

MEET THE  
GRANT TEAM

- **Dr. John Palasota,**  
Program  
Director, UST
- **Dr. Juan Carlos  
Reina,** Program  
Director, HCC
- **Dr. Ruth Ann  
Bagnall,**  
Undergraduate  
Research  
Director
- **Dr. Jyoti Wagle,**  
HCC Activity  
Two Director
- **Dr. Yiyen Bai,**  
HCC Activity  
One Director
- **Patricia M.  
Hernandez,** HCC  
Administrative  
Assistant

INSIDE THIS  
ISSUE:

Meet the grant team	1
About the STEM Program	1
Why Undergraduate Research	2
What Students are Saying	3
Purpose of Funding	4

# STEM Scholars Newsletter

VOLUME 1, ISSUE 1

DECEMBER 2012

## About the STEM Scholars Program

**Project Outcomes:** UST and HCC are working on three activities to increase the participation, retention, transfer rates and completion of Hispanic and other low-income STEM students:

1) Developing a faculty-driven, robust transfer program with new model articulation agreements. This activity includes adding new online tutoring services at UST which align with current services at HCCS, adding a STEM Transfer Coordinator, as well as mentoring

and outreach conducted by faculty, mentors and peers to increase student engagement in STEM.

A STEM scholarship endowment will be created at both institutions and revenues will be increased through new transfer enrollments, strong retention and external funding;

2) Create a new year-round UST / HCCS undergraduate research program. Student learning, retention, and completion will be increased through improved

teaching / learning strategies, increased STEM faculty engagement and peer mentoring and tutoring.

Five STEM labs at HCCS campuses will be aligned with UST STEM labs to provide a seamless transition to baccalaureate-level coursework, and

3) Utilize data-driven strategies to improve student outcomes by adding an assessment coordinator to expand UST assessment services for ongoing assessment of STEM programs.

## Why Undergraduate Research?

A record-breaking five-year, \$5.9 million grant from the US Department of Education provides funds for the STEM Scholars Grant. The grant will run from October 1, 2011 through September 30, 2016.

This UST / HCCS STEM Scholars project is modeled on the recommendations made by Hispanic STEM researchers from the Tomas Rivera Policy Institute and The Center for Urban Education, leaders in the field of increasing Hispanic participation in STEM. Malcom, et. al. describe that, across the nation, Hispanic students begin studies at low-cost higher education institutions, predominately community colleges, where they have access to fewer STEM resources, stating that

“The lack of research opportunities at HSIs is problematic because engaging in undergraduate research has been shown to increase retention and graduate school enrollment among underrepresented minority STEM majors.”

Hands-on research is widely believed to encourage students to pursue advanced degrees and careers in research is widely believed to encourage students to pursue advanced degrees and careers in STEM fields (Source: Russell, Hancock, McCullough, 2007).



## What the Participants are Saying:

So glad I participated!”

“Dr. Larios is fantastic!!! “

“It was a great experience”

“This was so helpful for increasing my knowledge related to genetics and helping me in my current STEM classes!”

“Loved it!”

“Helped my research—what a great experience”

“I would definitely do it again if I had the chance!”

“Loved this opportunity!”

*“The  
research  
helps me  
remember  
my  
Calculus  
and Gen  
Chem  
while  
helping me  
do better  
in  
Organic!”*

## Impact on Career Plans

“ I love it. I plan to attend graduate school. I want to be part of the M. D.Anderson Moon Shot research. I want to be part of the cure for cancer.”

“I am going into the medical field. The research went well and I was very well prepared for Organic Chemistry.”

“I want to work in research. I didn’t know I could stay in Houston after graduation and work at the Medical Center—a great opportunity!

## How can I participate?

Applications to the program are accepted once a year. If you have already participated, we ask that you wait a year before applying again. A waiting

list is kept should any students drop out of the undergraduate research program and additional students will be invited to participate.





## Purpose of Funding

The HSI STEM & Articulation Programs was enacted through the Health Care and Education Affordability Reconciliation Act of 2010 which amended Section 371 of the Higher Education Act. The program provides grants to Hispanic-Serving Institutions, as defined in Section 502 of the Higher Education Act, with a

priority given to applicants that propose:

- (1) to increase the number of Hispanic and other low income students attaining degrees in the fields of science, technology, engineering, or mathematics; and
- (2) to develop model transfer and articulation agreements between 2-year Hispanic-serving

institutions and 4-year institutions in such fields.

