

BIOGRAPHICAL SKETCH

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NAME: Gonzalez Casanova, Ines

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

POSITION TITLE: Research Assistant Professor

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
School of Nutrition and Dietetics, Mexico	B.S	11/2006	Nutrition and Dietetics
Emory University, Atlanta, GA	Ph.D.	05/2013	Biological and Biomedical Sciences (Nutrition)
Emory University, Atlanta, GA	Postdoctoral	11/2018	Epidemiology

A. Personal Statement

I am an Assistant Professor at the Hubert Department of Global Health at Emory University. I have over 10 years of experience teaching community nutrition and epidemiology. Currently, I teach a course on diet and chronic diseases and a class on proposal development for the Masters in Public Health program at the Emory University Rollins School of Public Health. I also serve as thesis, practicum, and research rotation mentor in this program. In terms of public health research, I am a nutritional epidemiologist with expertise assessing the long-term impacts of early exposures on child health and development. I have worked in various public health and epidemiology projects in different countries including Mexico, Colombia, Vietnam, Guatemala, Kenya and the US, and have gained fieldwork experience and strong analytic skills. I have led data management and analysis for these projects, and co-authored more than 25 peer-reviewed publications in the field. As part of my research, I apply epidemiologic methods to understand the role of nutrition and other biological exposures during pregnancy and early development on maternal and child health. Moreover, I have led complex statistical analysis of national datasets or cohort studies in Mexico and Colombia to understand the predictors of childhood obesity. For example, I used Latent Class Growth analysis techniques to assess trajectories of cognitive development in Mexican children and how those relate to prenatal exposure to environmental contaminants. Similarly, I used multilevel modeling techniques to assess correlates of childhood obesity at the individual, familial and community level. I also collaborate in the Mexican Physical Activity Report Card with Drs. Lopez y Taylor, Jauregui, and Galaviz.

- Gonzalez-Casanova I**, Rzehak P, Stein AD, Garcia Feregrino R, Rivera Dommarco JA, Barraza-Villarreal A, Demmelair H, Romieu I, Villalpando S, Martorell R, Koletzko B, Ramakrishnan U. Maternal single nucleotide polymorphisms in the fatty acid desaturase 1 and 2 coding regions modify the impact of prenatal supplementation with DHA on birth weight. *The American journal of clinical nutrition*. 2016;103(4):1171-8. Epub 2016/02/26. doi: 10.3945/ajcn.115.121244. PubMed PMID: 26912491; PMCID: PMC4807702.
- Pearce BD, Nguyen PH, **Gonzalez-Casanova I**, Qian Y, Omer SB, Martorell R, Ramakrishnan U. Pre-pregnancy Maternal Plasma Cytokine Levels and Risks of Small-for-Gestational-Age at Birth. *J Matern Fetal Neonatal Med*. 2016:1-18. doi: 10.3109/14767058.2016.1156669. PubMed PMID: 26902393.
- Gonzalez-Casanova I**, Stein AD, Hao W, Garcia-Feregrino R, Barraza-Villarreal A, Romieu I, Rivera JA, Martorell R, Ramakrishnan U. Prenatal Supplementation with Docosahexaenoic Acid Has No Effect on Growth through 60 Months of Age. *J Nutr*. 2015. doi: 10.3945/jn.114.203570. PubMed PMID: 25926416.
- Gonzalez-Casanova I**, Stein AD, Barraza-Villarreal A, Feregrino RG, DiGirolamo A, Hernandez-Cadena L, Rivera JA, Romieu I, Ramakrishnan U. Prenatal exposure to environmental pollutants and child development trajectories through 7 years. *International journal of hygiene and environmental health*. 2018;221(4):616-22. Epub 2018/04/28. doi: 10.1016/j.ijheh.2018.04.004. PubMed PMID: 29699913; PMCID: PMC5988245

B. Positions and Honors

Positions and Employment

2004-2005	Clinical Dietitian, Unilever Mexico City, Mexico
2005-2006	Fellow, Department of Community Nutrition, Instituto Nacional de Salud Publica (INSP), Mexico
2006-2008	Junior Researcher/ Fieldwork supervisor , Instituto Nacional de Salud Publica (INSP), Mexico
2007-2008	Lecturer, Universidad Iberoamericana, Mexico
2009-2010	Fellow, Division of Nutrition, Physical Activity, and Obesity (DNPAO), Center for Disease Control, Atlanta, GA
2011	Instructor, Global Health, Culture and Society, Emory University, Atlanta, GA
2012-2013	Research Assistant, Center for Community Partnerships, Emory University, Atlanta, GA
2013-2018	Postdoctoral Fellow, Rollins School of Public Health, Emory University, Atlanta, GA

Other Experience and Professional Memberships

2011-present	Member, American Society for Nutrition
2010-present	Member, the Obesity Society
2011-2015	Member, International Society for Physical Activity and Public Health
2010-2012	Student Representative, Global Nutrition Council, American Society for Nutrition
2011-2012	Voting Member, Presidential Commission for the status of Race in the University, Emory University
2015-2017	Member, American Public Health Association
2015-present	Member, Society for Epidemiologic Research

Honors

2008-2012	CONACYT Award for Studies Abroad, Science and Technology National Council, Mexico-covered my tuition for 5 years to do my PhD
2012	Award for best student poster presentation, Epidemiology Section, American Society for Nutrition, Experimental Biology, San Diego 2012
2012	Best presentation from a developing country, International Conference of Physical Activity and Public Health, Sydney 2012
2015	Young Scholar/Researcher Award, Global Nutrition Council, American Society for Nutrition, Experimental Biology 2015
2015	Thrasher Career Development Award, Thrasher Research Fund

C. Contribution to Science

1. Epidemiology and assessment of childhood obesity in Latin America

My initial research focused on assessing the epidemiology and predictors of overweight and obesity in Latin America using complex statistical methods. I conducted the first analysis of childhood obesity in Latin America using multilevel models to assess the complex interactions among individual, familial, and community factors in the etiology of childhood obesity using data from two national nutrition surveys.

- a. **Gonzalez-Casanova I**, Sarmiento OL, Pratt M, Gazmararian JA, Martorell R, Cunningham SA, Stein AD: Individual, family, and community predictors of overweight and obesity among Colombian children and adolescents. *Preventing Chronic Diseases* 2014, 11:E134.

Using data from these surveys, I also described BMI growth patterns among Colombian children and demonstrated that there might be misclassification of overweight or obesity depending on the reference used (CDC, WHO, or IOTF) and the underlying growth patterns of the target population.

- b. **Gonzalez-Casanova I**, Sarmiento OL, Gazmararian JA, Cunningham SA, Martorell R, Pratt M, Stein AD: Comparing three body mass index classification systems to assess overweight and obesity in children and adolescents. *Pan-American Journal of Public Health* 2013, 33:349-355.

2. *FADS* genotype, prenatal supplementation with Omega-3 fatty acid DHA, and child growth and development

I led the first study to demonstrate that maternal *FADS* genotype modified the impact of prenatal supplementation with DHA on infant birthweight using data from the NIH-funding Prenatal Omega-3 Supplementation on Child Growth and Development randomized controlled trial (POSGRAD).

- a. **Gonzalez-Casanova I**, Rzehak P, Stein AD, Garcia Feregrino R, Rivera Dommarco JA, Barraza-Villarreal A, Demmelmair H, Romieu I, Villalpando S, Martorell R, Koletzko B, Ramakrishnan U. Maternal single nucleotide polymorphisms in the fatty acid desaturase 1 and 2 coding regions modify the impact of prenatal supplementation with DHA on birth weight. *The American journal of clinical nutrition*. 2016;103(4):1171-8. Epub 2016/02/26. doi: 10.3945/ajcn.115.121244. PubMed PMID: 26912491; PMCID: PMC4807702.

Using data from the POSGRAD study, I also assessed the impact of the supplement on child growth and cognitive development through 5 years.

- b. **Gonzalez-Casanova I**, Stein AD, Hao W, Garcia-Feregrino R, Barraza-Villarreal A, Romieu I, Rivera JA, Martorell R, Ramakrishnan U. Prenatal Supplementation with Docosahexaenoic Acid Has No Effect on Growth through 60 Months of Age. *J Nutr*. 2015. doi: 10.3945/jn.114.203570. PubMed PMID: 25926416.
- c. Ramakrishnan U, **Gonzalez-Casanova I**, Schnaas L, DiGirolamo A, Quezada AD, Pallo BC, et al. Prenatal supplementation with DHA improves attention at 5 y of age: a randomized controlled trial. *Am J Clin Nutr*. 2016;104(4):1075-82.

Complete List of Published Work in MyBibliography:

https://www.ncbi.nlm.nih.gov/sites/myncbi/ines.gonzalez_casanova_soberon.1/bibliography/56948213/public/?sort=date&direction=descending

D. Additional Information: Research Support and/or Scholastic Performance

1 R03 HD087606-01A1; NIH Ramakrishnan (PI) 04/01/17-03/31/19

The role of *FADS* genotype on prenatal DHA supplementation and child growth and development

To assess the role of genotype as effect modifier of a prenatal DHA supplementation trials on development.

Thrasher Research Fund Omer (PI) 05/01/2014 – 10/31/2019

Efficacy and Immunogenicity of Tdap Immunization of Pregnant Women for Preventing Pertussis in Early Infancy

A randomized, blinded, controlled, phase III vaccine trial of maternal Tdap vaccination during the third trimester of pregnancy in Guatemala. Role: Epidemiologist, Project director

No Number (NCE) Kotloff (PI) 09/01/17-12/31/18

Bill and Melinda Gates Foundation / University of Maryland

Rotavirus Impact Studies

The Emory team will work with the VIDA project led by University of Maryland to develop and implement the analysis of nutrition related data. Role: Epidemiologist

No number; BMGF / Cornell University Pingali (PI) 12/01/15-11/30/19

Technical Assistance and Research for Indian Nutrition and Agriculture (TARINA)

The Emory team helps develop, validate and support integration of validated metrics for the TARINA project. Role: Epidemiologist

1R01HD075784-01A1; NIH Stein (PI) 04/10/14 - 03/31/19

Early childhood nutrition and adult metabolomic and cardiometabolic profiles

To test the hypothesis that improvements in early-life nutrition can attenuate the development of risk through impacts on the metabolomic and cardiometabolic profile.

Role: Epidemiologist; Project Director

Completed Research Support

Thrasher Research Fund Gonzalez-Casanova (PI) 01/01/15-7/31/18

Early exposure to environmental contaminants, home stimulation, and child cognitive development trajectories

The objective of this proposal is to assess the relative importance of prenatal exposure to environmental contaminants and the home learning environment on child development trajectories in explaining the known association between SES and child development in an urban setting in Mexico.

Role: PI

No number; Micronutrient Initiative

Ramakrishnan (PI)

03/21/11-8/31/17

Impact of Pre-pregnancy Micronutrient Supplementation on Maternal and Child Outcomes

This is a RCT of preconceptional micronutrient supplementation among women of reproductive age in Vietnam that evaluates the effects on birth outcomes, maternal and infant iron status, and offspring growth and development through 2 years of age.

Bill & Melinda Gates Foundation (OPP1120377)

Omer (PI)

09/30/2015 – 05/31/2018

Creating evidence base for determinants of maternal immunization acceptance

Develop an evidence base for the determinants of maternal vaccine acceptance to inform future maternal vaccination demand creation strategies in low- and middle- income countries.