



# 2022 Tufts Research and Data Symposium for Food and Nutrition

*March 03-05, 2022*

*Symposium Proceedings*

*#TuftsNutrition*

<https://sites.tufts.edu/friedmanresearchsymposium/>



## Executive Summary

*24 Fully-Virtual Sessions Offered*

*24 Student Research Presentations*

*60 Invited Guest Speakers*

*70+ Countries Represented*

*200+ Universities in Attendance*

*300+ Professional Organizations*

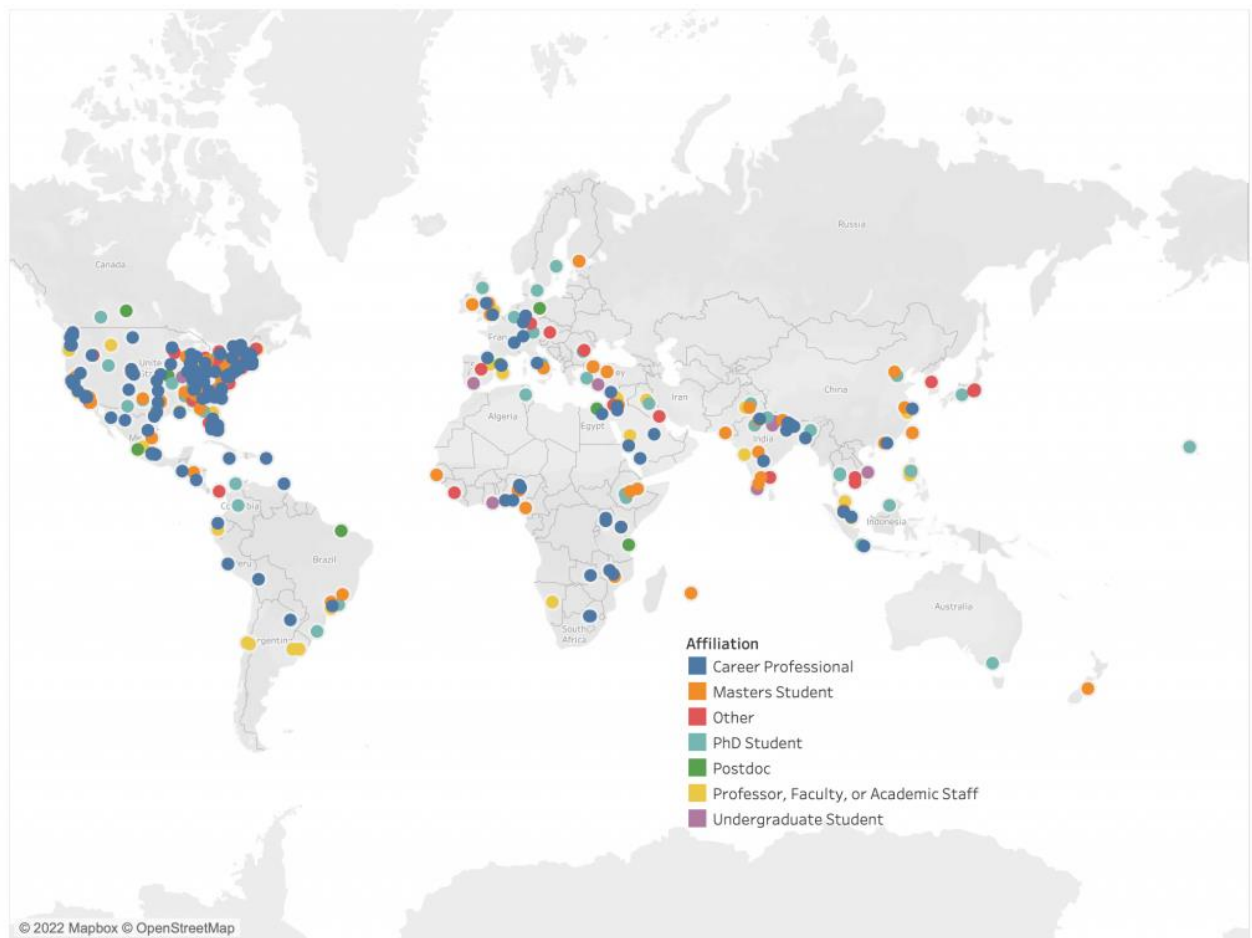
*~1,100 Total Participants*

The **2022 Research and Data Symposium for Food and Nutrition** marked the 15<sup>th</sup> annual student-run research event at the Tufts University Friedman School. Amidst global crises, we recognize the imperative role of nutrition sciences, research, and data in creating, explaining, and refining health policies, programs, and analytic methods. We establish this forum to promote multicultural, intergenerational, and interdisciplinary collaboration to tackle complex emerging and existing nutrition science challenges

To achieve this, we:

1. Promoted transdisciplinary research by inviting students and young professionals from all disciplines, backgrounds, and cultures to foster opportunities for creativity and innovation;
2. Engaged in professional networking to build partnerships beyond institutional boundaries and foster pathways for professional networking, internships, and career opportunities; and
3. Encouraged diverse and inclusive conversations to share differing and unique perspectives, ideas, expertise, and skillsets in disciplines related to nutrition and public health.

Over our 3-day virtual event, we showcased both challenges and solutions of emerging and persistent nutrition and public health topics. We also provided opportunities to empower students to become accomplished nutrition experts, data scientists, and science communicators. We thank you for your role in empowering students to become data scientists and science communicators to impact nutrition and public health for years to come!



## Global Impact

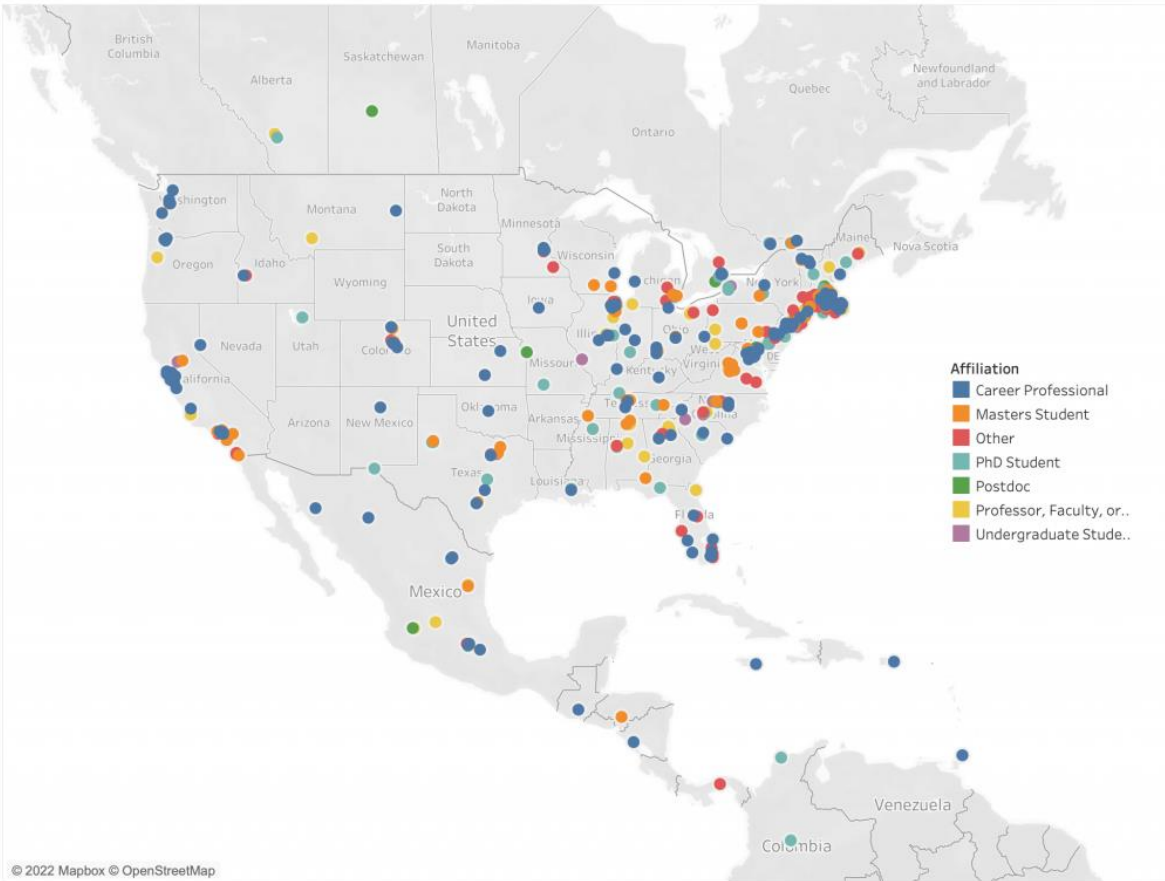
### A diversity of peoples, cultures, and experiences

Our symposium included *1100+ participants from 70+ countries* worldwide reaching all continents except Antarctica. Participants ranged from undergraduate students to chief medical, health, and nutrition officers in governmental and private-sector organizations. Over *200 academic institutions and 300 professional organizations* attended emphasizing that, despite differences in culture, language, location, and experiences, we stand united in utilizing data sciences and interdisciplinary collaborations to solve the complex problems and challenges in our field.

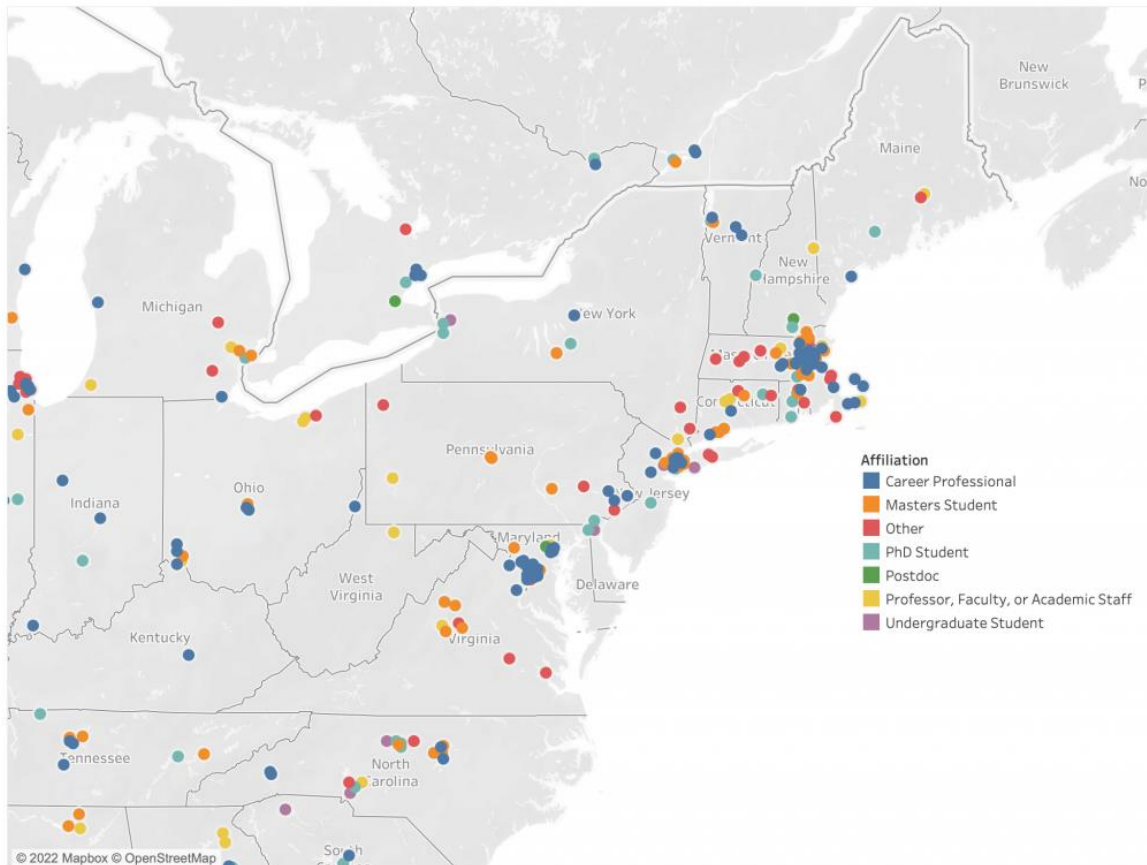
### An action-oriented approach

*This symposium is designed by students, for students.* We created a forum where students developed knowledge and skills while simultaneously broadening their professional networks. *With 24 student research presentations and 60 invited speakers,* we showcased the methodological complexities of rigorous data analysis, discussed challenges in nutrition and public health science, and provided opportunities for the next generation of professionals to gain experience communicating and disseminating scientific research.

# National Impact



# Regional Impact



## Invited Speaker Highlights

*“In times of disasters, old wounds reopen, and new ones arrive. In our polarized world, it takes guts to treat people with kindness and respect regardless of intellectual capacity, physical upbringing, skin color, mother tongue, religion, race, gender, or orientation.”*

**Dr. Elena N. Naumova, Tufts University Friedman School**

*“Your zipcode is a strong predictor of your health in America. The redlining of American districts has created racial segregation that still persists in this country today with implications extending to food access, diet quality, and health services.”*

**Dr. Alison Brown, National Heart Lung Blood Institute**

*“To shape the future of the food system, we must consider integrated systems of risk hazards related to environmental sustainability and incorporate complex interactions of malnutrition, food supply, and the environment over spatiotemporal dynamics.”*

**Dr. Nathaniel Newlands, Summerland Research and Development Centre**

*“To achieve inclusion in nutrition and public health research, we must strive towards involving high school students early in their academic pipelines, ensure representation of diverse subpopulations in research studies, and promote community engagement.”*

**Dr. Sara Folta, Tufts University Friedman School**

*“We, in policy, research, advocacy and non-profit, need to tie together all the challenges of basic needs that people are facing. We need to highlight the connection between working wages, living costs, food security, and their connection to health and well-being.”*

**Dr. Meredith Niles, University of Vermont**

*“Systematic reviews should not be considered clinical recommendations, because to make recommendations and policies we need to consider both scientific evidence and the variety of included stakeholders’ perspectives.”*

**Dr. Mei Chung, Tufts University Friedman School**

*“There is a recognized need for ethnic-specific health promotion efforts among Hispanics/Latinos. Interventions should deliver opportunities for social interaction, emphasize ease of access, and highlight opportunities for participant engagement to garner autonomy and awareness.”*

**Cristina Gago, Harvard University T.H. Chan School of Public Health**

*“The goal of SNAP is not only to address food insecurity, but also to improve the health of participants. Therefore additional efforts to improve the metabolic profiles of participants may strengthen the program’s impact.”*

**Mirjana Stevanovic, Dartmouth College**

*“Dynamic maps help break down the spatial and temporal complexity of public health data to solve challenges in public health and nutrition epidemiology. Advanced features include data dashboards, like the Global Nutrition and Health Atlas, which can store big volumes of data that can be shared, with visualizations, for public reuse and research.”*

**Bingjie Zhou, Tufts University Friedman School**

*“Climate change is not just about technological fixes, but about the process that changes occur. As a community, together, we need to decide how to treat this problem so that we don’t leave population subgroups behind.”*

**Erin Coughlan de Perez, Feinstein International Center**

# Academic Network

## Top 25 International Universities Represented

University	Under-Graduate	Masters Degree	Doctoral Degree	Post-Doctoral	Professors & Faculty
University of São Paulo	1	3	10	2	4
University of Santo Tomas, Philippines	4	0	0	0	3
Lilongwe University of Agriculture and Natural Resources	0	5	0	0	1
University of the Philippines Los Baños	0	0	0	0	6
Agricultural University of Malaysia	0	3	1	0	1
National University of Malaysia	0	1	1	0	3
Science University of Malaysia	0	2	2	0	1
University of Calgary	0	0	1	2	1
American University of Beirut	0	0	0	0	3
Umaru Musa Yar'adua University Katsina	2	1	0	0	0
University of Copenhagen	0	0	3	0	0
University of the Philippines	0	0	1	0	2
Addis Ababa University	0	0	2	0	0
Ahmadu Bello University	0	1	1	0	0
Baskent University	0	2	0	0	0
University of Agriculture Abeokuta	2	0	0	0	0
King Abdulaziz University	0	0	0	0	2
Makerere University	1	1	0	0	0
Marmara University	2	0	0	0	0
Masinde Muliro University	0	0	1	0	1
McGill University	0	1	1	0	0
Technical University of Munich	0	0	2	0	0
Universiti Teknologi MARA	0	1	0	0	1
University of the Philippines Manila	0	0	1	0	1
Akdeniz University	1	0	0	0	0

## Top 25 American Universities Represented

University	Under-Graduate	Masters Degree	Doctoral Degree	Post-Doctoral	Professors & Faculty
Tufts University	8	87	20	2	25
Harvard T.H. Chan School of Public Health	0	11	3	10	4
University of New Haven	1	18	0	0	1
Boston University School of Public Health	0	10	1	0	1
University of North Carolina, Chapel Hill	0	6	5	0	0
Cornell University	2	1	6	0	0
University of Illinois, Urbana-Champaign	0	0	4	1	4
University of North Carolina, Greensboro	4	1	3	0	1
University of Massachusetts	3	1	2	0	1
University of Vermont	2	2	2	0	1
Louisiana State University	0	0	3	0	3
Boston University	5	0	0	0	0
James Madison University	2	2	0	0	1
Johns Hopkins Bloomberg School of Public Health	0	1	3	0	1
University of Tennessee	0	3	1	0	1
Alabama A&M University	0	3	0	0	1
University of Alabama	0	0	2	0	2
University of Connecticut	0	1	1	0	2
University of Rhode Island	0	0	4	0	0
Andrews University	0	2	0	0	1
Merrimack College	1	1	0	0	1
State University of New York	0	1	2	0	0
Texas Christian University	3	0	0	0	0
Texas Tech University	0	1	2	0	0
Texas Woman's University	0	3	0	0	0

# Representation of Professional Organizations



## Local Boston-Area Organizations

Massachusetts General Hospital  
Boston Children's Hospital  
Boston Medical Center  
Cambridge Public Health Department  
Cambridge Health Alliance  
Alpha Preclinical



## Regional State-Based Organizations

Washington State Department of Health  
Knoxville County Community Action Coalition  
University of Maryland Medical Center  
Vermont Department of Health  
Rhode Island Department of Health  
American Society of Nutrition (ASN)



## National Governmental Organizations

United States Army  
Centers for Disease Control and Prevention (CDC)  
American Institutes for Research (AIR)  
US Army Research Institute of Environmental Medicine  
Food Research and Action Center (FRAC)  
National Institutes of Health (NIH)  
US Food and Drug Administration (FDA)  
US Agency for International Development (USAID)  
US Department of Veterans Affairs  
US Department of Agriculture (USDA)



## National Private Sector Organizations

ScriptDrop  
Steindler Consulting  
Chaak Healthy Snacks  
Star Cypress Partners  
Be Well Solutions  
Environmental Defense Fund (EDF)  
Motif FoodWorks, Inc.  
Family Health International  
Indigo Ag.  
PepsiCo  
Archer Daniel Midlands (ADM)



## International Organizations

UN International Children's Emergency Fund (UNICEF)  
UN World Food Program (WFP)  
Hellen Keller International (HKI)  
Nutrition International  
KIND International  
ICF International

# Representation of Professional Organizations

Plenitud Puerto Rico  
 Givaudan  
 Nutrien  
 Family Health International (FHI 360)  
 Select Fresh Produce Kenya Ltd  
 International Rescue Committee  
 International Crops Research Institute  
 for the Semi-Arid Tropics (ICRISAT)  
 CF Energia

Istanbul Medipol Üniversitesi  
 Peru Ministry of Development and Inclusion  
 Ministry of Health, Malaysia  
 Mexico Environmental Defense Fund  
 Malawi Department of Nutrition  
 Gesellschaft für Internationale Zusammenarbeit  
 Global Alliance for Improved Nutrition  
 Ministry of Education, Madrid, Spain  
 Civil Society- Scaling Up Nutrition in Nigeria

## Symposium Data Bytes

### Affiliation Breakdown

<i>Region</i>	Under-Graduate	Masters Degree	Doctorate/ Post-Doc	Professors & Faculty	Career Professional
North America	48	201	119	88	317
Western Pacific	5	10	11	22	15
European	5	11	16	4	23
African	9	13	5	3	28
Central & South America	3	5	15	8	11
Southeast Asian	6	4	6	3	16
Eastern Mediterranean	1	5	1	11	16
Total	77	249	173	139	426

### Goals for Attending the Symposium

<i>% Agreement</i>	<i>Description</i>
82.71%	Gain exposure of existing and emerging topics in nutrition and public health sciences.
61.01%	Understand novel analytic methods and their applications in nutrition and public health science.
52.06%	Engage with students and researchers across disciplines and universities.
50.55%	Learn about career opportunities in in nutrition and public health fields.
49.65%	Develop technical skills and competencies in data management, modeling, and visualizations.
48.34%	Discuss the importance of diversity, equity, and inclusion in nutrition and public health research.
37.29%	Receive advice on professional networking through career conversations.
22.61%	Practice scientific communication by presenting at or attending student research presentations.



We offer a special thank you to our sponsors of this year's Symposium



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Gerald J. and Dorothy R.  
Friedman School of  
Nutrition Science and Policy



Data Intensive  
Studies Center



ASA Boston Chapter

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The International  
**ENVIRONMETRICS**  
Society - TIES

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Thank you for joining us at the

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Video recordings and presentation  
materials are available at our website!

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