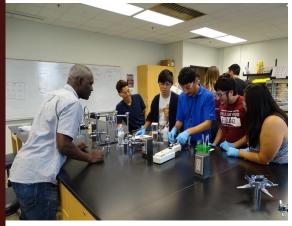


Introduction to Problem Solving in Engineering Module with Dr. Tariq H. Tashtoush.



Introduction to GPS, Mapping, and Map Making Module with Dr. Andrew M. Hilburn.



Introduction to Forensic Chemistry Module with Dr. Alfred K. Addo-Mensah.

# **Program Staff**



Dr. Rohitha Goonatilake (956) 326-2588 harag@tamiu.edu



Faculty Leader: Dr. M. Lourdes Viloria (956) 326-4915 maria.viloria@tamiu.edu



**Activity Director:** Sofía C. Maldonado (956) 326-2582 sofiac.maldonado@tamiu.edu

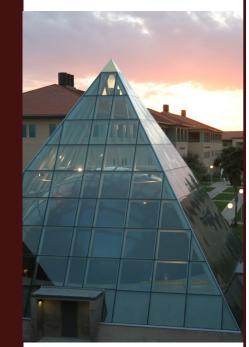


**Special Program Aid:** Karina N. Flores (956) 326-2406 karina.flores@tamiu.edu



Award #: P031S140130 **Program Contact Information: Building Scholars** Texas A&M International University **Department of Mathematics and Physics** 5201 University Blvd. Laredo, TX 78041 Office: LVB 324G **Web:** http://www.tamiu.edu/coas/dmps/titlev/index.shtml

# **Building Scholars**



### Mission To increase the number of Hispanic and low-income students involved in original research.





# **About the Program**

Texas A&M International University (TAMIU) and Laredo College (LC) jointly serve the predominately Hispanic community, a group historically underrepresented in research careers and positions of leadership in the nation. The goal of this program is to increase the number of Hispanic and low-income students completing a college degree, thus increasing the competency and diversity of our workforce.

Building Scholars consist of activities developed by TAMIU and LC, including:

(a) Provide undergraduate research and presentation opportunities across disciplines and develop a summer research week,

(b) Implement a program for departmental faculty to teach University Seminar 1102 to first-year students that is discipline specific,

(c) Provide specialized resources and instruction for all developmental students,

(d) Improve the number of full-time students who have a developmental background that persist and graduate,(e) Fund travel to professional conferences for training,

building collaborations & presenting research results,

(f) Host an annual faculty development training for faculty at both institutions,

(g) Perform analysis on current protocols for sharing data and make recommendations and improvements, and

(h) Track student progress and retention.



Congressman Henry Cuellar presents \$1.5 million in Grants to TAMIU for STEM Programs which include the TAMIU Building Scholars.

## Summer Research Week

This workshop takes place every summer, mostly in July. It is a week long workshop that includes 10 modules. Students will complete 30 hours of lecture and activities to embellish their research experience. Participating in this workshop will expose students to cutting edge research techniques and methodologies that are applicable to a wide range of fields. Participants will be trained in developing testable hypotheses, utilizing technology and critical thinking to analyze data, drawing appropriate conclusions, as well as the effective communication of experimental results.



Participants of Summer Research Week work on hands-on activities promoting their discipline-specific undergraduate research capabilities.

#### **Undergraduate Research**

One of the Building Scholars Program's goal is to engage undergraduate students in original research. Undergraduate research experiences enhance the quality of the student's learning experience and promote a variety of important skills. Our current faculty has the background and training to mentor undergraduate research projects in a wide range of fields including biology, chemistry, engineering, mathematics, physics, sociology, psychology, communications, business, education, humanities, public affairs and nursing. Sharing research results among colleagues is an important step in building expertise in the field, and it is expected that faculty members involved in research with undergraduate students include students in their research and publications.

## **Faculty Development**

Faculty development workshops, held at least once a year, are led by a speaker who provides tools that can further promote undergraduate research. The general format is the presentation, activities, discussion, and time for a Q&A session.



Dr. Bertha E. Flores during her presentation at the faculty development workshop on September 10, 2019.

## **Grant Activities at LC**

#### Advising & Mentoring

LC offers academic support in the form of quality advising and mentoring in line with the goal of increasing the number of Hispanic students pursuing and completing a college degree.

#### Supplemental Instruction

LC provides supplemental instruction which are regularly scheduled, informal review sessions in which students compare notes, discuss readings, develop organizational tools, and predict test items. Students learn how to integrate course content and study skills while working together.

#### Academic Bootcamps

These bootcamps will be held in the summer for developmental students who wish to accelerate their entrance into college level courses . The Texas Success Initiative (TSI) camps are utilized to prepare students with effective testing strategies pertaining to the disciplines of Reading, Writing, and Mathematics.