Luis Alexis Rodríguez-Cruz

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EDUCATION

Ph.D. in Food Systems

January, 2022

University of Vermont

Dissertation: Adaptive Capacity & [un]Natural Disasters: Puerto Rican Farmers' Adaptation and Food

Security Outcomes after Hurricane Maria.

Advisor: Dr. Meredith T. Niles

Committee: Drs. V. Ernesto Méndez, Amy Trubek, and Teresa Mares

Certificate of Graduate Study in Agroecology

2020

Agroecology and Livelihoods Collaborative, University of Vermont

M.S. in Food Science and Technology

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

Committee: Drs. María del Carmen Rodríguez-Rodríguez & Robinson Rodríguez-Pérez

B.S. in Biology with sub-concentration in Biotechnology

2014

University of Puerto Rico at Ponce, Cum Laude

PROFILE AND SCHOLARSHIP STATEMENT

• I am an applied and transdisciplinary scientist and writer, who brings visibility and understanding to food systems issues in the Caribbean and beyond. In general, my work explores human-environmental interactions, from the individual to structural levels, in relation to sustainable agriculture, food security, and human and environmental wellbeing. I do so through applied and participatory work that strives to convene different voices and disciplines, while also engaging in science communication and creative storytelling to facilitate scientific information to different audiences. These are the general workstreams I pursue:

<u>Sustainable food systems and climate adaptation</u>: This line of work aims to generate information, resources, and tools that support farmers, fishers, and agricultural service providers in their decision-making processes related to climate adaptation, sustainable food production, and policy dynamics. <u>Food security, food sovereignty, and disasters:</u> This work seeks to understand how we navigate disruptions in the built and natural environments to produce and access food in the context of compounded shocks. It is grounded in the assertion that disasters are not natural. It also uses interdisciplinary approaches to better understand our relationship to the food system. <u>Vulnerability and natural hazards</u>: Here I engage with public health, NGO, community, and governmental sectors, to work in understanding social determinants of health and wellbeing in relation to natural hazards. This work highlights the role of governance structures on individual outcomes.

APPOINTMENTS

<u>Assistant Professor</u> August 2023 –

Department of Agricultural Technology, University of Puerto Rico at Utuado

- Agroecology (TPAG 3019)
 - Main instructor of the course (26 students).
 - Restructured the syllabus and included new and updated teaching materials.
 - Organized in-class talks and workshops by farmers, researchers, and organizations relevant to course topics (13)
- Senior Capstone Project I: Project Planning and Design (AGSU 4300)
 - Main instructor 13 students).
 - Advises on proposal development (agribusiness, research, and community development)

Research Fellow February 2022 – 2023

Caribbean Climate Hub, International Institute of Tropical Forestry, US Forest Service

- Leads the NRCS-funded project, "Climate Adaptation Guide for Tropical Forestry and Agriculture: Pilot assessments and draft guide development"
 - Developed a methodology for on-farm assessment to determine areas of vulnerability, areas to implement conservation practices, and potential adaptation strategies.
 - Completed 18 farm assessments, 39 informative interviews, established 5 cross-sector partnerships, and catalyzed 10 outreach activities that included presentations and workshops for community, Extension, university, and governmental partners (impacting over 400 people)
 - Led the development of a secondary proposal to the Natural Resource Conservation Service to extend this project to include a secondary phase focused on evaluating the produced resources through a participatory approach. The proposal was fully funded for \$250,000
 - Adapted the USDA Climate Hub's adaptation workbook to the context of Puerto Rico and the Virgin Islands. It includes (1) a practical and culturally-appropriate guide to support decision-making regarding on-farm and forestry adaptation, (2) nine practical climate brief with sector-specific information on climate impacts, adaptation strategies, and specific USDA programs that support those practices and strategies, and (3) two information sheets on actual USDA resources and programs tailored to the Caribbean.
- Contributed to the Caribbean Drought Learning Networking by working in team 1, Drought Impact Reporting / Citizen Science, through the development of communication and outreach activities. Provided technical support and advisory to tasks and activities related to the project, Climate Smart Caribbean
- Co-authored two "Drought Status Update for Puerto Rico and the U.S. Virgin Islands" report, which details drought conditions and impacts, as well as strategies to mitigate and adapt to impacts in working lands.
- Supported day-to-day activities of the Caribbean Climate Hub: science communication and outreach, proposal development, data analyses, among other research-related activities.

Research Assistant 2017 – 2020

Department of Nutrition and Food Sciences, University of Vermont

Assistant to Dr. Meredith T. Niles

- Project: Food access and food security during Coronavirus
 - Built survey on Qualtrics platform and translated to Spanish some parts of the survey.
- Project: Farmers' Perspectives on Water Management and the Sustainable Groundwater Management Act (SGMA)
 - Wrote policy briefs on the results of three California counties.
- Project: Advancing Grass-Fed Dairy: A Whole Systems Approach to Enhancing Productivity, Quality, and Farm Viability in the US.
 - Performed qualitative analysis of transcripts
- Project: Assessing the Cumulative Impacts of Policy Stacking on Vermont Farmers.
 - Prepared data sheets for coding and statistical analysis.
 - Performed qualitative analysis of transcripts.

Teaching Assistant and Laboratory Instructor

2017 - 2020

Department of Nutrition and Food Sciences, University of Vermont

- Basic Concepts of Food Laboratory (NFS 054) (Spring Semesters 2018, and 2020)
 - Instructor of two laboratory sessions (12 and 16 students each).
 - Intertwined culinary skills with food science and technology.
- Fundamentals of Nutrition (NFS 043) (Fall Semester 2019)
 - Graduate TA of the course (206 students)
 - Supervisor of 5 undergraduate TA's
- 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.

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.

<u>Laboratory Instructor</u>

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.

2014 - 2017

- Designed and carried out exams and assessments.
- 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.

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.

RELEVANT CONSULTANCIES

2. USAID Advancing Nutrition, USAID, Washington D.C.

2022 - 2023

- Co-led the development of the project titled, "Understanding Climate Change Interventions Influencing Resilience for Improved Nutrition Outcomes".
- Co-led conceptualizing the evidence review methodology (systematic literature review). Developed a search approach and evidence spreadsheet focused on gray literature of 19 websites of governmental and non-governmental organizations.
- Co-authored the report based on a systematic literature review of existing and emerging peer-reviewed and gray literature, focused on interventions that address nutrition outcomes in relation to climate adaptation and mitigation in Low-and-Middle-Income countries.

1. Caribbean Agroecology Institute, Burlington, Vermont

2018 - 2021

- Provided consulting on program development and evaluation, and on food systems research.
- Developed 5 synthesis documents for outreach and communication purposes about highlights from the conference series, "Resistance & Resilience: Responses to the Climate Crisis from Cuba and Puerto Rico."
- Worked in the logistics regarding the US delegation's participation at the 7th International Encounter of Agroecology, Sustainable Agriculture and Cooperativity of Cuba's National Association of Small Farmers (November 2019, Havana).
- Provided consulting on climate change adaptation workshops for a collaborative project between the Caribbean Agroecology Institute and the *Unidad Presupuestaria de Servicios Ambientales* (Baracoa, Guantánamo, Cuba) titled, *Strongly Prepared for Climate Change: Community-based Adaptation and Resiliency Planning*. (November 2018)

RESEARCH INTERESTS

• Island food systems, natural hazards and working lands, food security and food sovereignty, adaptive capacity and structural vulnerability, agroecology, social-ecological systems, science communication and outreach, Puerto Rican and Caribbean studies, food culture, governance, public health, and public policy.

GRANTS AND DIRECT SUPPORT

Total awarded in grants and direct support: \$1,607,783 (USD)

- 8. Nicolás Gómez Andújar, **Luis Alexis Rodríguez-Cruz**, Alfredo Montañez Acuña, Emmanuel Maldonado, Nathania Martínez, Gerardo Rosa. (2023) <u>Exploring the influence of coastal displacement in accessible seafood for the small-scale fisheries of Culebra, Puerto Rico</u>. University of Maine. Total award: \$11,518.00
- 7. Marysel Pagán Santana, **Luis Alexis Rodríguez-Cruz**, Aníbal López-Correa. (2022) <u>Building Capacity</u>

 <u>Among Community Health Centers to Address Climate Change Impact on Agriculture Workers in US

 <u>Caribbean Territories</u>. USDA NIFA Program: Extension, Education & USDA Climate Hubs Partnership. Total award: \$1,489,000 (Co-PI)</u>
- 6. Jocelyn West, **Luis Alexis Rodríguez-Cruz**, and K. Stephen Hughes (2022) <u>Assessing Social</u>

 <u>Vulnerability to Landslide Hazards in Rural Puerto Rico.</u> Research in U.S. Territories, Tribal Areas, and Rural Communities, Natural Hazards Center. Total award: \$49,764 (Co-PI)
- 5. **Luis Alexis Rodríguez-Cruz**. (2020) <u>Switzer Environmental Fellowship</u>. The Robert and Patricia Switzer Foundation. 2020-2021. Total award: \$15,000
- 4. **Luis Alexis Rodríguez-Cruz.** (2020) <u>Food Systems 4th Year Doctoral Candidate Grant</u>. Graduate College, University of Vermont. Total award: \$31,500
- 3. **Luis Alexis Rodríguez-Cruz**, Bianca Valdés, Luz Cumba García, Puerto Rico Science Policy Action Network. (2020) *Visibilidad y conCiencia en Puerto Rico de cara a las elecciones 2020*. Science Rising Challenge Fund, Union of Concerned Scientists, Washington, DC. *Total Award: \$1,000* (PI).
- 2. Marysel Pagán-Santana, **Luis Alexis Rodríguez-Cruz**, and Yamil López. <u>Puerto Rican Agricultural</u> <u>Resiliency and Sustainable Rural Livelihoods</u>. COVID-19 Working Group for Public Health and Social Sciences Research. (2020) NSF-funded Social Science Extreme Events Research (SSEER) network and the CONVERGE facility, Natural Hazards Center, University of Colorado Boulder. *Total Award: \$1,000* (Co-Lead).
- 1. **Luis Alexis Rodríguez-Cruz** and Amy Trubek. *Food Systems, Mixed-Methods and Archival Research: A Learning and Doing Workshop*. (2020) Food Systems Transdisciplinary Workshop or Proposal Development Grant, University of Vermont Graduate College. *Total Award: \$10,000* (Co-Lead).

PEER-REVIEWED PUBLICATIONS

Research articles

- 4. **Luis Alexis Rodríguez-Cruz**, Nora Álvarez-Berríos, and Meredith T. Niles. (2022) Social-ecological interactions in a disaster context: Puerto Rican farmer households' food security after Hurricane Maria. *Environmental Research Letters*. https://doi.org/10.1088/1748-9326/ac6004. [Español]
- 3. **Luis Alexis Rodríguez-Cruz**, Maya Moore, and Meredith T. Niles (2021) Puerto Rican Farmers' Obstacles Towards Recovery, and Adaptation Strategies after Hurricane Maria: A Mixed-Methods Approach to Understanding Adaptive Capacity. *Frontiers in Sustainable Food Systems*.

https://doi.org/10.3389/fsufs.2021.662918. [Español]

- 2. **Luis Alexis Rodríguez-Cruz** & Meredith T. Niles. (2021) Awareness of climate change's impacts and motivation to adapt are not enough to drive action: A look at Puerto Rican farmers after Hurricane Maria. *PLOS ONE*. https://doi.org/10.1371/journal.pone.0244512. [Español]
- 1. Robinson Rodríguez-Pérez, PhD, Nancy Correa-Matos, PhD, RDH, LND, Angélica Valdés-Valderrama, MS, **Luis Alexis Rodríguez-Cruz, MS**, María C. Rodríguez, PhD. (2018) A Qualitative Study of Puerto Rican Parent and Child Perceptions Regarding Eating Patterns. *Journal of Nutrition and Education Behavior*. https://doi.org/10.1016/j.ineb.2018.10.002

Research articles in revision

1. Meredith T. Niles, Courtney Hammond Wagner, Natalia Aristizabal, Carolyn Hricko, Adam Petrucci, and **Luis Alexis Rodríguez-Cruz**. "Politically engaged and knowledgeable farmers are more likely to support regulatory groundwater policies: Implications from the Sustainable Groundwater Management Act in California." *Accepted at Ecology and Society*.

Comments and book reviews

- 4. Luis Alexis Rodríguez-Cruz (2020) Food in Cuba: the pursuit of a decent meal. *Journal of Food, Culture & Society*. DOI: 10.1080/15528014.2020.1773145.
- 3. Vanessa García Polanco & **Luis Alexis Rodríguez-Cruz** (2019) <u>Decolonizing the Caribbean diet:</u>

 <u>Two perspectives on possibilities and challenges</u>. In a special edition of the *Journal of Agriculture, Food Systems, and Community Development* titled, "*Indigenous Food Sovereignty in North America*". 9(B).
- 2. Luis Alexis Rodríguez-Cruz (2019) Between Two Worlds. Science. 365(6456): 946.
- 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).

RESEARCH REPORTS AND POLICY BRIEFS

- 5. Steep Risks: Assessing Social Vulnerability to Landslides in Rural Puerto Rico (2023) Jocelyn West, Luis Alexis Rodríguez-Cruz, K. Stephen Hughes. Public Health report #34. Natural Hazards Center, University of Colorado, Boulder. English.
- 4. Puerto Rican farmer households' food security after Hurricane Maria (2022) Luis Alexis Rodríguez-Cruz, Nora Álvarez-Berríos and Meredith T Niles. University of Vermont and International Institute of Tropical Forestry. English and Spanish
- 3. Obstáculos para la recuperación de fincas tras María (2021) **Luis Alexis Rodríguez-Cruz**. University of Vermont. <u>Spanish</u>.
- 2. Seafood handling and processing in western Puerto Rico: Challenges and opportunities for commercial fishermen (2020) **Luis Alexis Rodríguez-Cruz**. University of Puerto Rico at Mayagüez. English and Spanish.
- 1. Hurricane Maria's Impacts on Puerto Rican Farmers: Experience, Challenges, and Perceptions (2018) **Luis Alexis Rodríguez-Cruz** & Meredith T. Niles. University of Vermont. <u>English</u> and <u>Spanish</u>.

PUBLIC RESEARCH AND OUTREACH MATERIALS

- 2. *Uso eficiente del agua de riego en fincas de hortalizas y otros cultivos*. [Practical guide for producers]. Gustavo A. Rodríguez, Sofía Macchiavelli Girón, Luis G. Sierra Rivera, **Luis Alexis Rodríguez-Cruz**, Ermita Hernández, and Eric Irizarry. USDA Caribbean Climate Hub, International Institute of Tropical Forestry, UPRM Extension Service. 2023.
- 1. <u>Puerto Rican farmers, Hurricane Maria, and adaptive capacity</u>. [Datasets and survey instruments]. Luis Alexis Rodríguez-Cruz & Meredith T. Niles (2020) University of Vermont. Harvard Dataverse.

PUBLIC WRITING

- 9. Luis Alexis Rodríguez-Cruz (2023, August 8) <u>Puerto Rican farmers should have the opportunity to access USDA programs in Spanish</u>. Yale Climate Connections. [<u>Español</u>]
- 8. Luis Alexis Rodríguez Cruz (2023, March 23) <u>Urge actuar ante la crisis climática: a mantener los</u> <u>embalses</u>. [Urgent action needed to address climate crisis's impacts in Puerto Rico: Let's start with reservoir <u>maintenance</u>] *El Nuevo Día*, p. 37.
- 7. Luis Alexis Rodríguez-Cruz (2022, September 19) <u>In Puerto Rico, Activists Transform Abandoned</u>
 <u>Land to Build Food Sovereignty</u>. [*La transformación de un terreno abandonado para fortificar la*<u>soberanía alimentaria de Puerto Rico</u>] NextCity.
- 6. Luis Alexis Rodríguez-Cruz (2021, March 24) <u>Obstáculos post-María: estrategias futuras para la agricultura</u>. [Obstacles Puerto Rican Farmers Faced after Hurricane Maria: Information for Future Adaptation Strategies]. El Nuevo Día.
- 5. Luis Alexis Rodríguez-Cruz (2021, March 12) <u>Buscando mariposas bajo la luna nueva en El</u>
 <u>Yunque</u>. [Looking for Moths Under the New Moon]. Revista 80 grados.
- 4. Luis Alexis Rodríguez Cruz (2020, March 19) <u>Soberanía alimentaria en tiempos de coronavirus</u>. [The COVID-19 Pandemic and Puerto Rico's Food Sovereignty] El Nuevo Día.
- 3. Luis Alexis Rodríguez-Cruz (2019, August 29) <u>I wanted to join my fellow Puerto Ricans in protest—but I'm far away for my Ph.D.</u> [Quería involucrarme en las protestas del verano, pero me encontraba lejos de Puerto Rico.] Working Life, Science Magazine.
- 2. Luis Alexis Rodríguez Cruz (2019, June 14) *El reto de fortalecer la pesca en Puerto Rico*. [Challenges on Strengthening the Puerto Rican Fishing Sector] *El Nuevo Día*, p. 48.
- 1. Luis Alexis Rodríguez Cruz (2019, March 11) <u>Descontaminar sin atentar contra los viequenses</u>. [Cleaning Vieques Shouldn't Threaten its Citizens nor the Environment] *El Nuevo Día*, p. 52.

LITERARY PUBLICATIONS

- 2. Al otro lado (A compilation of short stories) (March 2023) ISBN: 978-1-64131-737-5
- 1. Cuentos color mostaza (A compilation of short stories) (July 2015) ISBN: 978-1-51461-120-3

ORGANIZED EVENTS AND OUTREACH ACTIVITIES

- 16. "Efficient Use of Irrigation Wate: Adapting to Climate Impacts". Co-organizer (USDA Climate Hub section) and Speaker. Informative presentations with Gustavo A. Rodríguez, Sofía Macchiavelli Girón, and Luis G. Sierra. Agricultural Experimental Station, UPR. Corozal, P.R. Decmber 2, 2023. Workshop (57 participants)
- 15. **Careers in Agriculture**. *Organizer and Co-facilitator*. An activity for high school students, alongside Yahaira Torres Burgos. Luis Muñoz Marín High School, Juana Díaz, P.R. October 19, 2023. <u>Talk.</u> (19 students)
- 14. **Practical Tools to Understand and Facilitate Data and Information Regarding Climate Change Impacts to Puerto Rico and its Agriculture**. *Organizer and Speaker*. This session was part of *Integrating Climate Change and Agriculture to High Schools' Science Classrooms*. University of Puerto Rico at Utuado. May 31, 2023. <u>Workshop</u>. Funded by the National Agriculture in the Classroom Organization. (26 teachers)
- 13. "Efficient Use of Irrigation Wate: Adapting to Climate Impacts". Co-organizer (USDA Climate Hub section) and Speaker. Informative presentations with Gustavo A. Rodríguez, Sofía Macchiavelli Girón, and Luis G. Sierra. Agricultural Experimental Station, UPR. Gurabo, P.R. May 2, 2023. Workshop and Expo. (80 participants)
- 12. "Connecting the USDA Foreign Agricultural Service with the Climate Hubs." Organizer and Speaker. Informative presentations with William Gould, Nora Ávarez-Berríos, and Eva Holupchinski. USDA FAS Sustainability Committee. January 25, 2023. Online meeting. (13 participants)
- 11. "USDA Caribbean Climate Hub's Tools and Resources for Vegetable Growers." Organizer and Facilitator. Information table with Silmarie Crespo. Annual HORT EXPO of the Extension Service. May 21, 2022. Conference and workshop. (75 participants)
- 10. "**Island Food Security and Climate Change**". *Organizer and Moderator*. Panel with Christina Chanes, Marioga Reyes Cruz, Sommer Sibilly-Brown, and Uriyoán Colón Ramos at the 3rd Climate Change in the Caribbean Conference. April 19, 2022. <u>Virtual Panel</u>. (76 participants)
- 9. "Una mirada interseccional al tema de la mano de obra agrícola: Desde la salud pública y la agroecología". [An Intersectional Look to Agricultural Labor: Perspectives from Public Health and Agroecology]. Co-Moderator and Organizer. Puerto Rico Science Policy Action Network Seminar Series. April 7, 2021. Webinar.
- 8. "Undergraduate Research: How and Why?" *Moderator and Co-Organizer*. SACNAS University of Vermont Chapter. February 17, 2021. *Webinar*.
- 7. "<u>Demystifying Grad School</u>." *Presenter and Co-Organizer*. SACNAS University of Vermont Chapter. October 29, 2020. *Webinar*.
- 6. "La movilización comunitaria como modelo para la preparación equitativa a emergencias: Retos y oportunidades para el desarrollo de políticas públicas". [Community Mobilization as a Model for Just Emergency Management: Challenges and Opportunities for the Development of Public Policies] Organizer. Funded by The Science Rising Challenge Fund. October 23, 2020. Webinar.

- 5. "Inclusividad y la equidad en la política, junto con retos y oportunidades para el desarrollo de políticas públicas". [Inclusion and Equity in Politics: Challenges and Opportunities for the Development of Public Policies] Organizer. Funded by The Science Rising Challenge Fund. October 16, 2020. Webinar.
- 4. "<u>Un 101 realista y criollo de las comunicaciones y la ciencia: Retos y oportunidades para el desarrollo de políticas públicas</u>". [A Realist and Culturally-appropriate 101 of Media Communications and Science: Challenges and Opportunities for the Development of Public Policies] *Organizer*. Funded by The Science Rising Challenge Fund. September 25, 2020. <u>Webinar</u>.
- 3. "<u>Pedagogía de la tierra en la escuela y en la comunidad: Retos y oportunidades para el desarrollo de políticas públicas.</u>" [Land Pedagogy at Schools and Communities: Challenges and Opportunities for the Development of Public Policies] *Moderator and organizer*. Funded by The Science Rising Challenge Fund. September 11, 2020. <u>Webinar</u>.
- 2. "<u>Racismo en Puerto Rico: Retos y oportunidades para el desarrollo de políticas públicas</u>". [Racism in Puerto Rico: Challenges and Opportunities for the Development of Public Policies] <u>Moderator and organizer</u>. Funded by The Science Rising Challenge Fund. September 4, 2020. <u>Webinar</u>.
- 1. "Acortando la brecha entre la ciencia, política y medios de comunicación". [Shortening the Gap Between Science, Politics, and the Media] *Presenter, and leadership team*. Funded by the National Science Policy Network (NSPN). San Juan, Puerto Rico. September 6, 2019. <u>Workshop</u>.

INVITED PRESENTATIONS

- 21. <u>Panelist</u>. Presented: "Climate Change Awareness into Action: The Case of Puerto Rican Farmers" in the panel, "<u>Climate Change in Puerto Rico: Public Opinion and Public Engagement</u>"; with Marija Verner, Ada Monzón, and Sara Santiago. Yale Program on Climate Change Communication. December 8, 2023. 20. <u>Guest speaker</u>. Presented: "Sustainability, Food Security and Food Sovereingty, in the Context of Climate Change" with Yahaira Torres Burgos. Luis Muñoz Marín High School (35 students). Juana Díaz, P.R. October 19, 2023.
- 19. <u>Panelist and speaker</u>. Presented: "Vulnerability to Landslides in Puerto Rico: Communicating Risks and Implications for Public Health" with Desireé Bayouth García. *Jornada de comunicación de riesgo y salud pública ante eventos de la naturaleza y desastres*. San Juan, P.R. July 19, 2023.
- 18. <u>Panelist</u>. Presented: "Working with Farmers and Extension in Puerto Rico." USDA Caribbean Climate Hubs All-Hands Pre-meeting' panel: "Conversation on Administering a Regional Hub." Panel alongside Holly Prendeville, Emile Elias, Erin Lane, Karrah Kwasnik, and Clay Pope. October 18, 2022.
- 17. <u>Guest speaker</u>. Presented: "**Areas of Opportunities and Needs for Farmers' Climate Adaptation**". USDA NRCS State Technical Meetings for Puerto Rico and US Virgin Islands. May 18 and 19, 2022.
- 16. <u>Guest speaker</u>. Presented: "Contrasts and Similarities between Food Security and Food Sovereignty". Industrial Biotechnology Students Association, University of Puerto Rico at Mayagüez. March 8, 2022.
- 15. <u>Panelist</u>. Participated in the COMPASS Science Communication-organized panel for the Switzer Foundation: "**Understanding Policy Engagement and Communication**." Panel alongside Kristin Dobbin and Raven Graf. January 14, 2022.

- 14. <u>Panelist</u>. "**Importance and Challenges of Bilingual Science Communication**". USDA Hispanic American Cultural Effort. Earth Day Panel with colleagues from the USDA Caribbean Climate Hub. April 22, 2021.
- 13. <u>Guest speaker and panelist</u>. "Exploring the Intersections of Identity, Agency, and Engagement". Training session for the Leaders for Sea Change Fellows, COMPASS Science Communication. Panel alongside Priya Shukla. April 21, 2021.
- 12. <u>Panelist</u>. **Discussed experience with science communication and advocacy**. COMPASS Policy Communications Training for the Foundation for Food and Agriculture Research Fellows. Panel alongside Switzer Fellows working in agriculture. March 18, 2021.
- 11. <u>Guest speaker</u>. Presented: "Obstacles towards recovery and adoption of adaptation practices after Maria: A look at 405 Puerto Rican farmers". Working Group for Private Forests in Puerto Rico. March 3, 2020. US Forest Service, USDA. San Juan, PR.
- 10. <u>Guest speaker</u>. Presented: "**The role of science communication and outreach in my research**". Institute on the Environment Global Scholars Program. February 22, 2021. University of Minnesota-Twin Cities. Minneapolis, MN.
- 9. <u>Guest lecturer</u>. GEOL 371: Critical Writing in Erath and Environmental Sciences, Prof. Paul Bierman. Presented: "**Publishing a Working Life Piece in Science Magazine**". February 18, 2021. University of Vermont. Burlington, VT.
- 8. <u>Panelist</u>. Presented a short version of "Looking at Puerto Rican Farmers' Food Security and Climate Change Adaption Through the Eye of Hurricane Maria". Panel: *Agricultural Adaptation and Global Food Security: Trends, Needs, Barriers, and Opportunities*. December 8, 2020. American Geophysical Union Fall Meeting.
- 7. <u>Panelist</u>. Presented: "Giving Visibility to the Role of Governance and Power Structures in Food Systems". Panel: *Racial Inequities in Food Systems and Agricultural Training*. Alongside Sarah Huang and Olga Bolden-Tiller. November 13, 2020. National Science Policy Network Annual Symposium.
- Guest lecturer. PSS 212: Advanced Agroecology, Prof. Victor Izzo. Presented: "Beyond the Farm:
 Community Resilience in Eastern Cuba". October 29, 2020. University of Vermont. Burlington, VT.
 Guest lecturer. DESS 8305: Social Health Policy Analysis, Profs. Carmen Vélez and Irene Lafarga Previdi.
- Presented: "The Puerto Rico Science Policy Action Network as a Tool for Graduate Students Interested in Policy and Advocacy". October 7, 2020. University of Puerto Rico, Medical Sciences Campus. San Juan, PR.
- 4. <u>Guest lecturer</u>. NFS 073: Farm to Table: Our Contemporary Food System, Profs. Jean Harvey and Amy Trubek. Presented: "**Small Island Developing States and Climate Change**". December 3, 2018. University of Vermont. Burlington, VT.
- 3. <u>Panelist</u>. Presented:" **Small Island Developing States: Challenges and opportunities for agricultural resilience in a changing climate**". Panel: *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.

- 2. <u>Discussant.</u> *Peer Mentoring Chat:* "**Isolation and Imposter Syndrome**". Alongside Sofia Machiavelli-Girón & Liz Hernández. Yale Ciencia Academy. June 12, 2018. Yale University and Ciencia Puerto Rico.
- 1. <u>Guest speaker</u>. Basic Spanish, Prof. Marta García Nieves. Was invited to speak to students about the process of writing *Cuentos color mostaza*. December 8, 2016. Interamerican University of Puerto Rico. Ponce, PR.

PRESENTATIONS AT ACADEMIC AND PROFESSIONAL MEETINGS

*Presenter

- 13. **Luis Alexis Rodríguez-Cruz***, Jocelyn West, and K. Stephen Hughes. "Vulnerability and Risks to Landslide Hazards in Puerto Rico: A Focus on Farmers". *46th Annual Meeting of the Puerto Rican Society of Agricultural Sciences*. Añasco, Puerto Rico. Oral Presentation. December 2023.
- 12. Jocelyn West*, **Luis Alexis Rodríguez-Cruz**, and K. Stephen Hughes. "Assessing Social Vulnerability to Landslide Hazards in Rural Puerto Rico." Researchers Meeting of the *48th Annual Natural Hazards Research and Applications Workshop*. Broomfield, Colorado. <u>Oral Presentation</u>. July 2023.
- 11. Jocelyn West*, **Luis Alexis Rodríguez-Cruz**, K. Stephen Hughes. "Assessing Social Vulnerability to Landslide Hazards in Rural Puerto Rico." *Research in U.S. Territories, Tribal Areas, and Rural Communities Internal Meeting on Public Health Implications*. Natural Hazard Center and Center for Diseases and Control. Oral presentation. May 2, 2023.
- 10. Nora L. Álvarez-Berríos*, Eva Holupchinski, **Luis Alexis Rodríguez-Cruz**, Dariana Mattei, Silmarie Crespo Vélez, Gabriela Cotto, William A. Gould. "Climate-Smart Caribbean: Efforts to increase drought adaptation and climate literacy in Puerto Rico and US Virgin Islands." *103rd Annual Meeting of the American Meteorological Society*. <u>Oral presentation</u>. January 2023.
- 9. **Luis Alexis Rodríguez-Cruz***, Silmarie Crespo, Nora L. Álvarez-Berríos, Eva Holupchinski, Dariana Mattei Ramos, Gabriela Cotto, Kathleen McGinley, and William A. Gould. "*Una mirada a las investigaciones, colaboraciones, y herramientas desarrolladas por el Centro Climático del Caribe del USDA."* 49th Annual Meeting of the Puerto Rican Society of Agricultural Sciences. Oral presentation. December 2022.
- 8. Luis Alexis Rodríguez-Cruz* and Christian Giardina. "Lessons Learned from the Caribbean and Pacific Regions: Climate Adaptation Guides for Tropical Agriculture and Forestry." *USDA Clima Hubs' All Hands Fall Meeting*. Oral presentation. October 2022.
- 7. Nora L. Álvarez-Berríos*, **Luis Alexis Rodríguez-Cruz**, Eva Holupchinski, Kathleen McGinley, and William A. Gould. "Adaptation lessons from rural communities in Puerto Rico and the US Virgin Islands after hurricanes Irma and Maria: Summarizing challenges and strategies in agriculture and forestry working landscapes." *5th National Adaptation Forum*. <u>Poster presentation</u>. October 2022.
- 6. **Luis Alexis Rodríguez-Cruz***, Nora Álvarez-Berríos, and Meredith T. Niles. "Puerto Rican Farmer Households' Food Security after Hurricane Maria: Rethinking Metrics." *47th Annual Natural Hazards Research and Applications Workshop*. <u>Poster presentation</u>. July 2022.
- 5. **Luis Alexis Rodríguez Cruz*** & Meredith T. Niles. "Looking at Puerto Rican Farmers' Food Security and Climate Change Adaption Through the Eye of Hurricane Maria." *American Geophysical Union Fall Meeting*. Oral presentation. December 2020.

- 4. **Luis Alexis Rodríguez Cruz*** & Meredith T. Niles. "Intended and Actual Adoption of Climate Adaptation Practices after Hurricane Maria". *American Association for the Advancement of Science Annual Meeting*. <u>Poster presentation</u>. *Seattle*, *WA*. February 2020.
- 3. Luis Alexis Rodríguez Cruz*. Farming in an Unincorporated Territory of the United States. Panel presentation: Relocalizing Agriculture in a Transnational World: Place, Markets, and Migration. Alongside Emily Ramsey, Andrea Rissing, Alex Korsunsky, and Debarati Sen as moderator. SANA/SUNTA joint conference. San Juan, PR. May 2019. [paper in absentia]
- 2. **Luis Alexis Rodríguez Cruz*** & Meredith T. Niles. "Hurricane Maria's Impacts on Puerto Rican Farmers: Experience, Perceptions, and Challenger." *University of Vermont's Student Research Conference*. <u>Poster presentation</u>. *Burlington*, *VT*. April 2019.
- 1. **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*. <u>Poster presentation</u>. *Washington*, *D.C.* February 2019.

AWARDS & FELLOWSHIPS

Fellowships

- 9. <u>Public Voices Fellowship on the Climate Crisis</u>. The OpEd Project and the Yale Program on Climate Change Communication (YPCCC). 2023.
- "This Fellowship is part of The OpEd Project's national Public Voices initiative to change who writes history. It is also part of YPCCC's work to diversify and amplify the voices working to build public and political will for climate change action." Almost 500 people applied for this cycle; 20 fellows were chosen.
- 8. <u>USDA-USFS Reducing Climate Risks and Increasing Climate Fellowship Position</u>, ORISE, USDE. 2022.
- 7. Semi-finalist, Mass Media Fellowship, American Association for the Advancement of Science. 2021.
- 6. Switzer Environmental Fellowship. The Robert and Patricia Switzer Foundation. 2020-2021.
- "The Switzer Fellowship offers one-year fellowships to highly talented graduate students in New England and California whose studies and career goals are directed toward environmental improvement and who clearly demonstrate leadership in their field."
- 5. Scientist Sentinels for Civic Engagement and Leadership, COMPASS Science Communication Inc. 2019.
- One of 15 scientists chosen nationwide (US) to "(...) advance the role of science in society, inspire their peers, and support evidence-based decision making at the local level and beyond".
- 4. Graduate Fellow. Gund Institute for the Environment, University of Vermont, Burlington, VT. 2018 2022
- "The Gund Institute for Environment brings scholars and leaders together to accelerate research, uncover solutions and tackle the world's most pressing environmental issues."
- 3. Borlaug Summer Institute on Global Food Security Fellow, Purdue University, West Lafayette, IN. 2018.
- One of the 40 accepted graduate students nationwide (United States) interested in "developing a holistic understanding of the conceptual challenges around global food security."
- 2. Yale Ciencia Academy, Yale University and Ciencia Puerto Rico. 2018.

- 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.
- 1. The Caminos Project Fellow (USDA-NIFA), Texas State University, San Marcos, Texas. 2016.
- One of 12 graduate students from underrepresented populations in the US, chosen to participate in a multidisciplinary training in the agricultural sciences at the 2016 National Conference of the American Association of Hispanics in Higher Education.

Awards

- 9. Angela Batista Award. The Mosaic Center for Students of Color. (April 2021). University of Vermont.
- Awarded to the SACNAS leadership team for staring the first SACNAS chapter at UVM.
- 8. 2021 Grist 50. Fix program. The Grist. (March 2021) Grist Magazine Inc.
- "The Grist 50 is an annual list of emerging leaders from across the U.S. who are working on fresh, real-world solutions to our world's biggest challenges".
- 7. <u>2020 Graduate Research Excellence Award</u>. Recognized by the College of Agriculture and Life Sciences for excelling in research and scholarly accomplishments. (May, 2020) University of Vermont. Burlington, VT.
- 6. <u>Winner in Social Sciences</u>. Student *Eposter* Competition of the American Association for the Advancement of Science Annual Meeting (February 2020), Seattle, Washington.
- 5. <u>Symposium Scholar</u> #InclusiveSciComm Symposium. Funding from the Chan Zuckerberg Foundation. (August 2019) Metcalf Institute, University of Rhode Island. Kingstown, RI.
- 4. <u>Honorable Mention in Social Sciences.</u> Student *Eposter Competition* of the American Association for the Advancement of Science Annual Meeting (February 2019) Washington, D.C.
- 3. Student Diversity Program Winner. USDA's Agricultural Outlook Forum. (February 2017) 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.
- 2. Honorable Mention in Poetry. 2015 Literary Contest (May 2015) University of Puerto Rico at Mayagüez.
- 1. <u>Best Presentation and People's Choice Awards.</u> *New Food Product Development Competition* (November 2014) University of Puerto Rico at Mayagüez.

SELECTED MEDIA INTERVIEWS AND FEATURES

- 8. **El Nuevo Día** (October 15, 2023) <u>A merced de la tierra: más de una tercera parte de los puertorriqueños vive en zonas de alta susceptibilidad a derrumbes</u>. (In print: p. 4-6; <u>video report as well</u>).
- 7. PBS (July 5, 2022) Puerto Rico's Small-Scale Farming Revolution.
- 6. El Nuevo Día. (August 1, 2021; pp. 34-35). A medio camino la recuperación del agro.
- 5. El Nuevo Día. (April 17, 2021; pp. 55). Revista The Grist reconoce a científico boricua.
- 4. The Grist. (March 23, 2021) His research gets to the root of the problem on Puerto Rico's farms.
- 3. <u>In Common Podcast</u>. (March 15, 2021) <u>Food systems, communicating science and taking care of yourself in academia with Luis Alexis Rodríguez-Cruz</u>.

- 2. **Rolling Stone**. (July 23, 2020) Puerto Rico Is Battling a COVID-19 Surge on Top of a Drought.
- 1. <u>AAAS Member Spotlight</u>. (September 20, 2019). <u>How Luis Alexis Rodríguez-Cruz Brings His Culture with Him While Studying Overseas</u>.

INTERNSHIPS AND VOLUNTEER WORK

Past:

8. Volunteer Researcher

2020 - 2022

Caribbean Climate Hub, International Institute of Tropical Forestry, United States Forest Service, United States Department of Agriculture.

- Provided support in data analysis, project development, and grant and research scientific article writing.

7. Agricultural Worker Health and Environmental Justice Intern

Summer 2021

Migrant Clinicians Network. San Juan, Puerto Rico.

- Provided support in project management, data analysis, and outreach communication. Worked in 3 projects related to agricultural emergency management, public health, and food security:
- Mobilizing Communities in Puerto Rico to Meet the Needs of Vulnerable Populations Before, During and After a Natural Disaster, Founded by Bristol Myers Squibb Foundation.
- Exploring Mental Health and Natural Disasters in Agricultural Communities in Puerto Rico, Founded by Southeastern Coastal Center for Agricultural Health and Safety.
- Environmental Education Program on Safe Water and Chemical Management During Disasters, Founded by EPA.

6. Chapter Liaison 2020 – 2021

Society for the Advancement of Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), UVM Chapter.

- Was part of the founding group. Represents the group at the SACNAS US Level, and at the University of Vermont Graduate Student Senate

5. <u>Co-Chair</u> 2020

Puerto Rico Science Policy Action Network (PR-SPAN). Founding member since 2018.

- A Ciencia Puerto Rico <u>initiative</u> that seeks to create a platform for Puerto Rican scientists to access resources and skills that allow them to inform policy and decision-making at all levels, and collaborate with Puerto Rican communities and organizations in the creation and implementation of sound and evidence-based policies.

4. Co-Lead 2020

Social Activities Committee, Agroecology and Livelihoods Collaborative.

3. <u>Undergraduate Researcher</u>

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*.

2. Voluntary Research Assistant

2012 - 2013

AIDS Program of the Ponce Health Sciences University, Ponce, PR.

Volunteer 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.

1. Volunteer Research Assistant

2012

Tropical Agricultural Research Station, Agricultural Research Service, USDA, Mayagüez, PR. Assisted Dr. Timothy Porch.

- 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).

ADVISING EXPERIENCE

- 5. PhD Committee member to Francis Russell (University of Texas at Austin, 2023 present)
- 4. PhD Ad Honorem advisor to Aura Alonso-Rodríguez (University of Vermont, 2022 present)
- 3. PhD *Ad Honorem* advisor Maya Moore (University of Vermont, 2022)
- 2. PhD Ad Honorem advisor Edrick Marrero-Soto (Universidad Interamericana-San Germán, 2022)
- 1. PhD Ad Honorem advisor Milton López-Aponte (Universidad de Puerto Rico-Mayagüez, 2022).

ACADEMIC SERVICE

- 7. Expert participant. Academic Research Workshop to Understand Nutritional Security and Agricultural Production in PR. March, 2023. George Washington University. San Juan, PR.
- 6. Voluntary application reviewer (8 applications). Switzer Environmental Fellowship, Switzer Foundation. February 2023.
- 5. Volunatry application reviewer (8 applications). Switzer Environmental Fellowship, Switzer Foundation. February 2022.
- 4. Student representative in selection committee, Gund Institute for the Environment, University of Vermont. (2021)
- 3. Student representative in curriculum evaluation committee, Food Systems Graduate Program, University of Vermon (2019)
- 2. Student representative in selection committee, Department of Nutrition and Food Sciences, University of Vermon (Fall 2018)
- 1. Student representative in selection committee, Department of Nutrition and Food Sciences, University of Vermon (Spring 2018)

REVIEWER SERVICE

Agriculture and Human Values (2023); PLoS One (2021); Weather, Climate, and Society (2021).

OTHER TRAININGS & SKILLS

• Human Research Protection Foundational Training. US Departament of Health and Human Services (2023)

- Building Better Virtual Events, COMPASS Science Communication (3 hours) (2023)
- Curso de Productorxs y Promotorxs Agroecológicas, Proyecto Agroecológico El Josco Bravo (February-June 2022)
- Social Networks Analysis. CenterStat by Curran-Bauer Analytics (40 hours) (2021)
- Certified in Standard Operating Procedure (SOP), Standard Sanitizing Operating Procedure (SSOP), Hazard Analysis and Critical Control Points (HACCP), and Good Manufacturing Practices (GMPs). University of Puerto Rico at Mayagüez (2016).
- Proficiency with/in:
 - Project/program management, and interdisciplinary teams' management
 - Event management, planning, and organizing
 - Quantitative analyses in STATA, SPSS, JMP (basic), and R (basic)
 - Scientific survey design and administration (in person, online, by phone, and through enumerators)
 - Survey design in Qualtrics and Google Forms
 - · Qualitative analysis with NVivo Software
 - Microsoft Office Suite, CANVA platform, Mural platform, WordPress blog management and design
 - Webinar facilitation and design, online event planning (Microsoft Teams, Zoom, Google Meet, Jetsy)
 - Online education systems (e.g. Moodle)

OTHER SPOKEN LANGUAGE

Spanish (first language)

ACTIVE PROFESSIONAL AFFILIATIONS

Sociedad Puertorriqueña de Ciencias Agrícolas

Ciencia Puerto Rico

2017 Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

2015 -