FY 2007

Hispanic Serving Institutions Education Grants Program

Description of Funded Projects

Multicultural Alliances
Science and Education Resources Development
Cooperative State Research, Education, and Extension Service
U.S. Department of Agriculture
Washington, DC
Proposal Number: 2007-02355  
Institution: Allan Hancock Community College  
Award Number: 2007-38422-18040  
Award Amount: $275,000  
Project Director: Ginger Lordus  
Project Duration: 3 years

Multi-Cultural Culinology: From Campus to Career
This project builds on the collaboration between Allan Hancock Community College (a 2-year institution) and California State Polytechnic University (a 4-year institution) to create associates and bachelors degrees in the new field of culinology, which blends food science and nutrition. This project focuses on student recruitment and retention, prepares faculty to support student success, brings a multicultural perspective to the industry, and promotes healthier eating habits and lifestyles.

Proposal Number: 2007-02359  
Institution: College of the Sequoias  
Award Number: 2007-38422-18615  
Award Amount: $251,559  
Project Director: Larry Dutto  
Project Duration: 2 years

Veterinary Technician Training Program
The College of the Sequoias (a 2-year institution) will address the significant shortage of veterinary technicians in the Central Valley of California, one of the largest dairy regions in the nation, by adding about forty students annually. The institution will purchase equipment, train faculty, hire staff, and expand the program to include nine new courses for a total of 26.5 additional credits to meet the accreditation standards of the American Veterinary Medical Association. The project will also provide hands-on experience at the College’s 500-acre farm at the University Training and Research Center. Finally, the project will facilitate student transfer to the University of California, Davis School of Veterinary Medicine, one of their main collaborators in this project.

Proposal Number: 2007-02361  
Institution: Del Mar College  
Award Number: 2007-38422-18084  
Award Amount: $230,000  
Project Director: Jonda Halcomb  
Project Duration: 3 years

South Texas Liaison of Laboratories for Agricultural Research (STELLAR)
STELLAR involves a collaboration among Del Mar College, Texas A&M University-Corpus Christi, Texas A&M University Kingsville (all 4-year institutions), Texas Agricultural Research, and Cooperative Extension. USDA CSREES priority areas include increase the number of students earning degrees in agricultural science, improve recruitment and retention of under-represented students, strengthen curriculum, and improve the delivery for different learning styles; attract and support undergraduate students from underrepresented minorities; and facilitate cooperative linkages. STELLAR will impact over 1,000 students. Expected outcomes include increasing the number degrees in agriculture, improving student research and project management skills, and increasing retention and transfer of under-represented students.
Science Summer Camp for the Highly Hispanic High School Students of South Texas
Texas A&M University–Kingsville (a 4-year institution) and the Weslaco Independent School District (Texas) will collaborate to establish a hands-on science summer camp to teach molecular biology to 45 high school students and science teachers. Furthermore, we will extend the benefit of the grant to other students by creating a small leaning community (SLC) in agricultural science-related disciplines. New science labs are being built, and this grant will provide the funds to equip some of them. Additionally, teaching materials, such as DVDs and biological models, will make learning in the SLCs more attractive to the students.

Urban College of Boston Food Sciences Capacity-Building Project
The Urban College of Boston’s (UCB) Food Science Capacity-Building project seeks to develop a higher education program in the food sciences and to produce graduates capable of entering or advancing within the nation’s food sciences and nutrition field. The development of this 21-credit certificate program in health, nutrition, and food safety (HNFS) is UCB’s (a 2-year institution) first program of study in the hard sciences and the precursor to the development of an associate degree in food sciences. During the grant period, approximately 50 students will earn a certificate in HNFS, while another 25 will complete the certificate in the semester immediately following the end of the funding period.

Proyecto Alimento II: Success in Food & Nutrition—Recruit, Retain, Transfer of Hispanic Students from 2-year to 4-year Nutrition Degree Program
Proyecto Alimento II: Success in Food and Nutrition, is a 2-year project developed to address the underrepresentation of Hispanics in science and nutrition programs, and the high incidence of obesity that cuts across ethnic and economic boundaries. St. Philip's College (SPC) and the University of the Incarnate Word (UIW) (2- and 4-year Hispanic-Serving Institutions, respectively) are in a unique position to address these issues. They are committed to creating student successes in the classroom by increasing the number of Hispanic students who enroll at SPC as culinary arts majors, retained each year, and then transfer to UIW to complete a degree in nutrition.
Preparing Underrepresented Students for Careers in Agriculture through Recruitment, Experiential Learning, and Community Service

The Agriculture Studies program at California State University, Stanislaus, (a 4-year institution) accommodates a variety of students, including underrepresented students, who often begin their education at community colleges but never complete a bachelor's degree. This project assists this relatively new program as it attracts and retains underrepresented students from partner community colleges, and engages them in real-life applications and experiences that will prepare them for agricultural careers. The project provides a variety of activities, including new student scholarships, improved transfer coordination, experiential learning through internships with USDA partners, and the creation of a sustainable garden that will provide a variety of instructional opportunities.

Engaging Hispanic Students in USDA Math and Science Pipeline

This project in Texas will create a dynamic approach to science education and demonstrate to students that the science/math pipeline is multifaceted and offers exciting career opportunities. The project engages students’ interests by allowing them to explore methods to solve a significant real-life problem, such as the hypoxic dead zone in the Gulf of Mexico. Students will enroll in a special research and design course at each of three Spring Branch Independent School District (Texas) high schools and will work on the same issue, although they may approach the solution from diverse methodologies. The premise is to become engaged in the process of finding a solution through a team-based approach.

Comienzo Sano: Familia Saludable / Healthy Start: Healthy Family

Comienzo Sano: Familia Saludable (CSFS) will advance the quality of human nutrition education by preparing first generation-educated Latino students in nutrition and health sciences, through experiential learning opportunities with the California State University at Long Beach Department of Health and Human Services’ Women, Infants, and Children (WIC) Program. Based on the Community Health Outreach Model, CSFS will provide peer education and social support to Latina immigrant WIC participants. CSFS will help participants reduce risk for maternal/infant/child obesity by enhancing cultural and scientific knowledge related to the genetic, social, and behavioral determinants of childhood overweight and obesity for pregnant and postpartum Latinas.
TSJC Associate of Science Transfer Program Improvements
Trinidad State Junior College (TSJC), is a comprehensive, Hispanic-serving, rural Colorado 2-year community college. TSJC’s Associate of Science Transfer Program will update biology laboratories, chemistry laboratories, and greenhouse with state-of-the-art scientific equipment; update biology classrooms with technology-based delivery methods; train science instructors to effectively and efficiently utilize the laboratory and technology based equipment; and increase enrollment through scholarship incentives. The project will enhance the biology and chemistry programs for historically underserved students. At least 250 students and 3 instructors will benefit directly from this project during the grant period.

Advancing English Language Learning for Food and Agricultural Science Majors
English proficiency is a problem that slows the progress of many agriculture students at the University of Puerto Rico at Mayagüez (a 4-year institution)—this issue slows their progress towards achieving their degrees. Advancing English Language Learning for Food and Agricultural Science Majors addresses this problem by using a technology-enhanced classroom to deliver a revised curriculum for a three-course basic English track with content geared specifically to the needs and interests of agriculture majors. The curriculum, developed with experts in agriculture, will build students’ vocabulary and develop the reading, writing, speaking, and listening skills needed to be successful in the university and in the workplace.
**Geomicrobiological and Metagenomic Studies (GeMS) of Puerto Rican Soils**

GeMS is a joint cooperative initiative from the University of Puerto Rico (UPR) at Mayagüez and UPR Humacao (both 4-year institutions) to train a new generation of students who are more competitive in functional genomics, bioprospecting, geomicrobiology, and natural resources conservation. Students will participate in exchange programs with the University of Wisconsin-Madison, and the Center for Integrative Geosciences at the University of Connecticut. The GeMS project will enrich the UPR system curriculum by developing and implementing the first metagenomic course and providing participating students the opportunity to visit schools in Puerto Rico to share what they have learned.

**Preparing Underrepresented Students for USDA Natural Resource Careers**

California State University at San Bernardino's (CSUSB) Water Resources Institute (WRI) will provide up to 30 multidisciplinary internships, mentoring, and instruction on watershed management-related projects. WRI is collaborating with the Redlands Office of the Natural Resource Conservation Service, the Santa Ana Watershed Project Authority, local resource conservation districts, and other watershed groups to offer the program, which is a result of increasing population, changing land use patterns, and expanding urbanization. CSUSB is a 4-year institution. Students in this program will participate in scientific research and train in the latest Internet-based information sharing systems at the WRI. The project will assist rural community decision-making by providing available scientific knowledge about the impact of urbanization.

**Undergraduate Biotechnology Engagement Track**

This award funds a project at South Mountain Community College (a 2-year institution) that will increase the number of underrepresented minorities pursuing bioscience careers in Arizona’s rapidly growing biotechnology field. The project brings together a community college, three public high schools, and scientists from the Agricultural Research Service’s Arid Climate Laboratory. It increases minority student access to bioscience education and improves student bioscience abilities and interest in pursuing bioscience careers by creating biotechnology laboratory facilities in each of the three high schools, training high school faculty, providing bioscience supplies and lab technician support for student bioscience research projects, and providing college-level bioscience curriculum for high school students. The project will establish an integrated bioscience curriculum encompassing biotechnology, chemistry, botany, environmental sciences, animal science, and pre-veterinary science in high schools in order to promote access to advanced biosciences. It will provide high school students coursework and laboratory training typically reserved for upper-division or graduate level college students so its students can successfully compete in the bioscience workforce or in a university pursuing advanced bioscience studies.
Proposal Number: 2007-02396  
Institution: Rancho Santiago Community College District/Santa Ana College  
Award Number: 2007-38422-18030  
Award Amount: $275,000  
Project Director: Martha Vargas  
Project Duration: 3 years

**Partnership for Transfer Success in USDA Career Majors**
Santa Ana College, with its 2006 enrollment of 24,402 students, is a 2-year public community college in California’s Rancho Santiago Community College District. Goals of the “Partnership for Transfer Success in USDA Career Majors” program are to raise awareness among diverse students of career options available in USDA-related fields, and to prepare them to transfer to a university and major in these fields. The project builds on collaborations with California State University, Pomona, University of California, Irvine, (both 4-year institutions) and the local food industry. Activities include guest speakers, a research in food/nutrition course, intensive academic and counseling support, internship/research experiences, and financial support for selected students.

Proposal Number: 2007-02397  
Institution: Universidad del Turabo, SUAGM  
Award Number: 2007-38422-18026  
Award Amount: $230,000  
Project Director: María E. Rosa  
Project Duration: 2 years

**Strengthening Retention and Graduation Rates of Disadvantaged Students in a Nutrition/Dietetics Program at Universidad del Turabo**
The project aims at planning, developing, and implementing retention activities for disadvantaged Hispanics in the baccalaureate in sciences in nutrition and dietetics (BSND) program. By July 2009, Puerto Rico’s Universidad del Turabo (UT), Sistema Universitario Ana G. Méndez (SUAGM), will maintain a 90 percent retention rate of minority/disadvantaged nutrition/dietetics students through the use of an individualized nutrition/dietetics retention program among freshmen. UT is a 4-year institution. By December 2009, UT will obtain a 90 percent graduation rate through activities integrated to the supervised practice. An educational program will increase the pool of motivated Hispanic students entering UT’s BSND program, identify senior-year students’ academic and personal needs, and provide them with skills to complete their supervised practice.

Proposal Number: 2007-02398  
Institution: California State University, Los Angeles  
Award Number: 2007-38422-18041  
Award Amount: $240,000  
Project Director: Laura Calderon  
Project Duration: 2 years

**Recruitment and curricular development for the Food Science + Technology and Nutrition Programs**
This California State University, Los Angeles (a 4-year institution) project will recruit students into a newly developed food science and technology (FST) bachelor of science degree program, as well as recruit Spanish-speaking students to pursue a nutritional science (NTRS) degree to become registered dietitians. Project plans also call for the curricular development of a fundamental food science/agricultural course to increase interest in the FST and NTRS programs, and the development of a food safety certificate program. These recruiting activities and new programs should result in the increased graduation of Spanish-speaking nutritional science, food science and technology, and food safety experts.
Tex PREP Consortium-Sul Ross State University, UTSA, Dallas County Community College District, Victoria College

The TexPREP Collaboration expands delivery of science, technology, engineering, and math (STEM) curriculum and strengthens underrepresented Hispanic, minority, and female college student recruitment, retention, and performance at Sul Ross State University (a 4-year institution). TexPREP programs cultivate Hispanic and minority student performance by identifying interested and capable middle school students and mentoring their success through summer STEM-based programs. Undergraduate student program assistant classroom mentors, who assist teachers, support students, and serve as role models, are critical to the success of TexPREP. TexPREP participants have higher rates of college entry and degree achievement, pursue advanced STEM degrees, and can ultimately help increase the agricultural scientific workforce.

Two-year project to strengthen & enhance existing educational programs in range, wildlife, natural resources, and habitat

Southwest Texas Junior College (a 2-year institution) will coordinate a geospatial ecosystem management (GEM) program. GEM is a 2-year project that will enhance undergraduate education application of geospatial technologies and analysis methods in rangeland and wildlife ecosystem management, which includes range, livestock, natural resources, and habitat assessment and management. This multidisciplinary focus addresses multiple emerging areas of regional, state, and national workforce needs. The objective of this program is to broaden educational opportunities for Texas undergraduates, increase the diversity of the students, and expand the shared capacities of the partnering institutions (Texas Agricultural Experiment Station and Texas A&M University) within the GEM program.

Chef-Scientists: A Collaborative Cross-Disciplinary Program

Through the “Chef-Scientists” project, New Mexico State University’s (NMSU) (a 4-year institution) College of Agriculture and Home Economics is collaborating with regional community college culinary programs to prepare well-educated professionals cross-trained in food science/nutrition and culinary arts. These individuals are highly valued by food manufacturing and processing companies. The 3-year project will result in the development of a culinology option at NMSU, a significant update of the food science teaching laboratory at NMSU, and a targeted recruitment and retention plan.
Increasing Multicultural Diversity in Agriculture: Education and Partnerships
Laredo Community College and Southwest Texas Junior College, both 2-year institutions, and Texas State University, a 4-year institution, will create a solid path for Hispanic and other underrepresented students to complete degrees in agriculture science and business. Students will be admitted jointly, take two teleconferenced courses, attend summer academies, participate in USDA agency internships, and will be encouraged to participate on employment opportunities available at USDA.