Lozada, Alexis R.**, Aguilar, Diego L., Daw, Jonathan, and Howard, Jeffrey T. The Contribution of three dimensions of allostatic load to racial/ethnic differences in Mortality in the United States (Results available).

Mathematical Demography

- A decomposition of population percent change by multiple components: the case of the United States.

Burn Rehabilitation

- A comparison of the predictive power of Total Body Surface Area (TBSA) and Cutaneous Functional Units (CFUs) for skin contracture among burn patients.
- Comparison of the National Burn Repository (NBR) to the Acuity, Contracture & Time (ACT) Database

Transitions to Adulthood

- Coming of age in the Caribbean: The degree of autonomy and its impact on marital union, childbearing, education and employment in Puerto Rico, 2015.

Hispanic Paradox

- Paradox for whom? Assessing life expectancy among Hispanic subgroups.
- Salmon Bias for whom? Addressing the “lost to follow-up” concept for Hispanic subgroups.

Mentoring experience

Name	Project	Year	Role
Diego Aguilar	Mortality and allostatic load	2017	Co-Advisor (with JD Daw)

PARTICIPATION IN THE MEDIA

Op-Ed Columns

[Population of Puerto Rico: A ship without a destiny](#), column about population projection methods published in El Nuevo Día, one of the major newspapers in Puerto Rico.

Demographic News

[Immigration Concerns with Justin Betti](#) (05/11/2017), ABC 23 (WATM). Provided information about the profile migrants pre and post-1980s and recent trends in net migration.

DATASETS

National Health Interview Survey (NHIS)

National Health and Nutrition Examination Survey (NHANES and NHANES III)

Linked Mortality Files (LMF; NHANES III, NHIS, NHANES)

Behavioral Risk Factors Surveillance System (BRFSS)

Acuity, Time and Contracture (U.S. Army)

National Immunization Survey - Teen Sample (NIS-Teen)

American Community Survey (ACS, Individual and Summary Files) and U.S. Census

Demographic and Health Survey (DHS)

Puerto Rico Elderly Health Conditions (PREHCO, Wave 1 and Wave 2)

National Couples Survey (Wave 1 and Wave 2)

PROFESSIONAL ASSOCIATIONS

Interdisciplinary Association for Population Health Science (IAPHS)

Population Association of America

Southern Demographic Association

LANGUAGES

English and Spanish

REVIEWER

Journal of Healthcare for Poor and Underserved
Society and Mental Health
Demography

Ethnicity & Disease
SHOCK (Statistical Methods)
Women's Health Issues

SOFTWARE USE

SAS, R, SPSS, STATA, ArcGIS, GeoDa, Q-GIS, Maptitude, CART, Eviews

SECURITY CLEARANCE

2015-17 Active Security Clearance for access to U.S. ARMY data and networks

REFERENCES

Dr. Lloyd B. Potter
Professor, Department of Demography
University of Texas at San Antonio
lloyd.potter@utsa.edu

Dr. Richard J. Harris
Professor, Department of Social Work
University of Texas at San Antonio
richard.harris@utsa.edu

Dr. Rogelio Sáenz
Dean, College of Public Policy
University of Texas at San Antonio
rogelio.saenz@utsa.edu

Dr. Mario Marazzi-Santiago
Executive Director
Puerto Rico Institute of Statistics
mario.marazzi@estadisticas.pr

Dr. Stephen A. Matthews
Director, Demography Program
Pennsylvania State University
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Dr. Gordon DeJong
Emeritus Professor, Department of Sociology
Pennsylvania State University
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Prof. Argeo Quiñones
Professor, Economics Department
University of Puerto Rico, Rio Piedras
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Dr. José N. Caraballo Ríos
Director of Institutional Assessment
Pontifical Catholic University of Puerto Rico
josenoel.caraballo@gmail.com