# Luis Alexis Rodríguez Cruz

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## EDUCATION

**Ph.D. student in Food Systems** August 2017 –
University of Vermont
Advisor: Dr. Meredith T. Niles

**Certificate of Graduate Study in Agroecology** January 2019 –
Agroecology and Livelihoods Collaborative, University of Vermont

**M.S. in Food Science and Technology** December 2018
University of Puerto Rico at Mayagüez
Thesis: *Food Safety Knowledge, Attitudes, and Practices Amongst Small Scale Commercial Fishermen of Western Puerto Rico*.
Advisor: Dr. Fernando Pérez-Muñoz
Graduate Committee: Dr. María del Carmen Rodríguez-Rodríguez & Dr. Robinson Rodríguez-Pérez

**B.S. in Biology with sub-concentration in Biotechnology** 2014
University of Puerto Rico at Ponce, *Cum Laude*

## RESEARCH INTERESTS

• *Food security, climate change, agricultural resilience, food systems, Caribbean & Puerto Rican studies, island food systems, agroecology, trade and public policy, extension & outreach, and food culture.*

## ONGOING RESEARCH PROJECT

• *Understanding Puerto Rican Farmers' Experiences with Climate Change and Hurricane Maria*.

- Objective: Assess drivers and barriers to climate change adaptation, specific to extreme events, and its implications for food security and resiliency outcomes among Puerto Rican farmers.
- Developed survey, and established a collaboration initiative with the Extension Service of the University of Puerto Rico at Mayagüez. Extension agents surveyed farmers across Puerto Rico in 2018 (n = 405, 87% response rate).
- Current status: Data was entered, and briefs were prepared (in English and Spanish) to highlight findings and key descriptive results. Further statistical analysis will proceed to (1) understand how climate change perceptions relate to adaptation behaviors and motivation, (2) factors that impacted farmers' food security levels, and (3) comprehend how resiliency levels relate to sociodemographic and farm characteristics.

## RESEARCH & PROFESSIONAL EXPERIENCE

**Research Consultant** November 2018 –

Vermont Caribbean Institute, Burlington, Vermont

• Provided consulting on climate change adaptation workshops for a collaborative project between the Vermont Caribbean Institute and the *Unidad Presupuestaria de Servicios Ambientales* (Baracoa, Guantánamo, Cuba) titled *Strongly Prepared for Climate Change: Community-based Adaptation and Resiliency Planification*.

**Research Assistant** August 2017 –

Department of Nutrition and Food Sciences, University of Vermont

Assistant to Dr. Meredith T. Niles

• Project: *Assessing the Cumulative Impact of Policy Stacking on Vermont farmers*.

- Prepared data sheets for coding and statistical analysis.
- Qualitative analysis of transcripts

**Research Assistant** 2016 – 2017

Extension Service, University of Puerto Rico at Mayagüez

Assistant to Dr. María del Carmen Rodríguez-Rodríguez

• Project: *Development of Culturally-Sensitive-Age-Appropriate Nutrition Education Materials for Childhood Obesity Prevention in Puerto Rico*. (USDA NIFA-AFRI)

• Conducted 3 focus groups (~11 children each). Performed 5 verbatim transcriptions, and analyzed them through content analysis. Assessed current barriers on acquiring healthy food, promoting physical activity, and on healthy eating perceptions among Puerto Rican parents and children.

**Biology Assistant** 2014

Fisheries Division of the Department of Agriculture, San Juan, PR.

Supervisor: Salvador Coleman Tió

• Conducted in person and telephoned surveys (~20), organized meetings across Puerto Rico (~5), and developed an updated registry of the fisheries of the Puerto Rico Department of Agriculture.

**Undergraduate Researcher** 2014

Department of Biology, University of Puerto Rico at Ponce

Assistant to Dr. José G. Rodríguez

• Project: *A Comparison of Two Genetic Populations of Atlantea tulita*.

• Gathered field data (caterpillars) in two locations in Puerto Rico (Maricao and Quebradilla), and performed genetic tests (e.g. DNA amplification, Maximum Likelihood, etc.) of Cytochrome Oxidase I to understand the relationship between two extant populations of *Atlantea tulita*

**Volunteer Assistant** 2012 –2013

AIDS Program of the Ponce School of Medicine and Health Sciences, Ponce, PR.

Assistant to Dr. Qiyi Tang

• Performed techniques such as cloning using the Bacterial Artificial Chromosome, Overlapping PCR, Electroporation, and others to understand the roles of different genes in Human cytomegalovirus.

**Intern** 2012

Tropical Agriculture Research Station, USDA Agricultural Research Service, Mayagüez, PR

Mentor: Timothy Porch, Ph.D.

• Project: *Characterization, Conversion, and Improvement of Common Bean Germplasm*.

• Performed genetic techniques (e.g. PCR, gel electrophoresis), developed a photographic database for tepary beans, and carried out field work (e.g. virus inoculation, data analysis on-site).

## TEACHING EXPERIENCE

**Teaching Assistant** 2017 –

Department of Nutrition and Food Sciences, University of Vermont

• Basic Concepts of Food Laboratory (NFS 054) (Spring Semester 2018)

- Instructor of two laboratory sessions (12 and 16 students each).
- Intertwined culinary skills with food science and technology.

• Food Microbiology Laboratory (NFS 213) (Fall Semesters 2017, and 2018)

- Instructor of two laboratory sessions (16-20 students each).
- Prepared laboratory materials: media cultures, sanitation of equipment, etc.

**Teaching Assistant** 2014 – 2017

Department of Biology, University of Puerto Rico at Mayagüez

• Human Anatomy and Physiology Laboratory (BIOL 3716) (2015-2018)

- Instructor of 2-3 laboratory sessions per semester (15-20 students each).
- Prepared laboratory materials: dissection organs, anatomical schemes, etc.
- Incorporated experiential learning techniques, as well as the arts.

• Biological Sciences Laboratory (CIBI 3032) (2014 – 2015)

- Instructor of 2-3 laboratory sessions per semester (15-20 students each).
- Assisted Mr. Donato Seguí, coordinator of the laboratory, in leading TA meetings.
- Incorporated an interdisciplinary approach to satisfy the diverse interests of students.

## PEER-REVIEWED PUBLICATIONS

### Research

1. Robinson Rodríguez-Pérez, PhD, Nancy Correa-Matos, PhD, RDH, LND, Angélica Valdés-Valderrama, MS, **Luis Alexis Rodríguez-Cruz, MS**, María C. Rodríguez, PhD. Barriers to Healthy Eating Adolescents in Puerto Rico: A Qualitative Study of Parents and Child Perceptions Regarding Healthy Eating Patterns. *Journal of Nutrition and Education Behavior*. https://doi.org/10.1016/j.jneb.2018.10.002

### Non-research

1. **Luis Alexis Rodríguez Cruz** (2018) From Ocean to Table: Integrating Marine and Coastal Food Systems into Food Studies. *Cite This*, a special edition of the *Graduate Journal of Food Studies*. 5(2). https://gradfoodstudies.org/2018/12/11/from-ocean-to-table/

## LITERARY PUBLICATION

1. *Cuentos color mostaza* (A compilation of short stories) (July 2015) ISBN: 9781514611203

## LITERARY PUBLICATION IN PREPARATION

1. *Era su oficio* (A compilation of short stories).

## AWARDS & FELLOWSHIPS

**Graduate Fellowhips**

• The Gund Institute for the Environment, University of Vermont (2018 – ).

- "The Gund Institute for Environment brings scholars and leaders together to accelerate research, uncover solutions and tackle the world's most pressing environmental issues."

• Borlaug Summer Institute on Global Food Security, 2018. Purdue University, West Lafayette, Indiana.

- One of the 40 accepted graduate students nationwide (United States) interested in "developing a holistic understanding of the conceptual challenges around global food security."

• Yale Ciencia Academy, 2018. Yale University and Ciencia Puerto Rico.

- Successfully completed a competitive year-long career development program for doctoral students (40), across the United States and Puerto Rico, featuring professional development workshops, virtual conversations with successful scientists, career planning, science outreach, networking opportunities, and extensive community building.

• The Caminos Project (USDA-NIFA), Texas State University (October 2016)

- One of 12 graduate students from underrepresented populations in the US, chosen to participate in a multidisciplinary training in the agricultural sciences.

**Graduate Assistantship**

Department of Nutrition and Food Sciences, University of Vermont (2017)

**Awards**

• Honorable Mention in Social Sciences. Eposter Competition of the American Association for the Advancement of Science Annual Meeting (February 2019), Washington, D.C.

• Student Diversity Program of the 2017 USDA's Agricultural Outlook Forum, Washington, D.C.

- One of 10 graduate students selected nationwide (essay competition) for a highly competitive program that exposes students to contemporary agribusiness, future trends, scientific research and agricultural policy.

• Honorable Mention in Poetry. Literary Contest of the University of Puerto Rico at Mayagüez (May 2015)

• Best Presentation and People's Choice Awards. New Food Product Development Competition of the University of Puerto Rico at Mayagüez (November 2014)

## INVITED PRESENTATION, PANEL, AND WORKSHOP

**Panelist.** *Climate Change and Resilience*. Alongside Chathurika Wijewardana, Valens Niyigena, and Saleh Ahmed. Borlaug Summer Institute on Global Food Security. June 13, 2018. Perdue Center for Global Food Security, Perdue University, West Lafayette, Indiana.

**Discussant**. *Peer Mentoring Chat: Isolation and Imposter Syndrome* (webinar). Alongside Sofía Machiavelli-Girón & Liz Hernández. Yale Ciencia Academy. June 12, 2018. Yale University and Ciencia Puerto Rico.
**Invited class speaker**. Basic Spanish, Prof. Marta García Nieves. December 8, 2016. Interamerican University of Puerto Rico, Ponce Campus. Was invited to speak to students about the process of writing *Cuentos color mostaza*.

## ACADEMIC CONFERENCE PRESENTATION

• **Luis Alexis Rodríguez Cruz** & Meredith T. Niles. "Puerto Rican Farmers Psychological Distance of Climate Change Adaptation". *American Association for the Advancement of Science Annual Meeting*. Poster presentation. *Washington, D.C.* February 2019.

## POLICY ENGAGEMENT

**Member**

Puerto Rico Science Policy Action Network (PR-SPAN) (2018 – ).
- A Ciencia Puerto Rico initiative that seeks to motivate Puerto Rican scientists to inform policymakers at all levels on the development and implementation of evidenced-based policies.
• Responsibilities: Policy tracking at the Puerto Rico & Federal levels, writing alerts on policies and action recommendations, blog writer, and social media co-administrator.
• PR-SPAN blog: https://www.cienciapr.org/blogs/pr-span

## CERTIFICATIONS & SKILLS

• Certified in Standard Operating Procedure (SOP) & Standard Sanitizing Operating Procedure (SSOP) (2016)
• Hazard Analysis and Critical Control Points (HACCP) & Good Manufacturing Practices (GMPs)
• Proficiency with:
    • Statistical Analyses in SPSS (proficient), JMP (basic), and R (basic)
    • Survey design and administration
    • Qualitative analysis with NVivo Software
    • Microsoft Office Suite
    • WordPress blog management and design

## OTHER SPOKEN LANGUAGE

Spanish (first language)

## PROFESSIONAL AFFILIATIONS

American Association for the Advancement of Science (AAAS), August 2018 –
Ciencia Puerto Rico, October 2017 –
Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), July 2015 –
βββ National Biological Honor Society, Zeta Kappa Chapter (2010 –)