

FOOD SYSTEMS GRADUATE PROGRAM

10 Year Program Report



INTRODUCTION

As the past two years have demonstrated, the food system is at the center of all of our concerns. Whether we are examining supply chain shortages, the health and safety of essential food and farmworkers, or dramatic increases in food insecurity, the global COVID-19 pandemic has underscored the dire need for critical thinking and action. The University of Vermont Food Systems Graduate Program cultivates students to be adaptable problem solvers and systems thinkers and these kinds of skills and approaches will only become more necessary over the coming years. Our curriculum is designed to inspire and motivate students through a diversity of research methods, transdisciplinary and systems thinking approaches, and reciprocal forms of community engagement. We thrive by teaching and doing research across traditional disciplinary boundaries, asking big questions about big problems. As we look back at what we have accomplished as a program over the past ten years we are even more committed to the leading role we will play in food systems graduate education over the next decade.

As a program, we welcomed our first cohort of graduate students in the fall of 2012, a small group of 5 bright and determined individuals largely from the Northeastern part of the United States. In 2016, we welcomed our first PhD student. A decade later, we now work with students from around the globe, with 24 students pursuing the M.S. and 14 students pursuing the Ph.D. We have graduated 35 M.S. students and 3 Ph.D students, with our alumni working in all sectors of the food system, from doing food systems research for the United States Department of Agriculture to running small diversified CSA farms to coordinating Farm to School programs that benefit farmers and students alike.

Our graduate program is supported by 43 affiliated faculty, coming from six colleges at the University, representing 16 departments and disciplines. As the first university to offer an undergraduate minor and major, M.S, and Ph.D. in Food Systems, UVM is setting the pace for food systems education. We invite you to read this report to learn more about where our program has been and where we are heading.

VISION & MISSION

The University of Vermont, a leader in food systems research, teaching, and outreach was the first institution in the U.S. to offer undergraduate, masters, and doctoral degrees in Food Systems. The graduate program prepares students to address some of the most challenging problems within food systems, from building climate change resilience and reducing food waste, to exploring equitable distribution and fair labor practices.



Diversity, Equity & Inclusion Statement:

The Food Systems Graduate Program at the University of Vermont studies the inter-connected actors and processes in the modern food system, from production through disposal, and the opportunities for closing this loop. Food systems are inherently built on multiple, intersectional inequalities, and as researchers, scholars, practitioners, and community members, we use our diverse methodological and disciplinary orientations to study and address these inequalities.

We hold ourselves accountable, and we will work to amplify the voices of those who have been marginalized as we train future food systems leaders and scholars. We strive for an environment where everyone has a seat at the table, but also seek to challenge and undo the systems that have created an unequal table. We work toward creating a program that fosters diversity, inclusion, equity, and belonging.

LEARNING OBJECTIVES

The overall objectives of the Graduate Program in Food Systems are to provide students with the ability to:

- Adopt a transdisciplinary framework in researching food systems.
- Investigate complexity and interdependence in food systems of varying scope and scale.
- Develop and translate food systems research skills and knowledge to/with the appropriate audience.
- Define research problems and propose research approaches based on knowledge of more than one research method appropriate to various disciplines.
- Identify research problems and possible solutions related to food systems while recognizing relevant communities of scholars and communities of practitioners.
- Communicate clearly and effectively about food systems research and to,
- Create a network of professional and scholarly connections, and contribute to inquiry in their selected area(s) of study.

PROGRAM HISTORY

The Food Systems Graduate Program officially launched in September 2012. At this time, only an MS in Food Systems was offered. The PhD in Food Systems program began in September 2016. The creation of a transdisciplinary, cross-university graduate program was part and parcel of a concerted effort to make research, teaching and outreach efforts at the University of Vermont more responsive and reflective of complex changes in food production and consumption practices over the past 50 years. Thus, although the MS and PhD programs were first in the nation in terms of formal and organized graduate programs, they emerged from a longer initiative at the University of Vermont. The early efforts to pivot a number of disparate initiatives into a more singular one under the umbrella of food systems were led by several administrators whose responsibilities intersected with elements of the contemporary food system: John Bramley (Animal Science), Rachel Johnson (Nutrition), Jean Harvey (Nutrition), Doug Lantagne (Extension), Cynthia Belliveau (Continuing Education). Resources were committed to building momentum around the central notion of “food systems issues” rather than the more compartmentalized “farming practices”, “consumer habits” and such. The problems and solutions required more integrated approaches. In these days, the focus was within the College of Agriculture and Life Sciences. Some of the early commitments included an Aiken Lecture, small research grant opportunities, the creation of an undergraduate cross-college food systems minor, and several new faculty hires whose research and teaching interests were aligned with food systems. Deb Neher (at that time chair of Plant and Soil Sciences), Jean Harvey (at that time chair of the Nutrition and Food Sciences department) and Jane Kolodinsky (at that time chair of CDAE) created numerous departmental initiatives to support a shift to a coordinated approach to food systems. This included applying for a USDA grant to help support the creation of a cross-college transdisciplinary MS in Food Systems. Jane Kolodinsky and Amy Trubek were awarded the grant in 2009 and the work to create and launch the program began.

PROGRAM HISTORY

Just as the Food Systems graduate program was going through the final approvals in the Graduate College, the University's grand initiative to create spires of excellence, to try to create greater focus on certain integrated areas of inquiry, was in process and Food Systems was one of three areas of focus chosen by the President and Provost. This led to the broadening of the scope of influence of the MS in Food Systems, and it was decided that the program would be housed in the Graduate College and also have ongoing administrative support. Faculty from around the university and not just the College of Agriculture and Life Sciences would now be encouraged to participate through teaching, graduate student mentoring and transdisciplinary research efforts. Amy Trubek was appointed (by both the Dean of the Graduate College and the Dean of the College of Agriculture and Life Sciences) to be the founding Director of the Food Systems Graduate program. The first cohort of 5 students was enrolled in September 2012, and during the 2012-2013 academic year a group of 10 dedicated faculty members from across the UVM campus worked diligently to create a governance and administrative structure for a truly cross-university and transdisciplinary Food Systems program.

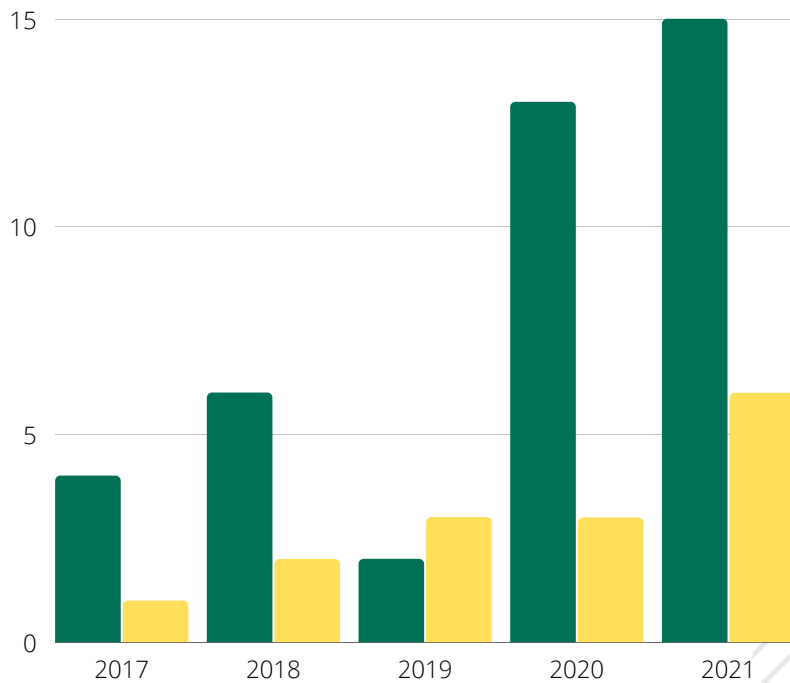
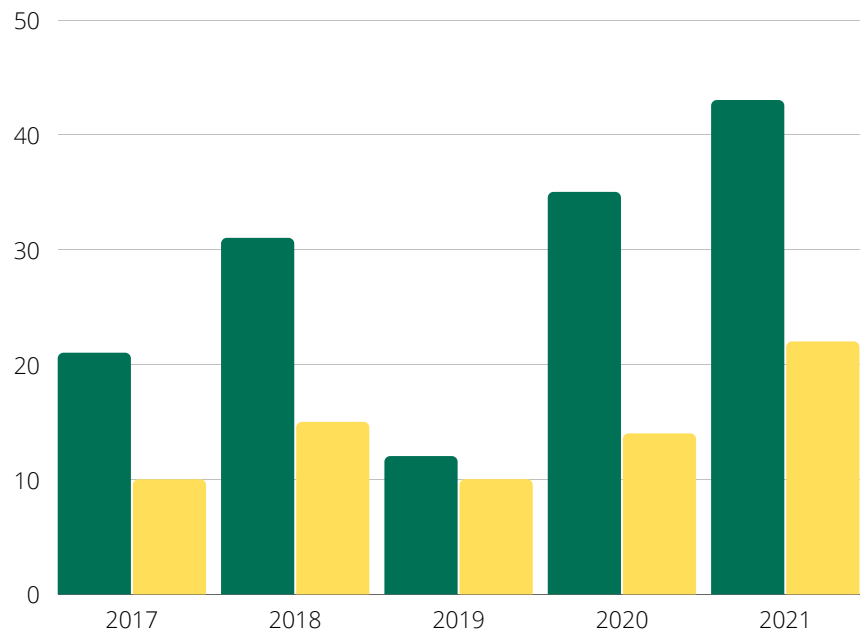
Amy Trubek

Chair, Nutrition & Food Sciences

Former Program Director, Food Systems Graduate Program

BY THE NUMBERS

Applications



Enrolled Students

*Green represents enrollment in the MS and yellow is PhD enrollment.

PROGRAM FACULTY

We have 43 faculty from 16 departments and 6 colleges across campus.

Dan Baker, Community Development & Applied Economics

John Barlow, Animal and Veterinary Sciences

Robert Bartlett, Political Science

Emily Belarmino, Nutrition and Food Sciences

Linda Berlin, Nutrition and Food Sciences

Farryl Bertmann, Nutrition and Food Sciences

Pablo Bose, Geography

Lisa Chase, Extension

Yolanda Chen, Plant and Soil Sciences

David Conner, Community Development & Applied Economics

Rocki Lee DeWitt, Grossman School of Business

Tyler Doggett, Philosophy

Andrea Etter, Nutrition and Food Sciences

Joshua Farley, Community Development & Applied Economics

Rachael Floreani, Mechanical Engineering

Gillian Galford, Rubenstein

Bernice Garnett, Education and Social Services

John Gennari, English

Sabrina Greenwood, Animal and Veterinary Sciences

Jean Harvey, Nutrition and Food Sciences

Sarah Heiss, Community Development & Applied Economics

Stephanie Hurley, Plant and Soil Sciences

Simon Jorgenson, Education

Paul Kindstedt, Nutrition and Food Sciences

Chris Koliba, Community Development & Applied Economics

Jane Kolodinsky, Community Development & Applied Economics

Jana Kraft, Animal and Veterinary Sciences

Teresa Mares, Anthropology

Cristina Mazzoni, Italian

Ernesto Mendez, Plant and Soil Sciences

Scott Merrill, Plant and Soil Sciences

Cheryl Morse, Geography

Deborah Neher, Plant and Soil Sciences

Meredith Niles, Nutrition and Food Sciences

Elizabeth Pinel, Psychological Sciences

Lizzy Pope, Nutrition and Food Sciences

Travis Reynolds, Community Development & Applied Economics

Julie Smith, Animal and Veterinary Sciences

Dan Tobin, Community Development & Applied Economics

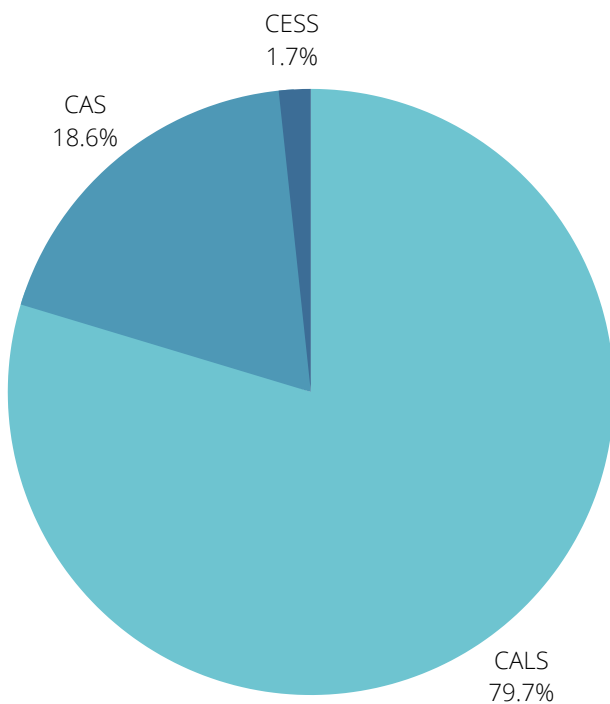
Amy Trubek, Nutrition and Food Sciences

Mark Usher, Classics

Eric Bishop-von Wettberg, Plant and Soil Sciences

Asim Zia, Community Development & Applied Economics

FACULTY ADVISING

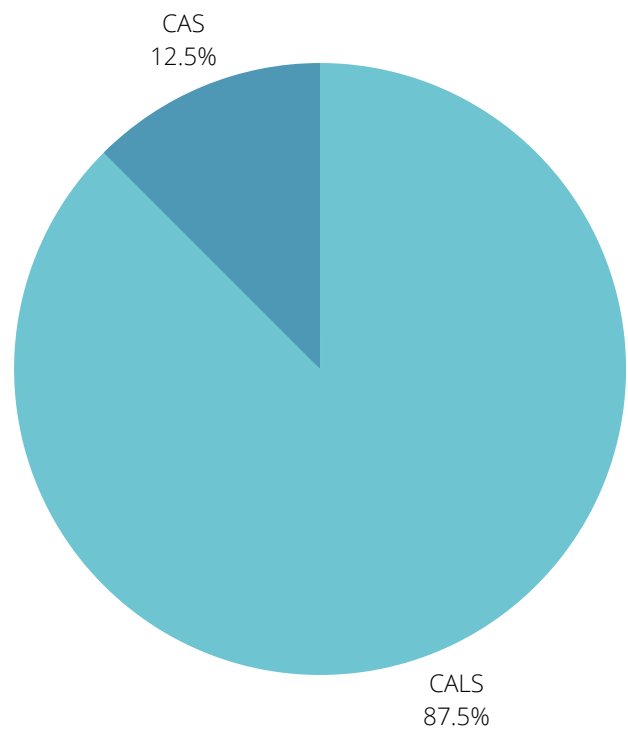


MS Advising Totals

CALS: 47

CAS: 11

CESS: 1



PhD Advising Totals

CALS: 14

CAS: 2

FACULTY PROFILES

Pablo Bose,
Associate Professor,
Geography and Geosciences



My current research as it pertains to food systems has mainly to do with two things: 1) the intersection of migration and food culture; how are complex ties to new and old homes maintained, strengthened, challenged and transformed through different food ways, and 2) how we might think about food security in spatial terms specifically in the context of the idea of 'food secure communities'. I am particularly interested in how this idea can be integrated into planning and management of US refugee settlement policy at the federal, state and local levels. I have had the opportunity to work with multiple masters and a few PhD students in this work, in both parts of my research – a few (Caroline Gilman, Elissa Johnson) have worked directly on my projects on refugee resettlement, others are involved more broadly in food and culture work and some have been involved in both (Krizzia Soto-Villanueva, Hannah Stokes, Josh Taylor).

I am hopeful that this concept of food secure communities can help long term in the ways in which we understand the needs and preferences of immigrant/migrant communities in terms of food and how food plays an important role in building secure lives. I am particularly interested creating food guides and policies that help to direct the efforts of state agencies (such as the USDA whose Community Food Projects and GusNIP programs I am involved with managing) and social service organizations such as food banks.

FACULTY PROFILES



Tyler Doggett
Professor,
Philosophy

My current work is about the ethics of consuming wrongfully produced food. When and why is it morally permissible to consume products that are produced in a wrongful way? I started working on these topics in my seminar FS 355 Ethics and the Food System and will continue with them this coming fall in another iteration of that seminar. The main upshot is that consumption decisions—which people obsess over: “I’m a vegan,” “I’m paleo,” “I only eat local”—are morally important but also dwarfed in comparison to issues about food production and so our consumption duties—which, again, people take quite seriously—are somewhat minor compared to duties to engage in political action.

FACULTY PROFILES

Meredith Niles
Associate Professor,
Nutrition & Food Sciences



My research focuses on ways to achieve sustainable food security, in two primary areas: 1) understanding the barriers and drivers for farmers to adopt sustainable management practices and 2) the impact of crises and extreme events like climate change and the COVID-19 pandemic on food security and systems. My research spans from the local (for example, a trial with Shelburne Vineyards a few years ago to integrate sheep into their vineyard) to the global (the effect of climate change on diets and nutrition in low and middle-income countries). Recently I also became affiliated faculty in the Complex Systems group, and increasingly use big data and connect novel datasets for food systems research. Graduate students are the heart and soul of my lab- they lead their own innovative projects across the globe from Madagascar to Puerto Rico, while also working on many federally-funded projects alongside myself. I've also had the great honor of teaching one of the core food systems courses (FS340) for five years, where I've integrated science and policy into action for students, for example, by having them meet with the Vermont legislature. At the core of my goals for research is to make it actionable- something that can not only be found, but be used to affect change in the food system. My lab consistently writes research and policy briefs to translate our work beyond the ivory tower. I feel passionately about ensuring equitable and democratic access to research results, data and manuscripts, so that the food systems research we do can be available to all.

STUDENT PROFILES

Ali Boochever MS Candidate



I moved back to Vermont from California specifically for the Food Systems graduate program and to rejoin the state's vibrant farming community after graduating UVM in 2015 with my B.S in Plant and Soil Sciences (majoring in Ecological Agriculture and minoring in Food Systems). I became interested in the program as a way to advance my personal and career goals of merging the academic study of complex food systems with hands-on farming in a mutually enriching way. Once I began the program, I also started to pursue a Certificate of Graduate Study in Agroecology as well as a Professional Certificate in Cannabis Plant Biology. During my first semester of the program in Dr. Mares' Food Systems, Society & Policy course, I came up with the idea for my Master's project: a business plan for a pilot farmer training program and non-profit farm in conjunction with Chittenden Regional Correctional Facility. The purpose of my proposed program is (1) for incarcerated women to gain valuable hands-on experience and skills in food production, (2) to provide food for use in the facility's own kitchen, and (3) to prepare women for careers in the Vermont food system post-release. It should be noted that farmer training is also an opportunity to address the social-emotional health and agency of incarcerated persons, whose wellbeing is ultimately a community and societal concern given 95% of those incarcerated are eventually released back into their communities. One of the reasons I think this program is right for me is because I get to explore a final project that meets the standards for both academic rigor and practical application. I feel inspired by this line of work and think this program is helping me realize and actualize this plan.

STUDENT PROFILES

Chris Brittain MS Candidate



I enrolled in the Food Systems graduate program because of a professional interest in making the ways we produce and consume food more environmentally sustainable. Before coming to Vermont, I studied sustainable food production and worked in local food policy but found myself moving away from professional work in food systems, and decided that it would be getting a graduate education that would help me shift to a food-centered career. I chose UVM because it is one of few interdisciplinary graduate programs addressing food systems in the United States. Unlike some of its peers, this program does not have a specific focus (such as nutrition or agriculture), but instead allows students to pursue electives which match their interests. This was particularly important to me because I did not see many other graduate programs which would allow me to focus on social science aspects of food systems. In addition, it offers more flexibility than other similar programs, offering both doctorate and masters programs that allow for professional-oriented or research-oriented experiences. There is a wide variety of electives that can be taken to fulfil degree requirements. I have, for example, taken courses in agroecology, economics and natural resources that focused on food but were outside of the food systems department. Because many faculty at UVM are interested in agriculture and in environmental sustainability, there are opportunities to study relevant topics in these other departments.

My current research project, which will be submitted as my master's project, is focused on the factors that influence adoption rates of agricultural climate adaptation strategies, such as switching the crops produced to match a changed climate. My role in this project is using GIS to identify where in the United States adaptation measures have been adopted, use a geographically weighted regression to determine regional differences in climate adaptation across the United States, and to visualize findings through an ArcGIS story map. Since coming to the University of Vermont, I've had the opportunity to work on projects related to institutional food purchasing, agritourism, and climate adaptation, and this diversity of experiences have helped me determine the type of work I'd like to do going forward.

STUDENT PROFILES

Amaya Carrasco PhD Student



The University of Vermont has world-class professors with experiences in the United States and internationally in areas relevant to food systems, such as human nutrition, agroecology, climate change and ecology. Within this context, the PhD program in Food Systems combines interdisciplinary research with a commitment to developing the methods for solving flaws and challenges of the current food systems. The program offers diverse courses that help the students to gain a holistic and systemic perspective of different issues beyond food production, distribution, consumption, and waste, such as food justice and sustainability. I find unique that both the students and professors have different backgrounds and professional experiences, which makes each class a rich learning space.

My main career goal is to work twofold as an academic and practitioner to promote a research agenda providing evidence-based solutions for the global community, particularly around a just, sustainable, and resilient food system. I believe that the PhD program in Food Systems at University of Vermont is equipping me with the tools and the frame of mind to integrate humanities, social and natural sciences to comprehend and improve complex and interdependent food systems at different scales. I am totally confident that the program is the perfect fit for my present and future endeavors. For example, during this year and half, I have significantly expanded my understanding of our current challenges as well as need to identify the leverage points to influence public policy and programming.

STUDENT PROFILES

Tung Liu PhD Student



Coming from a food studies and complex systems background, the Food Systems program at UVM allows me to combine these two interests and pursue a Ph.D. degree. Besides the mutual fit in experience, the positive communication with my advisor, funding opportunities, and administrative support led me to choose this program over the other programs I was considering.

Compared to a handful of similar Ph.D. programs worldwide, Food Systems at UVM offers excellent flexibility in the curriculum within the US instructional-based doctoral training. It simultaneously provides opportunities to individually develop one's dissertation or complete a dissertation within a large research team. Another aspect that makes the program unique is the broad interdisciplinary focus on diverse fields critical to understanding food systems but not often studied together.

My dissertation research examines the co-evolution of food biodiversity by tracing what and where food is grown, sold, and eaten from three interrelated scales: global agri-food trade networks, regional food and gastronomic systems, and individual-level dietary habits and choices. My goal is to identify intervention points during different steps of the food system, balancing the trade-off between planetary, societal, and human health.

STUDENT PROFILES



Krizzia Soto-Villanueva PhD Student

When I decided to apply to graduate school, I had a hard time finding programs that allowed me to think outside the box while still being organized around a central theme. When I found the Food Systems PhD at UVM, I immediately knew it would be my program of choice. Now that I'm here, I can't see myself having gone anywhere else. At UVM, I research colonial policy and its effects on island and Indigenous food systems, focused mostly on Puerto Rico. I am also the graduate assistant for the budding Institute for Social Justice (ISJ) and a graduate Fellow at the Gund Institute for Environment. I love that the Food Systems program has been able to help me make connections that benefit not only my research, but my work at the ISJ and my role at the Gund. I don't think any other program or department would have allowed me to look at Food Systems problems alongside researchers from such diverse disciplines as this program has. If the next few years are anything like this first semester, I am sure the Food Systems program will play an essential part in my development as a researcher and in an initiative as important as the ISJ.

ALUMNI PROFILES

I originally applied to the Food Systems master's program because it was the most transdisciplinary food program I could find. Many programs are trying to build out this kind of pedagogy, and it can be difficult to escape too much disciplinary influence within the existing departments and norms of a university; UVM was the only place with a truly innovative orientation. Once in the master's, I realized that I loved doing research and applied to stay for a doctorate, for the same reasons. The PhD program provided me intellectual and financial support while allowing me to pursue my own research questions, which was critical to my development as an independent thinker. This balance between assistance and independence, along with such a diverse group of affiliated faculty, meant that I could seek out the information and mentorship necessary for my particular project—for a new field, fostering this kind of curiosity is the only way we will actually build a new way of doing wide-reaching yet grounded social science. My career is off to a good start in large part because I have such a strong grounding in new understandings and methods, which is what many employers seem to be looking for as they recognize the need to transform how we approach sustainability, justice, and societal wellbeing through food.

Caitlin Morgan, PhD
Research Social Scientist,
USDA Agricultural Research
Service



ALUMNI PROFILES

Caroline Aubry, MS Research Assistant, Tetra Tech



I started my master's program in Food Systems after spending two years teaching food and garden education to elementary school students throughout the northeast kingdom of Vermont. I was drawn to the UVM Food Systems program because of its innovative approach to thinking and researching about food.

The teachers, cohort, and location make this program stand out from other institutions. My professors' passions for creating a better world through food fueled my passions for improved food access, food education, and environmental sustainability. The small class sizes, and the professors' breadth and depth of expertise in various components of the food system, made for illuminating classroom discussions. Oftentimes, I felt like I learned as much from the amazing multi-talented cohort I had the pleasure to learn with as I did from my readings. Additionally, the working agricultural landscape of Vermont contributed to my professional development as a unique but small enough location to easily get involved in statewide research.

During my graduate studies, I had the opportunity to work with UVM Dining and UVM Extension while participating in multiple research projects that honed my critical thinking, research, and writing skills. These opportunities gave me great insight and experience into the complexity of the food system, from both the institutional side of food to best practices for community outreach.

I now work as the Research Assistant with the Enabling Crop Analytics at Scale Initiative implemented by the Tetra Tech agriculture and economic growth team and funded by the Bill & Melinda Gates Foundation, improving the enabling environment for agricultural innovations globally. I'm grateful for UVM and the foundation in critical thinking and innovation I received from the Food Systems Program that has allowed me to excel at multiple different roles in the food system.

ALUMNI PROFILES

The Food Systems Graduate Program of the University of Vermont was my first and only choice to pursue a Ph.D. After working from fisheries to farms, and from classrooms to labs in Puerto Rico, I harnessed an awareness on how different structures of a system interconnect and relate to individual outcomes. That awareness founded my decision on pursuing a Ph.D. that provided me the academic and practical skillset to answer my research questions and contribute to solving food systems issues in my home. The transdisciplinary approach of our program, which provides students with the tools to blur disciplinary barriers and be more creative in problem-solving, was key in my decision. I got the opportunities to experience situations where I was challenged, pushed to be intellectually curious, and build a self-confidence as a scientist throughout my years in the program. Furthermore, the program provided me the freedom to lead my dissertation research and collaborate in projects outside the university. I remember sharing in my admissions interview about my goal to come back home and do the research and work that is close to my heart. Today I can say that this program helped me accomplish that.

Luis Alexis Rodríguez-Cruz, PhD
Research Fellow, Caribbean Climate Hub



THE NEXT 10 YEARS

As we look forward to the next decade of growth for the Graduate Program in Food Systems, we seek to prioritize the following areas:

Program Mission and Vision

- Continue and deepen our work in Diversity, Equity and Inclusion through engaging in antiracist and decolonizing approaches and practices in teaching, research, and service
- Contribute to all three areas of UVM's Amplifying our Impact Strategic Vision: Ensuring Student Success, Investing in our Distinctive Research Strengths (Healthy Societies, Healthy Environment) and Fulfilling our Land Grant Mission

Funding and Resources:

- Identify and secure additional funding resources for our students, particularly for students pursuing the MS
- Identify and secure additional financial resources for professional development of faculty, students, and staff affiliated with the program

Teaching and Advising

- Increase the number of faculty actively teaching and advising for the program
- Increase the number and diversity of courses available for students to complete

Internal and External Networking

- Support further collaboration between our program and other units and programs on the UVM campus
- Increase our visibility and participation as a program in local, regional, and national events (workshops, conferences, symposia) focusing on food systems