

# 2021 Annual Report of Collaborative Research Program

Illinois Institute of Technology (IIT), Institute for Food Safety and Health (IFSH)  
National Center for Food Safety and Technology (NCFST)



**2021 IIT IFSH NCFST Annual Report of Collaborative Research**

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## Research Activities

Research conducted at IFSH NCFST addresses key food safety issues facing the country and supports the development of safe food with health-promoting properties from farm to fork. This research forms a scientific basis for policy decisions affecting food safety and public health. Development and coordination of NCFST's scientific research programs are undertaken through the five science platforms: **Food Processing, Food Microbiology, Food Chemistry and Packaging, Nutrition, and Proficiency Testing and Method Validation.**

The **Food Processing Platform** aims to provide a scientific basis for the processing and production of safe food, and support programs related to pasteurization, extended shelf life, sterilization, package integrity, and potential cross-contamination/contact issues.

The **Food Microbiology Platform** aims to contribute knowledge about the characteristics, survival, and inactivation of hazardous microorganisms in foods and processing environments in support of food-contamination risk assessment and management.

The **Food Chemistry and Packaging Platform** aims to investigate approaches to prevent, reduce or mitigate the formation of hazardous chemical contaminants during processing, and to prevent the cross-transfer of pre-formed natural toxins, allergens or man-made (environmental) contaminants in the food production environment. Another platform goal is to evaluate factors affecting migration of packaging constituents and contaminants into food.

The **Nutrition Platform** aims to contribute knowledge about food choice and intake behavior by consumers and their impact on nutrition and health. The Nutrition Platform supports research needs of FDA Office of Nutrition and Food Labeling (ONFL).

The **Proficiency Testing and Method Validation Research Platform** aims to provide underpinning science for the development of food microbiological and chemical inter-laboratory studies and proficiency testing programs.

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