

*The Oldest and Best Food Science Department in the Country*

POINTS OF PRIDE

- **Ranked #1 Food Science PhD Research Program in the US** by the National Research Council, National Academy of Sciences, in its 2010 study evaluating graduate programs on faculty research productivity, student completion rates, and diversity.
- Tied for **#2 nationwide** in 2005 and ranked **#3 nationwide** in 2007 for scholarly productivity of faculty according to the two most recent editions of the *Faculty Scholarly Index*.
- Faculty ranked **#7 worldwide** for high-impact citations in agricultural sciences scholarly journals and **#8 and #24 worldwide** for most highly cited authors in the 1996-2006 assessment of research performance in agricultural sciences in *Science Week* (Vol. 17, No. 4).
- In five out of the past six years, ranked **#1 department on campus** for student satisfaction by UMass Amherst graduating seniors.
- All of our faculty members have received numerous awards and appointments, including research, teaching, and advising awards from the university, the government, and national and international societies, foundations, and organizations.
- Faculty members have been appointed to leadership roles in the World Health Organization, US Agency for International Development, National Academy of Sciences, USDA, FDA, and the State Department.

EDUCATION

**Undergraduate Concentrations**

Food Science and Technology  
Food, Health, and Wellness  
Food Safety  
Culinary Science

**Graduate Programs**

Five-year BS/MS  
One-year non-thesis MS  
Research thesis MS  
PhD

- 30%+ of our students receive scholarships.
- 60%+ of our students participate in internships.
- A high percentage of our undergraduate students place on the Dean's List each year.
- Our students have won awards from the Institute of Food Technologists, the American Oil Chemists' Society, the International Association for Food Protection, the Fulbright Program, and in numerous university, regional, and national competitions.

RESEARCH

**Research Areas**

- ***Physical-Chemical Properties for Food Quality and Function:*** Basic principles and instrumental techniques of the physical and chemical sciences to improve our understanding of complex food systems, enabling the production of longer lasting, higher quality, and safer foods.
- ***The Safety of Food:*** Microbiological and toxicological problems related to the processing, handling, and consumption of food, including the detection and prevention of food-borne pathogens.
- ***Foods for Health and Wellness:*** Identification of bioactive components in foods and food by-products; utilization of biological models to assess the molecular mechanisms and physiological effects of bioactive food components; development of technologies to increase the stability and activity of novel bioactive compounds without negatively impacting food quality and safety.

Research Facilities

Instrumentation for determining chemical, physical, and biological characteristics of foods and food components including:

- |                              |                                  |
|------------------------------|----------------------------------|
| Emulsions                    | Bioactive food components        |
| Natural products             | Food biopolymer                  |
| Nanostructures               | Food-borne pathogens             |
| Microscopic characterization | Plant and animal tissues culture |
| Food packaging               | Lipid chemistry                  |
| Biosensors                   |                                  |

INDUSTRY AND GOVERNMENT

- **Strategic Research Alliance:** Our industry partnership for research and development has more than 20 industrial members representing a wide range of expertise.
- **Food Science Policy Alliance:** Addresses current and future issues of food policy and regulation for both domestic and international markets and partners with the UMass Center for Public Policy and Administration to offer an MS with a concentration in Food Science Policy.
- **Food Science Advisory Board:** 20+ alumni and non-alumni members who hold top industrial positions and play a pivotal role in the department’s outreach, fund raising, and program development. A model advisory board on campus.

PRIVATE FUNDING

- Food Science is one of the top departments contributing to the UMass Amherst development effort.
- Thanks to the support of our alumni and our friends, we are able to provide our students with the up-to-date training and experience they need to succeed in food science careers. In recent years, Food Science has raised over \$6 million in private funding.

BY THE NUMBERS

Tenure-track Faculty .....	12
Undergraduate Majors.....	70
Graduate Students.....	30
Postdoctoral Fellows.....	10
Visiting Scholars .....	14
Research Awards.....	\$1,675,455