

BIOGRAPHICAL SKETCHNAME: **GALAVIZ ARREDONDO, Karla**

POSITION TITLE: Research Assistant Professor

eRA COMMONS USER NAME: KARLA.GALAVIZ

EDUCATION/TRAINING:

INSTITUTION AND LOCATION	DEGREE	COMPLETION DATE	FIELD OF STUDY
University of Guadalajara, Mexico	BA	12/2007	Physical Education and Sports
Queen's University, Canada	MSc	09/2010	Kinesiology and Health Studies
Queen's University, Canada	PhD	07/2014	Kinesiology and Health Studies
Emory University, Atlanta, Georgia	Postdoctoral	10/2017	Epidemiology

A. PERSONAL STATEMENT

I am an Assistant Professor at the Hubert Department of Global Health at Emory University. My research focuses on implementing proven health interventions in real-world settings, developing tools to inform public health and clinical practice, and building implementation research capacity in low- and middle-income countries. My areas of expertise include implementation science, diabetes epidemiology, lifestyle medicine, behavioral science, and statistical modelling.

I have experience designing, implementing and evaluating physical activity interventions in clinical settings in Canada and Mexico. In Canada, I designed a physician referral intervention that successfully connected clinical practice to a lifestyle education program in the community. In Mexico, I designed an effectiveness-implementation hybrid study to integrate physical activity counselling in primary care settings. My work building implementation research capacity involved delivering and evaluating the NIH-funded (D43TW009135-01A1) Public Health Leadership and Implementation Academy (PH-LEADER) for non-communicable diseases (www.ph-leader.org) that trained over 90 participants from 12 countries in 4 years. Another area of my work involves the development of evidence summaries to inform public health decision making and practice, where I have led a series of systematic reviews and meta-analyses around diabetes prevention interventions. I am also co-principal investigator on the Mexican Physical Activity Report Card, a knowledge translation tool summarizing current evidence around physical activity of children and youth. I am thus well qualified to serve as faculty in the proposed Physical Activity and Lifestyle Master's Program.

1. **Galaviz KI**, Weber MB, Straus A, Haw JS, Narayan KMV, and Ali MK. Global diabetes prevention interventions: a systematic review and network meta-analysis of the real-world impact on incidence, weight and glucose. *Diabetes Care*. 2018;41(7):1526-1534.
2. **Galaviz KI**, Estabrooks P, Jauregui E, Janssen I, Lee RE, Lopez y Taylor J, Ortiz-Hernandez L, Levesque L. Evaluating the effectiveness of physician counseling to promote physical activity in México: an effectiveness-implementation hybrid study. *Translational Behavioral Medicine*. 2017;7(4):731-740. PMID: PMC5684085.
3. **Galaviz KI**, Aguilar-Arroyo M, Gonzalez-Casanova I, Gonzalez-Villalobos MF, Jauregui A, Jauregui-Ulloa E, Perez-Rodriguez M, Pacheco S, Retano R, and Lopez-Taylor J. Results from Mexico's 2016 report card on physical activity for children and youth. *Journal of Physical Activity and Health*. 2016;13(11):S206-S212.
4. **Galaviz KI**, Narayan KMV, Manders O, McFarland DA, Goenka S, Torres-Mejía G, Reddy KS, Lozano PR, Magaña-Valladares L, Prabhakaran D, and Ali MK. The public health leadership and implementation academy (PH-LEADER) for non-communicable diseases. *Health Systems and Reform*. 2016;2(3):222–228. PMID: PMC6053278.
5. **Galaviz KI**, Levesque L, and Kotecha J. Evaluating the effectiveness of a physical activity referral scheme among women. *Journal of Primary Care and Community Health* 2012;4(3)167–171.

B. RESEARCH AND/OR PROFESSIONAL EXPERIENCE

Positions

2007 - 2008	Research Assistant, University of Guadalajara, Mexico
2008 - 2010	Teaching Assistant and MSc student, Queen's University, School of Kinesiology and Health Studies, Canada
2010 - 2014	Research Assistant and PhD student, Queen's University, School of Kinesiology and Health Studies, Canada
2013 - 2014	Research Coordinator, Queen's University, School of Kinesiology and Health Studies, Canada
2014	Course Instructor, Queen's University, School of Kinesiology and Health Studies, Canada
2014 - 2017	Postdoctoral Fellow, Hubert Department of Global Health, Rollins School of Public Health, Emory University

Honors

2007	Graduated Summa Cum Laude in the Physical Education and Sports Bachelor in Arts program, Universidad de Guadalajara, Mexico
2008 - 2012	IDRC-CAMBIO Award, International Development Research Centre, Canada
2011 - 2014	CONACYT Award for Studies Abroad, Consejo Nacional de Ciencia y Tecnologia, Mexico

Professional Societies and Public Advisory Committees

2010 - 2012	Member, American College of Sports Medicine
2010 - 2014	Member, Society of Behavioral Medicine
2008 - 2014	Volunteer, Heart and Stroke Foundation of Canada
2016 – Present	Member, Exercise is Medicine Global Research and Collaboration Center
2017 – Present	Member, Georgia Center for Diabetes Translation Research

C. CONTRIBUTIONS TO SCIENCE

1. Integrating Physical Activity Interventions in Clinical Practice

One important contribution of my research is the integration of evidence-based physical activity interventions in routine clinical practice. For my master's thesis, I designed a physician referral intervention in Canada, successfully connecting clinical practice to a lifestyle education program in the community. My work showed that physician referral to a community program was effective for increasing physical activity in women and demonstrated that clinical-community linkages were feasible and promising efforts to promote physical activity.

- a) **Galaviz KI**, Levesque L, and Kotecha J. Evaluating the effectiveness of a physical activity referral scheme among women. *Journal of Primary Care and Community Health* 2012;4(3)167–171.

For my doctoral work, I led the development and implementation of the first multi-level, state-wide physical activity intervention implemented in Mexican primary care clinics. This was an effectiveness-implementation hybrid study aimed at assessing the degree to which a training on physical activity counseling reached Mexican primary care physicians, effectively changed their counseling behavior, and resulted in significant changes in patient physical activity behavior.

- b) **Galaviz KI**, Estabrooks P, Jauregui E, Janssen I, Lee RE, Lopez y Taylor J, Ortiz-Hernandez L, Levesque L. Evaluating the effectiveness of physician counseling to promote physical activity in México: an effectiveness-implementation hybrid study. *Translational Behavioral Medicine*. 2017;7(4):731-740. PMID: PMC5684085.

- c) **Galaviz KI**, Jauregui E, Fabrigar L, Latimer-Cheung A, Lopez y Taylor J, and Lévesque L. Physical activity counseling among Mexican physicians: a structural equation analysis of the theory of planned behavior. *International Journal of Clinical Practice* 2015; 69(3)375-83.
- d) Stoutenberg M, **Galaviz KI**, Lobelo F, Joy E, Heath GW, Hutber A, Estabrooks P. A pragmatic application of the RE-AIM framework for evaluating the implementation of physical activity as a standard of care in health systems. *Preventing Chronic Disease*. 2018;15:170344. PMID: PMC5951671.

2. Summarizing Evidence to Inform Public Health Practice and Policy

Another important contribution of my research is the development of evidence summaries to inform public health decision making and practice. I have led a series of systematic reviews and meta-analyses to develop a method to estimate the real-world impact of health interventions that can be derived from calibrating efficacy and effectiveness data. The goal is to develop a tool that can aid policy-makers in determining, a priori, what effect could be achieved for different cost inputs based on different permutations of intervention intensity (i.e., intervention duration, sessions offered, participant contact time) that they can afford.

- a) **Galaviz KI**, Weber MB, Straus A, Haw JS, Narayan KMV, and Ali MK. Global diabetes prevention interventions: a systematic review and network meta-analysis of the real-world impact on incidence, weight and glucose. *Diabetes Care*. 2018;41:1–9.
- b) Haw JS,* **Galaviz KI*** (*co-first authors), Straus AN, Magee MJ, Weber MB, Wei J, Kowalski AJ, Narayan KMV, and Ali MK. Long-term Sustainability of Diabetes Prevention Approaches: A Meta-analysis of Randomized Controlled Trials. *JAMA Internal Medicine*. 2017:177(12). PMID: PMC5820728.

I am co-principal investigator on the Mexican Physical Activity Report Card, a knowledge translation tool summarizing current evidence around physical activity of children and youth. The tool is aimed at accelerating the dissemination of research and evidence-based practice through effective and strategic synthesis and application of knowledge. The Report Card has served as an advocacy mechanism to stimulate debate and inform programs and policy around children physical activity in Mexico.

- c) **Galaviz KI**, Aguilar-Arroyo M, Gonzalez-Casanova I, Gonzalez-Villalobos MF, Jauregui A, Jauregui-Ulloa E, Perez-Rodriguez M, Pacheco S, Retano R, and Lopez-Taylor J. Results from Mexico's 2016 report card on physical activity for children and youth. *Journal of Physical Activity and Health*. 2016;13(11):S206-S212.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1XABA9hKid1kg/bibliography/47084761/public/?sort=date&direction=ascending>

D. RESEARCH SUPPORT

Ongoing Research Support

3P30DK111024 (supplement) Narayan (PI) 09/01/17 – 08/31/19

National Institute of Diabetes and Digestive and Kidney Diseases

Optimizing and Implementing Diabetes Risk Screening in HIV Care

The goals of this study are to develop an HIV-specific diabetes risk screening and to assess its acceptability, clinical applicability, and impact in routine HIV care.

Role: Co-Investigator; recipient Administrative Supplement

No number Colasanti (PI) 05/01/17 – 08/31/18

Georgia Center for Diabetes Translation Research

The Intersection of Chronic Diseases: understanding the care continuum for patients co-affected by HIV and diabetes

The goal of this study is to explore the diabetes care continuum in people living with HIV using data from the U.S. Military HIV Natural History Study.

Role: Co-Investigator

U01AI103408-04 (supplement)

Ali (PI)

06/01/16 – 07/01/18

NIAID

Optimizing diabetes diagnosis and management in HIV-positive individuals

The goals of this study are to evaluate the performance of different diabetes risk scores among HIV+ and HIV- adults and to use the care continuum approach to examine what proportions of patients achieve standard HIV and diabetes treatment goals.

Role: Post-doctoral fellow

Completed Research Support

D43TW009135-01A1

Gonzalez, Reddy and Narayan (PIs)

07/12/12 – 02/28/17

National Institutes of Health, Fogarty International Center

Health Systems and Implementation Sciences Institute for NCDs in South Asia & Latin America

This study seeks to address the systems and research capacity challenges that constrain low- and middle-income countries in their efforts to address the burden of non-communicable diseases.

Role: Post-doctoral fellow

No number

Cunningham (PI)

09/15/15 – 09/14/16

Center of Excellence in Maternal and Child Health Education, Science and Practice Faculty Pilot Research

Adoption of New Lifestyles among Refugee Families: Health Implications of Integration

The goal of this pilot study is to expand research of how lifestyles change as newly arrived immigrant families integrate into their communities of reception, the timing of these changes, and the ways in which healthy integration can be achieved.

Role: Post-doctoral fellow

UWSC7007

Ali (PI)

05/01/13 - 04/30/16

Institute of Health Metrics and Evaluation

Assessing the Impacts of Implementing Diabetes Prevention and Hypertension Control Globally

This study will involve compiling literature and quantitative analyses to develop and validate an efficacy-to-effectiveness conversion and then uses two test cases (diabetes prevention and hypertension control) to estimate the avoidable burdens of disease and mortality worldwide.

Role: Postdoctoral fellow

GIR127075

Levesque (PI)

04/01/13 – 04/30/15

Canadian Institutes of Health Research

Physical Activity Promotion in Mexican Healthcare Settings

The goal of this project is to assess the implementation and impact of physician physical activity intervention to provide evidence for the effects of a state-wide strategy on enhancing physician physical activity promotion practices and ultimately patient physical activity.

Role: Graduate trainee

R13CA162816

Lee (PI)

11/01/11 – 10/31/13

NIH

Multinational Collaboration to Increase Physical Activity in Hispanics

The goal of this project was to identify behavioral and social science research priorities, and develop a long-term collaborative agenda focusing on the problem of physical inactivity and physical activity maintenance across the lifespan of Hispanics, Mexicans and Mexican-Americans.

Role: Graduate trainee