



Purpose

Local high school students conduct an independent research project under the supervision of a graduate student research assistant, to earn advanced science credits at the high school level. Completed projects are presented at the Lafayette Regional Science Fair.

Stakeholders

- Purdue University Food Microbiology Laboratory
 - Dr. Haley F. Oliver
 - Graduate Assistant Susan Hammons
- Lafayette Jefferson High School
 - Life Sciences Teacher, Mr. Joe Ruhl
 - Participating high school students
- International Science and Engineering Fair
 - Lafayette Regional Science Fair

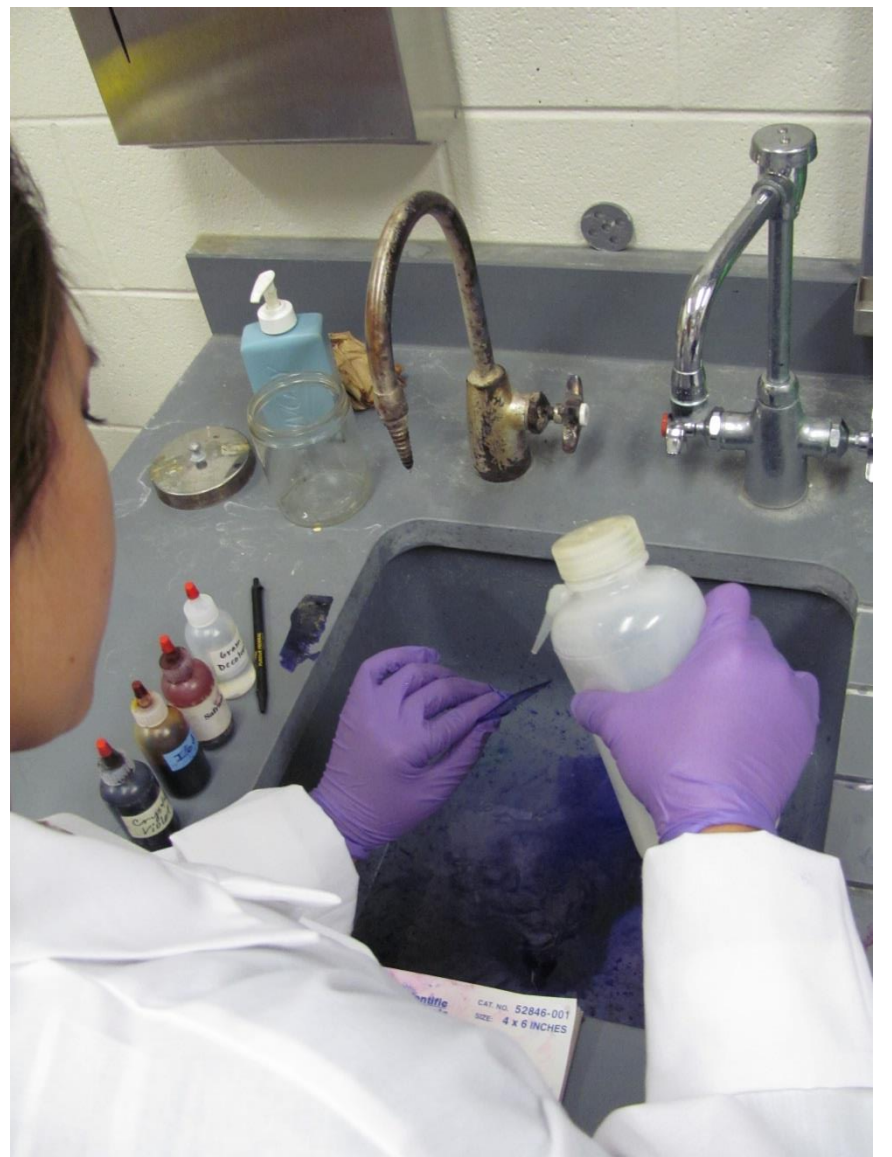
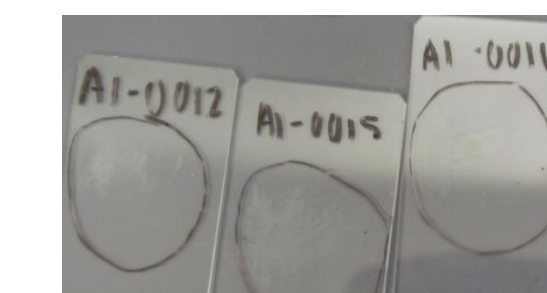
Support

USDA NIFA funded grant entitled "A National Food Safety Education Program: building a multidisciplinary food safety training pipeline from K-12 to graduate school" (NIFA 2010-04502) awarded to H.F. Oliver, M. Wiedmann, K. Nightingale, L. Jaykas, S. Ebrahim, A. Roberts, and K. Bohr. Additional support from the American Meat Institute Foundation (AMI) and Food Marketing Institute Foundation (FMI) grants awarded to H.F. Oliver. Graduate salary supported by Purdue University Andrews Fellowship awarded to S. Hammons.

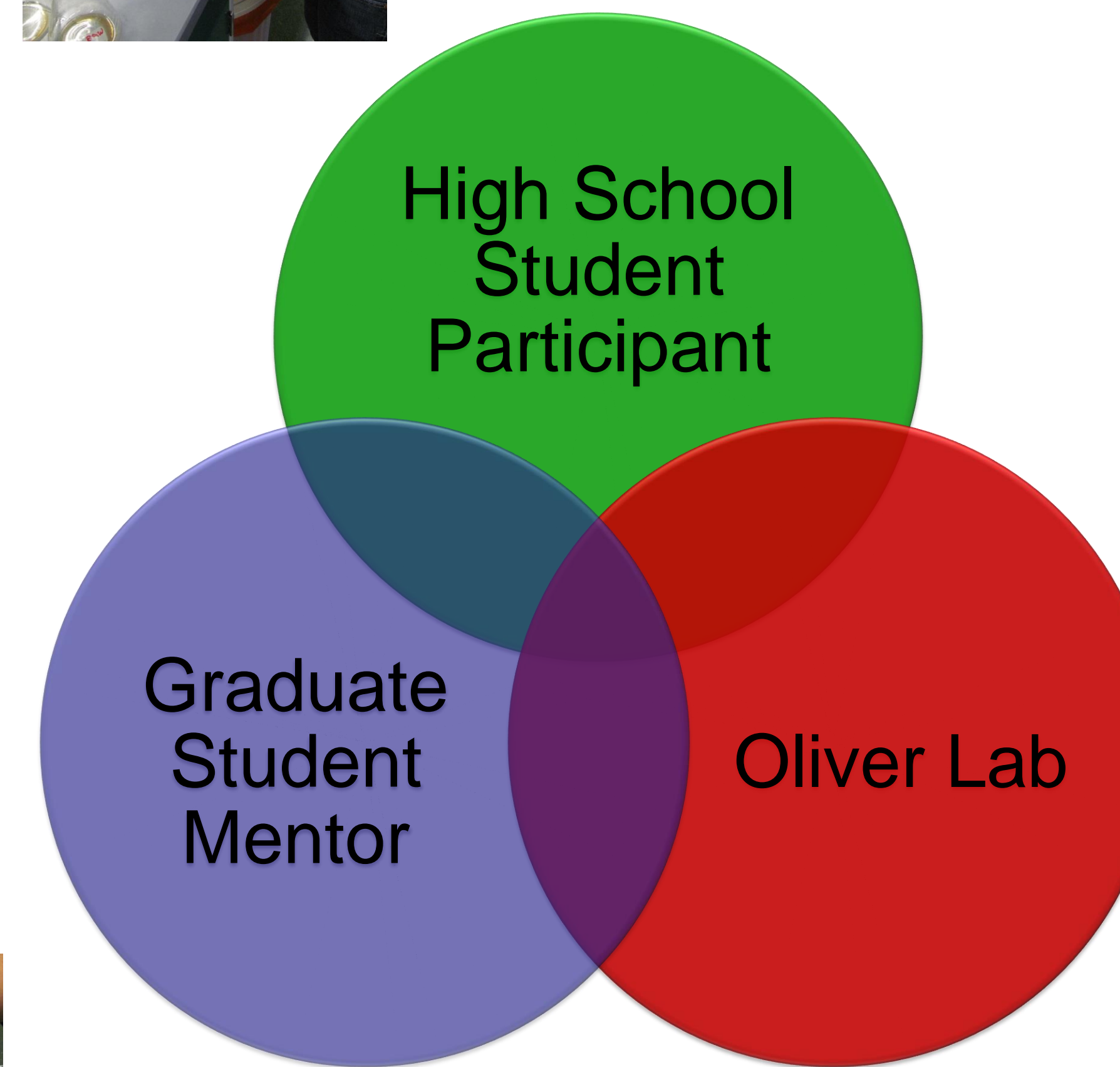
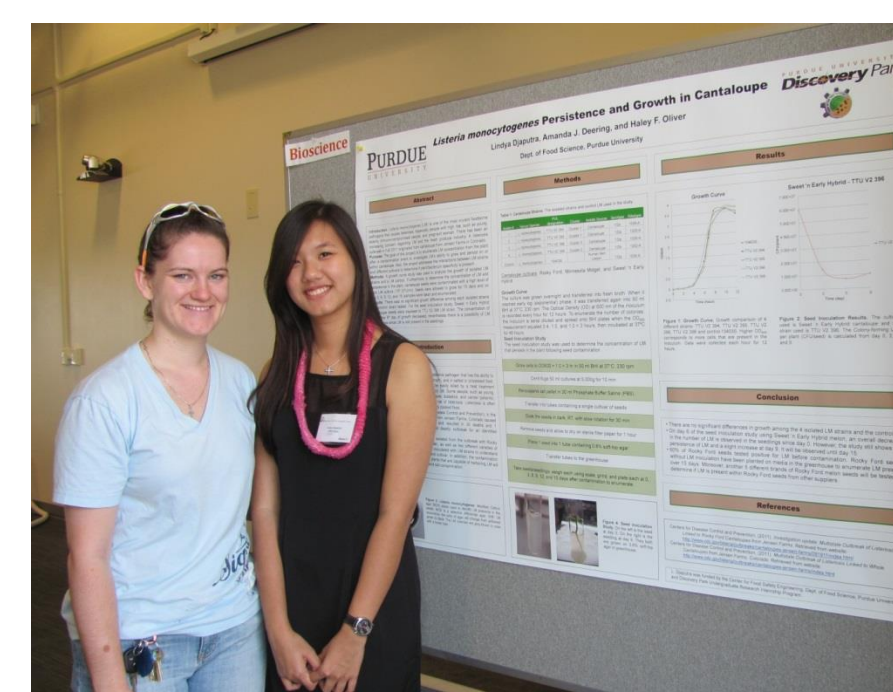
Student Projects

- *Listeria* in Retail Delis (Year One & Two)
- Description of Bacteria Found in Retail Delis
- Identification of Psychrotrophic Microorganisms from Retail Delis

Outcomes & Gains



- Leadership/Personnel Management
- Broader Technical Skills
 - Procedure development
- Teaching Techniques
 - Setting expectations
 - Identifying learning outcomes
 - Developing lesson plans
 - Modifying procedures to match student needs, limitations, & skills
- Soft Skills
 - Communication
 - Time management
 - How to be a mentor



- Build Food Safety Education Pipeline
 - Complete deliverables for AFRI
- Graduate Student Development
- Exploratory Projects
 - Add details to current projects
 - Preliminary data for future projects

- Hands-on Lab Skills
 - Aseptic technique
 - Media preparation
 - Molecular methods
 - Record keeping
- Data analysis
 - Scientific results
 - Practical significance
- Technical Writing
- Technical Presentation
- Soft Skills
 - Time management
 - Communication
 - Self-motivation/Initiative
- Critical Thinking/Problem Solving
- Explore Career Interest
 - Research experience



Timeline

