

# Food Safety and Agroterrorism Training: Educating Our Future Workforce

Dr. Douglas Morrish – Texas State University, Dr. Ryan Saucier – Texas State University, Dr. Nora Garza – Laredo Community College  
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United States Department of Agriculture  
National Institute of Food and Agriculture

## Objectives

- Allow community college students to develop early linkages with Texas State University through newly established University Transfer Centers, mentorship websites, summer camps, faculty networking, and field trips;
- Develop early linkages and a strong pipeline for K-12 students by visiting 10 schools a year with a high representation of Hispanic students. Discussion and activities regarding USDA employment will be performed;
- Train 50 scholar Hispanic students in the course *Preparing Communities for Agroterrorism*;
- Retain and place 90% of the student participants in job shadowing and internship opportunities within USDA agencies;
- Graduate 50 Hispanic students who are well trained and ready to enter employment in the food safety / inspection areas with APHIS, FSIS, or any other USDA agency;
- Provide funding for 6 graduate students every two years to complete a thesis and a degree, thus allowing them to be competitive for USDA employment;
- Create *Academic Research Clusters* (directed by faculty and graduate students) to foster a mentoring component and allow students to collect data and present their findings at one regional or national research conference.



## Results to Date

- First year retention rate of 96%; second year retention rate of 94%.
- Overall GPA increase from Fall 2011 ( $M = 2.93$ ) to Spring 2013 ( $M = 3.17$ ).
- Thirty one (65%) female participants.
- MANRRS student organization created and has over 30 members.
- All students have received two training certificates from the Southwest Border Food Safety and Defense Center and Department of Homeland Security.
- Student majors include: Agriculture (25), Biology (10), Nutrition (7), Environmental Science (4), Chemistry (1) and Engineering (1).
- Twenty-seven of the 29 community college students have successfully transferred.

Summer II Workshop Participants ( $n=42$ ) Pre/Post Knowledge Levels of USDA Agencies	Pre $M$	Post $M$
Agriculture Marketing Service	1.00	2.02
Animal and Plant Health Inspection	1.83	2.81
Farm Service Agency	1.10	2.70
Food and Nutrition	1.33	2.67
Food Safety and Inspection Service	1.85	2.95
National Agriculture Statistics Service	0.62	2.24
Natural Resources Conservation Service	1.00	2.71
Rural Development	0.95	2.88

\*All values significant at the  $P < 0.05$  level.  
\*\* Scale : 0 = no knowledge 1= low knowledge 2 = moderate knowledge 3 = high knowledge 4 = exceptional knowledge

## Activities

- Two -1 Week Summer Camps – Texas State University (Agroterrorism Training and guest speakers from USDA agencies including the FSIS administrator in Washington, D.C., the acting Deputy Under Secretary for Food Safety and Rural Development, and the State Director for Rural Development).
- University Transfer Centers at Palo Alto and Laredo Community College
- MANRRS recruitment at local K-12 schools.
- One week *Travelling Classroom* to Southwest Border Food Safety and Defense Center – Las Cruces, NM.
- Academic Research Clusters for fellows to collect and present data at national research conferences.
- Job shadowing and internships at USDA agencies (APHIS, FSIS, NRCS, and others).



Internship Agency	Location
United States Forest Service	Wilmington, IL; Aspen, CO; Logan, UT
Natural Resource Conservation Service	Pearsall, TX; San Marcos, TX
Food Safety Inspection Service	San Antonio, TX; Nixon, TX; Dallas TX
Texas Department of Agriculture	Austin, TX
Aramark	Hunt, TX
WIC	San Antonio, TX
Department of Homeland Security	Laredo, TX
Undergraduate Research Clusters	
Tick-rodent associations to identify the ecological correlates of the prevalence of <i>Borrelia</i> (Lyme disease agent) in Texas	Dr. Ivan Castro-Arellano Biology
Preliminary data collection for a NIH proposal concerning the mechanism by which vitamin A prevents colon cancer metastasis.	Dr. Michelle Lane Nutrition and Foods