BECOME AN INDUSTRY PARTNER!

Industry Partners Advisory Council
IPAC members are individuals, companies, or organizations who support, promote, and globally advance FBNS.

Involvement and Benefits:
• Access to students for projects, internships, and full-time jobs
• Early access to cutting-edge research and tools
• Lead creation of facilities (e.g., GMP) that benefit member companies
• Mentor students and deliver guest lectures
• Use of facilities for training and education

Email fbnsliaison@ncsu.edu to join.

1. Schaub Hall - Raleigh, NC
2. Center for Marine Sciences and Technology - Morehead City, NC
3. Plants for Human Health Institute - Kannapolis, NC
4. Dairy Farm; Randleigh Heritage Museum; Howling Cow Dairy Education Center and Creamery - Raleigh, NC

LOCATIONS

CONNECT

For an in-depth view of all our services and to engage with our faculty, staff, and students, please visit our website at fbns.ncsu.edu.

Follow us on social media and learn about our faculty, staff, student, and alumni achievements! Search fbns ncstate on Facebook, Instagram, Twitter, and LinkedIn.
TEACHING

400+ Undergrads, 70+ Graduate Students

Undergraduate Pathways:
- Food Science (Science or Technology emphases)
- Bioprocessing Science
- Nutrition Science

Graduate Pathways:
- Food Science: Masters (thesis and non-thesis), PhD
- Nutrition: Masters (thesis; and non-thesis, online), PhD

Minor Pathways:
- Food Science (undergraduate, graduate)
- Nutrition (undergraduate, graduate)
- Brewing Science and Technology (undergraduate)
- Food Safety (graduate)

Certificate Programs:
- Food Safety Quality Management (undergraduate)
- Acidified Foods Manufacturing School (for acidified foods operators/supervisors)

Various food science and nutrition courses are available online at the undergraduate and graduate levels.

RESEARCH

Food Safety and Foodborne Disease Prevention:
- Bacterial foodborne pathogens; virology; safety of produce, seafood, vegetables, and acidified foods

Food Manufacturing and Entrepreneurship:
- Thermal and plant food processing; vegetable preservation by fermentation and acidification; processing via cold atmospheric plasma, high pressure, UV; meat processing

Health and Well-being:
- Metabolomics; fruit, vegetable, and peanut bioactives; food structure and ingredient functionality; flavor chemistry; phytochemicals and gut microbiome interaction; probiotics; CRISPR; fermented foods; obesity prevention; study of diet, health, and disease

Education Innovation and Effectiveness:
- Community nutrition; maternal, infant healthcare; federal nutrition programs; virtual reality and interactive learning

Affiliated Areas:
- Southeast Dairy Foods Research Center (SDFRC):
  - Milk and whey ingredient functionality, thermal processing, sensory characteristics, and consumer perception of dairy products, proteins and other foods
- Center for Advanced Processing and Packaging Studies (CAPPS):
  - NSF-founded center; includes Ohio State, UC Davis, and food industry members
- Plants for Human Health Institute:
  - Phytoactive components in plant foods and their impact on human health and wellness
- USDA-ARS Food Science and Market Quality and Handling Research Unit:
  - Enhance flavor, nutrition, and safety of sweet potatoes, fermented vegetables, peanuts
- Seafood Science:
  - Multi-college/inter-disciplinary work on quality and safety of aquatic foods
- Dairy Enterprise System:
  - Dairy plant, farm
- Wolfpack Brewery:
  - Chemistry, microbiology, and engineering aspects of brewing
- Pilot Plants:
  - Advance knowledge of thermal processing and dairy products, fruits, vegetables, meats, seafood

A Land-Grant University Serving NC

Programs:
- Food product, process development; plant proteins
- Fresh produce safety; FSMA training
- Food safety and quality training programs; intervention studies and evaluation
- Maternal and infant nutrition; breastfeeding support
- Red meats: Quality and safety
- Seafood: Equipment validation, SSOP, HACCP, GMP, shelf-life determination
- Training on milk pasteurization and other thermal processes

Services:
- Entrepreneur Initiative for Food (ei4f) Program: pH, water activity, nutrition labels, and process authority letters; Acidified Foods Training School (required certification)
- Sensory Service Center:
  - Consumer panel, trained panel, and instrument analysis of texture, flavor, and aroma
- Rheology Lab:
  - Rheological characterization of foods and pharmaceuticals

Community Outreach:
- Nutrition NUTS Program:
  - Health and nutrition education for preschoolers and their families
- Breastfeeding Support:
  - Partnership with the NC Breastfeeding Coalition