Department of Food Science

Ithaca

Geneva

Our Department
Food Science by the Numbers

- Undergraduate students: 139
- Graduate students: 115
- Faculty: 25
- Research and Extension Staff: 100

$12M Research & Extension Expenditures (last year)
44% Federal, 28% State, 28% Industry

Industry Engagement
- Extension Program
- CIFS-IPP
- Food Venture Center
- Advisory Council

Cornell Food Science: Our Vision

Create and apply knowledge for the purpose of ensuring a safe, appealing, and nutritious food supply for all, today and in the future.
Cornell Food Science: Our Mission

Enhance the safety, quality, and abundance of the global food supply by educating students for leadership roles, advancing research on foods and beverages, translating and communicating discoveries for the benefit of all people.

Cornell Food Science: Our Core Values

- Maintain the highest standards of academic integrity in everything we do
- Continuously strive for excellence in teaching, learning, research & outreach
- Treat all individuals with respect, dignity, and fairness
- Foster a sense of community and collegiality within the Department
- Embrace diversity in our faculty, staff, and student body
Our students, our pride

- Successful, award winning students
- Highly sought out by industry, academic, and government employers
- Numerous entrepreneurial success stories
- Most become dedicated alumni

Department of Food Science Leadership

Carmen Moraru - Chair
Gavin Sacks - Associate Chair

Executive Committee
Olga Padilla-Zakour
Julie Goddard
Randy Worobo
Martin Wiedmann
Anna Katharine Mansfield
Matt Stratton

Past Chair
Curricular affairs
Extension programs representative
Industry relations
Geneva Program Lead
Department Business Administrator
Multidisciplinary, diverse, award winning faculty

- 3 Lecturers (1F, 2M)
- 5 Assistant Professors (2F, 3M)
- 4 Associate Professors (2F, 2M)
- 13 Professors (3F, 10M)
- 3 active Emeritus Professors
- 3 Senior Extension Associates (1F, 2M)

Top Food Science research program in the US and the world

Research areas
- Food microbiology/ Food safety
- Food processing & engineering
- Food quality
- Sustainable & active packaging
- Foods for health
- Sensory Science
- Enology
- Sustainable Food Systems
- Ingredient Technology

Our funding sources
- Federal: NIH, USDA, NSF, FFAR, USAID, FDA
- Foundations: Gates Foundation
- State: NY State Department of Ag. & Markets, NY State Department of Environmental Conservation
- Commodity groups: Center for Produce Safety, National Dairy Council, Apple research and development program (ARDP)
- Private industry
Our Extension Programs support our stakeholders and Cornell’s Land Grant Mission

- Dairy Foods
- Food Safety Programs
- Food Entrepreneurship
- Beer & Brewing
- Wine & Spirits

Ithaca Facilities:
- Research and Teaching laboratories
- Sensory testing facility
- Food Product Innovation Lab
- Cornell Dairy Plant
- Ithaca Pilot Plant
- Teaching Winery

Geneva Facilities:
- Research Winery
- Brewing Facility
- Geneva Pilot Plant
- High Pressure Processing Validation Center
Cornell Food Science Pilot Plant in Ithaca (FDPL)

- Supports teaching, research and extension
- Produces Cornell Big Red and A.D. White Cheddar cheese
- Works with industry on product development
- Partners with artisanal cheese and yogurt makers
- Supports student clubs and product development teams

Cornell Food Science Pilot Plant in Geneva

- Fruit and vegetable processing focus
- Houses a suite of novel food processing technologies – unique in the US
**State-of-the-art small scale dairy processing plant that supports our teaching, research and extension mission.**

- Milk from Cornell’s Veterinary Teaching Dairy Farm
- Processes ~ 1.5 million lb of raw milk every year
- 13,000 gallons go to research
- 146,000 gallons of fluid milk
- 20,000+ gallons of ice cream are produced

**Products:** Fluid milk, Ice Cream, Yogurt, Juice

Kosher certified since April ’18!

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**Award winning cheese made at Cornell!**

Collaborations with Wegmans and Old Chatham

Murray's Stockinghall cheese tops national competition

From left, Shawling Star Creamery’s Avido, Wegman’s Brie and Stockinghall by Murray’s Cheese. Photograph: The New York Times

By Diana Freedman | August 21, 2016

Murray’s Stockinghall cheese – a bright, creamy, cloth-bound cheddar named for Cornell’s Stocking Hall and developed as the university’s partnership with Old Chatham Creamery of Grotten, New York – won best to show at the 5th American Cheese Society competition.
Dairy Plant:
Kosher Certified

Home of the iconic Cornell ice cream

Viticulture & Enology (VIEN)
- Joint program with SIPS faculty
- 30 undergrad majors, 30 minors
- 600+ students each year in introductory courses on winemaking, distilling, brewing, cider

Cornell Craft Beverage Institute
- Extension programming on wine, beer, kombucha, and more
- Analytical services
- EnoCert certificate programs
- eCornell courses on brewing in development

Winemaking, Brewing, and other Craft Beverages
Recent News

New Faculty

Dr. Abigail (Abby) Snyder
Assistant Professor, Food Safety

Dr. Abby Snyder joined Cornell after serving as an Assistant Professor and Food Safety Extension Specialist at The Ohio University. She has a B.S. in Food Science, Chemistry from The Ohio State University and a Ph.D. in Food Science from Cornell University. Main research focus: process and sanitation program validation.
New Staff

Brynn Wilkins
Undergraduate Program Coordinator

Brynn is the new Undergraduate Program Coordinator for Food Science and Viticulture & Enology. Previously, Brynn was the Undergraduate Program Manager for the Computer Science Department at the University of Rochester (her alma mater).

Student Product Development Competitions

- **Mars IFTSA PD Competition**: 3rd place with **Wafful Wands**.
  - Team members: Kelsey Sheldon (C), Kaitlin Steinleitner (C), Sara Gamaleldin, Alexandra Hall, April Huang, Gracyn Levenson, Justin Marcus, Joice Pranata, Jesse Saltzman, Sriya Sunil.

- **Developing Solutions for Developing Countries Competition (IFT)**: Honorable Mention for **NutriBabaw**.
  - Team members: Elisabeth Silletto (C), Shoshanna Hoover, Emily Kim, Raquel Morehouse, Stella Shi.
Student Product Development Competitions

- **National Dairy Council PD Competition:** Second place for *MooVit*.
  - Team members: Joice Pranata (C), Viviana Flores (C), Ghadeer Makki, Joseph Bernard Tarnate
  - Team advisors: Sam Alcaine and Olga Padilla-Zakour

Cornell Food Science College Bowl Team
2019 North Atlantic Regional Champs!

**Undergraduates:**
Lyndsay Orlando (co-captain), Margot Shumaker (co-captain) and Yupawadee Galasong

**Graduate Students:**
Rohil Bhatnagar, Hannah Zurier, Genevieve Sullivan, Keqin He and Ghadeer Makki

**Cornell will host the regional competition in Spring 2020!**
Successes at IFT 2019

- Raheleh Ravanfar won 1st place in the Dairy Foods Division poster competition (Abbaspourrad Lab)
- Rohil Bhatnaer won 2nd place in the Nutritional Division poster competition (Padilla-Zakour Lab)
- Shuan Sim won 2nd place in the Nonthermal Processing Division poster competition (Moraru Lab)
- Linran Wang won 3rd place in the Dairy Foods Division poster competition (Moraru Lab)
- Nayara Luna Guzman ‘19, undergraduate Food Science major, received the Excellence in Leadership Award from IFTSA

- Faculty and Staff Awards -

- Gavin Sacks received the SUNY Chancellor’s Award for Excellence in Teaching
- Alireza Abbaspourrad received the CALS Alumni Association Rising Star Award
- Erin Atkins received the CALS Core Values Staff Award in the Inclusion category
- Aaron Jacobsen
- Christopher Gerling, Extension Associate: Apple of Appreciation Award by the New York Cider Association.
- More Awards -

- David Barbano's life work on the chemistry and processing of dairy foods was recognized with a half day Recognition Symposium at the ASDA Meeting.

- Martin Wiedmann received the International Dairy Foods Association Research Award in Dairy Foods Processing.

- Randy Worobo received the Harry Haverland Citation Award from IAFP

- Martin Wiedmann received the 2019 Freezing Research Award from the Frozen Foods Foundation.

- Carmen Moraru received the title of Doctor Honoris Causa from the University of Agricultural Sciences and Veterinary Medicine in Bucharest, Romania.
**Cornell Food Science: Initiatives**

**Increased Global Engagement**
- Dual undergraduate degree program with China Agricultural University – Beijing
- Collaborative $10M USAID initiative with Purdue University (Worobo, Wiedmann, Boor)
- Faculty participation in numerous international collaborations (Rizvi, Miller, Padilla-Zakour, Worobo, Wiedmann, Moraru, Liu, Barbano, Brady, Nugen, Dando, Mansfield, Regenstein, etc.)

**Enhanced Collaborations within Cornell**
- Increase Food Science participation in initiatives on food systems, sustainability, digital agriculture (in Teaching, Research, Outreach)
- Increased interdepartmental collaborations (Nutrition, Weill Medical School, Social Sciences, etc.)
- Increased NYC presence (Food Venture Center in NYC, seeking opportunities at Cornell Tech)

**Enhanced External Collaborations**
- Collaborations with industry - through direct research and programs like CIFS-IPP, Institute for Food Safety, the Center of Excellence for Food and Agriculture at Cornell AgriTech

**Fundraising**
- Active fundraising efforts to support our research, teaching, and extension programs
- Seeking partnerships to ensure the long term financial viability of Cornell Dairy, which is an integral part of the Cornell brand

**Recruitment**
- Constant efforts to attract the highest quality, diverse faculty, staff and students to maintain and enhance our national and international standing as the premier Food Science program
Ongoing Searches

- Open rank faculty position, Director of the Cornell – China Agricultural University dual degree program:
  - 40 candidates
  - Several selected for upcoming Zoom interviews

- Industry Liaison Officer for the CIFS Industry Partnership Program

Industry Engagement
Industry Partnership Program

A public-private collaboration program that expands and enhances Cornell University’s engagement with industry scientists, engineers and business leaders at companies throughout the food system.
Advisory Council

Food Science Advisory Council: Fall 2019

Council Leadership:
Chuck Marble, Chair, Stavis Seafood
Leslie Herzog, Past Chair, The Understanding and Insight Group
Tim Andon, Chair Elect, TIC Gums

Council Members:
Kristin Alongi, Rich Products Corporation
Alison Bodor, AFFI
Jim Carr, Tate & Lyle
Michelle Colban, Unilever
Nick Dokoozlian, E&J Gallo Winery
Steven Flyer, AUA Private Equity Partners
Julia Fritsch, PepsiCo
Hazel Fromm Tatosian, Mondelēz
Andrew Gellert, Gellert Global Group
Bill Graves, Dairy Management Inc.
Bob Koeritzer, 3M Center
Sean Leighton, Cargill
Robin Lougee, IBM
Jinzhou (Joel) Li, Qimei Organic
Douglas Marshall, Eurofins Microbiology Laboratories Inc.
Alejandro Mazzotta, Chobani
Casey McCue, NYS Dept. of Ag. & Markets
Meghan McIlory, Kraft Heinz
Kathleen O’Donnell, Wegmans Food Markets
Ashish Pandit, POM Wonderful LLC
Ruth Petran, Ecolab Inc.
Erica Reiner, Int. Flavors & Fragrances
Brad Riemenapp, FoodChain ID
Peter Salmon, International Food Network
Bruce Wolcott, Seneca Foods Corporation
1. Student Advisory Council Mentoring and Advising

Sub-Committee Chair: Peter Salmon
Faculty Liaison: Gavin Sacks

Goal: Provide mentoring and advising support for students:
• Provide guidance to student product development teams
• Career direction and guidance to individual students

2. Industry Relationships Sub-Committee

Sub-Committee Chair: Nick Dokoozlian
Department Liaison: Janette Robbins

Goals:
1. Help faculty attract an additional $500,000 in industry research funding
2. Help attract five additional companies to the Industrial Partnership Program
3. Help attract five additional companies to CIFS-IPP
3. Philanthropy Sub-Committee:

Sub-Committee Chair: Chuck Marble  
Department Liaison: Carmen Moraru

Goal: Develop strategies to name spaces in Stocking Hall based on departmental priorities.

http://stockinghall.cals.cornell.edu/pages/naming-opportunities#underground-research-kitchen

Department of Food Science

Contact us:
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