

BIOGRAPHICAL SKETCH

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NAME: Claudio, Luz

eRA COMMONS USER NAME (credential, e.g., agency login): luzclaudio

POSITION TITLE: Tenured Professor and Chief of the Division of International Health

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Universidad de Puerto Rico	BS	05/1984	Biology
Albert Einstein College of Medicine	MS	06/1988	Pathology
Albert Einstein College of Medicine	PhD	06/1990	Neuropathology

A. Personal Statement

My work focuses on three main activities: 1) research on environmental health and health disparities, 2) training and mentoring of new investigators, and 3) creating global health research programs in partnership with developing countries.

Relevant to the proposal submitted here, is my training and mentoring activities, which are extensive and impactful. A central focus of my work as a researcher and mentor has been training students of disadvantaged backgrounds to achieve careers in the medical and the biomedical research fields. One good example has been that I have directed several highly successful Short-term Training Programs for Minority Students (T35 ES07298-15 and 1R25HL108857-06) for over 20 years. I am also the PI of a related program titled: International Exchange Program for Minority Students, which has been continuously funded for 13 years (T37 MD001452-13). Together, these programs have served over 160 minority scholars, most of whom are women. The focus of these programs has been to address health disparities at all fronts.

In addition to my previous track record in training and mentoring, I am co-PI of the Community Research Education and Engagement for Data Science program (CREEDS) (R25EB020393). This training program was submitted in response to RFA-HG-14-008 titled: Courses for Skills Development in Biomedical Big Data Science, part of the Big Data to Knowledge (BD2K) initiative. Through this work, I have helped develop a training program on big data science in an effort to increase the numbers of women and minorities in the field.

In the current proposal, I intend to bring these experiences to bear, by providing mentoring and research experience in order to ensure achievement of the stated aims. Evidence of my capacity to achieve this is my scholarly work leading and evaluating training programs:

1. Claudio L: Increasing minority participation in environmental health sciences. Environmental Health Perspectives 105: 174-176, 1997
2. Claudio L: Reaching out to the next generation of scientists. National Education Association Journal 17: 77-86, 2001
3. Claudio L: Building self-reliance in environmental science: The ITREOH experience. Environmental Health Perspectives 111: A460-463, 2003
4. Peres F, Claudio L. Fifteen years of occupational and environmental health experiences in Brazil, Chile and Mexico: A report from the Mount Sinai School of Medicine ITREOH Program. Am J Industrial Med 56: 29-37, 2013

B. Positions and Honors (selected since 2000)

Positions and Employment

- 1993 - 2000: **Assistant Professor**; Division of Environmental & Occupational Medicine
Department of Community Medicine, Mount Sinai School of Medicine
- 2001 – 2008: **Associate Professor**; Department of Community and Preventive Medicine
Mount Sinai School of Medicine, New York NY
- 2004 – present: **Chief; Division of International Health**
Department of Community and Preventive Medicine
Mount Sinai School of Medicine, New York NY
- 2009 – 2013: **Tenured Associate Professor**, Department of Preventive Medicine
- 2013- present: **Tenured Professor**, Department of Preventive Medicine

Honors and Awards (selected for relevance)

- 2001: **Excellence in the Academy Award**;
National Education Association
- 2003: **Distinguished Visiting Scholar**;
Education Development Center
- 2003: **Profile Highlighted in the Book: Science in the Private Interest, By Sheldon Krinsky**; Rowman & Littlefield Publishing Group, Inc.
The book highlights Dr. Claudio as an example of science in the public interest, Chapter 11, pp. 192 - 195
- 2004: **Equity Champion**;
Educational Equity Concepts presented at the United Nations
- 2007: **Faculty Council Award for Academic Excellence**; Mount Sinai Sch of Med
- 2018: **Award for Outstanding Service to Underserved Communities**;
Mount Sinai Auxiliary Board

Other Experiences

- 2003 – present: ***Environmental Health Perspectives, Journal of NIEHS/NIH*** Contributing Editor
and member of the Editorial Review Board
- 2000 – 2002: **American Academy of Pediatrics; Consortium on Latino Children's Health**
- 2001 – present: ***American Journal of Industrial Medicine***; Contributing Editor
- 2002 – 2003: **Academy of Education Development;**
Advisory Committee on Science Gender and After School
- 2003 – 2005: **National Institutes of Health; Environmental Health Sciences Review
Committee of the National Institute of Environmental Health Sciences.**
- 2003 – 2006: **Healthy Schools Network; Board of Directors**
- 2006 – 2010: **Fogarty International Center, NIH; Advisory Board**
- 2010 – 2012: **National Institute of Environmental Health Sciences, Review Member**
- 2008 – present: **Collegium Ramazzini**: Member of the independent international academy of
experts in occupational and environmental health
- 2012 – present: **Institute of Medicine of the National Academies**
Member of Roundtable on Environmental Health Sciences, Research and Medicine

C. Contribution to Science

I have over 20 years of experience as an independent researcher focusing on using big databases to understand how social and environmental factors affect health disparities. One good example of this is our work in pediatric asthma. It started in 1999, when I used hospitalization data from New York City and Census databases to publish the first paper to clearly show how communities with low socioeconomic status had rates of asthma hospitalizations that were many times higher than communities with high SES. Using geographical information systems helped us create maps that illustrated the relationship between SES and asthma hospitalization rates. These maps were used by policy makers and community organizations to bring attention to the communities that were most affected by this asthma epidemic.

Since then, I have been working to use existing datasets and community-based participatory research strategies to explore how environmental, social and other factors interact to result in health disparities among populations. My trainees and I have used other existing databases and/or original data to further address health disparities. The factors that we have studied have included: race, language barriers, housing quality, special education and access to medical care. Through this and other work, we have cultivated research collaborations with many local and national community-based organizations. Below are examples of peer-reviewed original research selected for relevance from 96 published works.

1. Landrigan PJ, Claudio L: Heart rate variability: A new physiologic marker of autonomic neurotoxicity. *Journal of Pediatrics* 130(5):725-729, 1997
2. Svensson K, Ramirez OF, Peres F, Barnett M, Claudio L. Socioeconomic determinants associated with willingness to participate in medical research among a diverse population. *Contemp Clin Trials* 33: 1197-1205, 2012
3. Stingone JA, McVeigh KH, Claudio L. Association between prenatal exposure to diesel particulate matter and perchlorethylene with children's 3rd grade standardized test scores. *Environmental Research* 148:144-153, 2016
4. Stingone JA, McVeigh KH, Claudio L. Early-life exposure to air pollution and greater use of academic support services in childhood: a population-based cohort study of urban children. *Environ Health* 16:2 doi: 10.1186/s12940-017-0210-z, 2017

Additional publications can be found here:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1TAKB5dIxiJQ7/bibliographahy/48757028/public/?sort=date&direction=ascending>

D. Research Support

Ongoing

NIH/NCMHD (Claudio, L) 07/01/05 – 12/31/18

T37MD001452

International Exchange Program for Minority Students

Training program with Latin American countries particularly Mexico, Chile and Brazil. Minority students from the US are paired with mentors in these countries who have themselves been trained in public health research.

5 R25 EB020393 (Kovatch, P, Claudio L, Sharp A) 9/30/2015 – 6/30/2018

NIH/NIBIB

Community Research Education and Engagement for Data Science (CREEDS)

To create courses and training programs in the use of data science in health research and to increase the numbers of minority and women researchers using data science.

1 U2R TW 010088

(Woskie, S, Claudio L subcontract) 10/1/2015 – 9/30/2020

FIC/NIH

GEOHealth Hub: Improving Agricultural Health in Southeast Asia- Thailand

To provide environmental and occupational health training for researchers and health care providers from Thailand and other countries in Southeast Asia.

NIH/NHLBI

(Claudio, L)

06/01/2011 – 07/31/2021

1R25HL108857

Short-term Research Training Program for Minority Students

To nurture minority students' interests in science and medicine by enhancing their research capacity through multidisciplinary education using community-based strategies to reduce cardiopulmonary disease.

Completed Research Support (selected for relevance over the past five years)

1 D43 ES 018745

NIH/FIC/NIEHS

(Claudio, L)

9/1/2009 – 8/31/2016

Training in Environmental Health to Reduce Chronic Disease in Latin America

The goal of this training grant is to train health professionals in Latin America to implement research and service programs that identify, treat and prevent chronic disease of environmental origin.

1 D43 TW00640

(Claudio, L)

5/01/95 – 2/29/2013

NIH/FIC

Mount Sinai International Training and Research in Environmental and Occupational Health (ITREOH)
Fogarty International Center

Ford Foundation

1075-0501-04

(Claudio, L)

03/01/07 – 02/28/11

Study of the Relative Contribution of Socioeconomic Status and Race/Ethnicity on Health Outcomes in Children.

To assess factors that determine health disparities in different populations.