



The LEADERS Program:

Learning, Enhancing, and Developing Experiential Research Skills



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Summary

The LEADERS Program is a collaborative STEAM project between Texas A&M University-Kingsville (TAMUK) and New Mexico State University (NMSU) animal science programs. It will focus on developing well-rounded leaders who address *global food security and hunger*. The purpose of this project is to increase the number of Hispanic leaders in animal science by developing experiential learning activities that increase retention and graduation rates and enhance scientific skills and professional development. The LEADERS program will produce experienced Hispanic graduates who are well qualified to enter the work force and provide human capital necessary to enhance the nation's food supply.



Beneficiaries

At a minimum, 10 B.S. and 10 M.S. students will be supported through grant funds and participate in proposed activities over the 4-year grant. As a result, The LEADERS Program will result in a significant contribution to not only Texas and New Mexico, but the nation because these students will have developed technical, professional, and leadership skills that will make them highly employable for many career opportunities in agriculture.

Proposed activities will produce work-experienced graduates that will enter the job market or graduate school.

The completion of the LEADERS program will lead to the following:

- 1) collaboration between TAMUK and NMSU that leads to students obtaining degrees and future grant collaborations
- 2) students will gain skills through the research process that will result in employment or acceptance into graduate school
- 3) increase student opportunities for public speaking and professional growth through participation at research symposiums and/or professional conferences
- 4) cultivate student and faculty enrichment through collaborative efforts and beneficial partnerships within the agricultural industry

Grant Objectives

Objective 1: Develop a cooperative link between TAMUK and NMSU that will improve underrepresented student success through professional development opportunities.

Objective 2: Educate both undergraduate and graduate students in the field of animal science through 'hands-on' experiential learning activities.

Objective 3: Engage students through research training.



Evaluation Plans

The primary method to determine the program's success will be to compare historic retention rates, historic graduation rates, and previous post-graduation employment/education choices of animal science students prior to implementation of our LEADERS program. We will also be participating a Meta-analysis with other USDA HSI funded projects to capture meaningful data not only within the project, but across other funded projects.

Specific comparisons will be made at each institution for:

- retention rate of students participating in the LEADERS program
- 4- and 6- year graduation rates of undergraduate LEADERS
- 2- and 3- year graduation rates of graduate student LEADERS
- employment in food and agricultural careers
- acceptance into graduate school

In addition to institutional data, we will:

- ask students about their experiences and knowledge gained through the experiential learning activities using a Likert-scale assessment
- pre-/post- test results and open-ended questions
- assessed activities will include: research, participation in symposia/professional meetings, internships, site visits, and mentoring by faculty and peers

Activities

The objectives of this project will be met by providing access to activities that support Hispanic student success.

- **Experiential learning** will be supported through student *research projects, participation in professional meetings, internships, and educational tours.*
- **Retention goals** will be met through *faculty mentoring, peer mentoring, and the experiential learning opportunities.*



Expected Impact

The outcomes will be increased retention and graduation rates of Hispanic students because of the multi-faceted approach of financial support (compensation for research efforts), emotional encouragement (through faculty and peer mentoring), and career awareness (interaction with USDA, state agencies, and private industry). This will result in successful Hispanic graduates who are competitive for careers requiring advanced degrees in the food and agriculture sector.