

College of Natural Resources and the Environment

University of Massachusetts Amherst

Safe and Secure Food and Fiber Systems

Bacterial Adhesion and Growth at Phase interfaces

Issue

Foodborne pathogens cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths each year. More than 200 known diseases are transmitted through food.

Impact

Listeria monocytogenes is responsible for 61% of FDA Class 1 recalls of processed foods and the bacterial source is often established biofilms in the food-processing environment. This project will elucidate the genetic basis for adhesion and biofilm formation of Listeria monocytogenes. Knowledge of the molecular events will be used to design unique strategies for biofilm prevention and removal from processing plants, leading to large economic savings for the food

industry.

Primary impact area(s)

- Research
- Education
- Extension

Funding sources

- Hatch Act
- Special Research Grants

Topics

- Food Safety

Contacts

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