



*Texas A&M University System Louis Stokes Alliance for Minority Participation*

# **Bridge to the Doctorate Program**

*Letter from the Director*



Howdy!

The Texas A&M University System Louis Stokes Alliance for Minority Participation (TAMUS LSAMP) is privileged to have received yet another funding award from the National Science Foundation, to support our fifth cohort of Bridge to the Doctorate (BTD) fellows.

The TAMUS LSAMP Alliance consists of three institutions, Texas A&M University serving as the lead institution, Texas A&M University – Corpus Christi and Prairie View A&M University. With graduate school success in mind, the Bridge to the Doctorate Program is aimed at increasing the quality and quantity of students interested in, academically qualified for, and matriculating into programs of doctoral studies in science, technology, engineering and mathematics (STEM) disciplines.

The TAMUS LSAMP BTD Program has served over 50 students through four cohorts. BTD Cohort I, hosted at Texas A&M University, began with 10 students and 100% matriculation into doctoral programs. BTD Cohort II, also hosted at Texas A&M University, was comprised of 12 students. Thirty-three percent have entered doctoral programs, with the remaining students in the final phase of their masters' programs. BTD Cohort III and IV, with twelve students each, are continuing to reveal outstanding results in doctoral program placement.

The Texas A&M University Louis Stokes Alliance for Minority Participation is building bridges to the doctorate and furthering careers and opportunities in STEM fields. We look forward to helping you make your dreams a reality.

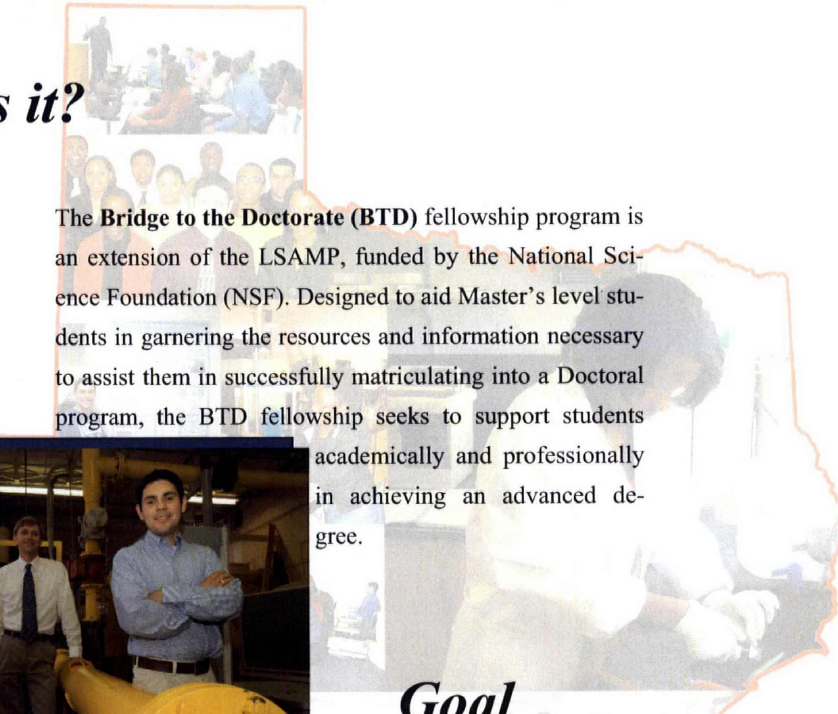
Sincerely,

Karen Butler-Purry, Ph.D.

*Texas A&M University System Louis Stokes Alliance for Minority Participation*

# Bridge to the Doctorate Program

## *What is it?*



The **Bridge to the Doctorate (BTD)** fellowship program is an extension of the LSAMP, funded by the National Science Foundation (NSF). Designed to aid Master's level students in garnering the resources and information necessary to assist them in successfully matriculating into a Doctoral program, the BTD fellowship seeks to support students academically and professionally in achieving an advanced degree.



*The TAMUS-LSAMP Bridge to Doctorate Fellowship program is like no other. The fellowship allows me to focus solely on academics and research. It's carrying me through my master's degree work to the point where I'm now in a position that the idea of pursuing a Ph.D. is actually possible.*

**Jacob Torres**  
M.S., Civil Engineering  
Texas A&M University

Ph.D. Student, Civil Engineering  
John Hopkins University

Jacob stands with his two mentors, Dr. Kelly Brumbelow (left) and Dr. Seth Guikema (center).

## *Goal*

To increase the quality and quantity of underrepresented minority students successfully completing STEM graduate degree programs.

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# Bridge to the Doctorate Program

## *Benefits*

Students who participate in this fellowship program are provided the following:

- Funding for initial two years of graduate study where a stipend is provided, along with graduate tuition and fees paid in full
- Mentoring assistance
- Academic enrichment
- Travel to conferences
- Opportunity to attend a series of workshops focused on thriving and succeeding in a Ph.D. program



*I have received so much from being a part of the LSAMP Program. I really gained a lot from the other students in the program who could identify with the day-to-day struggles of grad school. It was encouraging to see other people like myself succeeding in grad school.*

**Maxine Jones**  
M.S., Ph.D., Chemical Engineering  
Texas A&M University

Maxine performs research for biomass conversion energy with her mentor, Dr. Mark Holtzapfle.

## *Qualifications*

- B.S. degree in a STEM major at an LSAMP Institution
- Minimum GPA of 3.0
- Acceptance as a first time graduate student into a Master's or Ph.D. Program at the TAMUS BTM hosting university
- U.S. Citizen or Permanent Resident

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# Bridge to the Doctorate Program

## Professional Development Activities

### Seminars/Workshops

The seminars are designed to assist in developing their readiness and increase eagerness to complete STEM doctoral degrees and by preparing them to take their places as leaders in interdisciplinary research and in academia.

#### Types of Workshops/Seminars

##### Thriving in Graduate School: Choosing a Research Question

**Description:** Finding your academic passion. What can you toil over? What are you academically prepared to handle? What is relevant and interesting to the greater engineering community?

##### Thriving in Graduate School: Getting the Research Done

**Description:** Keeping your focus. Finding your support system. Balancing home and school.

##### Thriving in Graduate School: Studying Abroad during Graduate School

**Description:** There are study and research abroad opportunities available at the graduate level. Are they beneficial? What is the advantage of them? What are the drawbacks? Should I pursue one?

##### How to Create a Successful Ph.D. Packet

**Topics:** What makes a competitive Ph.D. application? How to prepare a Letter of Intent and a CV?

##### Applying for Ph.D. Programs

**Description:** Should I stay or leave? Should I already have an advisor in mind? What if I'm not sure what I want to research? Campus Visits. How many is too many applications?

##### The Professoriate as a Career Choice

**Description:** What is it like to be a faculty member? Service? Funding? Teaching? Vacation? Family Life?

##### Doors a Ph.D. Can Open for You

**Description:** What career opportunities are available other than the professoriate option? Pros and Cons of the different opportunities? What is expected of a person who has earned a Ph.D.?

##### The Thesis

**Topics:** Requirements for a thesis? Important milestones and dates? How to make the thesis writing process go as smoothly as possible?

##### Qualifying and Preliminary Exams

**Topics:** What's the difference between qualifying and preliminary exams? Who is required to take these exams? Purpose for exam? Who administers these exams? Are there standard formats for the 2 exams? How to prepare for these exams?



### End of the Year Symposium

At the end of each academic year, the BTDF fellows give presentations on their research to their fellow BTDF peers and the LSAMP undergraduate research students.



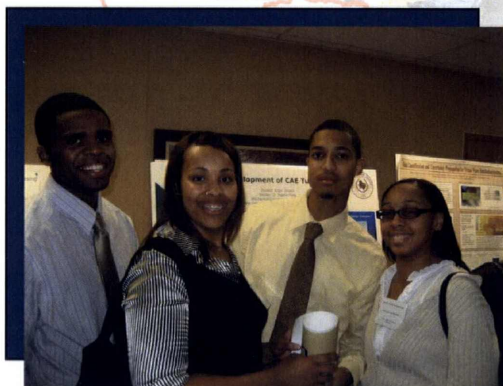
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# **Bridge to the Doctorate Program**

## *Professional Development Activities*

### **Annual TAMUS LSAMP Symposium**

The Annual TAMUS LSAMP Symposium is a mini conference that consists of several workshops, a poster session for TAMUS LSAMP and BTD students to make oral presentations and/or participate in poster presentations based on professor-guided research, and several keynote speakers who motivate and show the students that it is possible to succeed as an URM in STEM fields.



*Above are pictures from the 4th Annual TAMUS LSAMP Symposium held on the campus of Johnson Space Center, NASA (Feb. 8-9, 2008).*

# Cohort I

at Texas A&M University  
(2003-2005)

**Shannon Walton**



**Ph.D. Student** - Interdisciplinary Studies

**MS** - Safety Engineering  
Texas A&M University

**BS** - Industrial Engineering  
Texas A&M University

**Maxine Jones**



**Ph.D.** - Chemical Engineering

**BS** - Chemical Engineering  
Mississippi State University

**Douglas Rodriguez**



**Ph.D. Student** - Mechanical Engineering

**BS** - Mechanical Engineering  
Texas A&M University

**Deborah Roman Santos**



**Ph.D.** - Water Resources Engineering

**MS** - Natural Science  
University of Puerto Rico

**BS** - Natural Science  
University of Puerto Rico

**Jessica Houston**



**Ph.D.** - Chemical Engineering

**MS** - Chemical Engineering  
Texas A&M University

**BS** - Chemical Engineering  
New Mexico State University

**Erica Reese Bruce**



**Ph.D.** - Civil Engineering

**MS** - Civil Engineering  
Texas A&M University

**BS** - Civil Engineering  
Texas A&M University

**Samuel Rodriguez**



**Ph.D. Student** - Computer Engineering

**BS** - Computer Engineering  
Texas A&M University

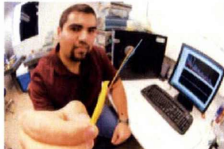
**Migvia del C. Vidal**



**Ph.D.** - Chemical Engineering

**BS** - Chemical Engineering  
University of Puerto Rico

**Juan Juarez**



**Ph.D.** - Electrical Engineering

**MS** - Electrical Engineering  
Texas A&M University

**BS** - Electrical Engineering  
Texas A&M University

**Julianna Camacho**



**Ph.D. Student** - Environmental Engineering

**MS** - Environmental Engineering  
Texas A&M University

**BS** - Chemical Engineering  
University of Puerto Rico

# Cohort II

*at Texas A&M University*  
(2004-2006)

**Aldo Gardea**



**MS Student** - Entomology  
**BS** - Entomology  
Texas A&M University

**Alfredo J. Hernandez**



**Ph.D. Student** - Biochemistry  
**BS** - Biochemistry  
University of Texas-Pan American

**Varrian D. Hall**



**MS** - Computer Science  
**BS** - Electrical Engineering  
Mississippi State University

**Dominique Elijah Watts**



**MS** - Wildlife Science  
**BS** - Wildlife Science  
New Mexico State University

**Javier Ramirez III**



**MS** - Agriculture, Physiology of  
Reproduction  
**BS** - Agriculture, Physiology of  
Reproduction  
Texas A&M University-Kingsville

**Jennifer Owens**



**Ph.D.** - Applied Mathematics  
**BS** - Applied Mathematics  
University of Texas, Austin

**Kimberly Jones Paulhill**



**Ph.D. Student** - Nutritional Sciences  
**BS** - Nutritional Sciences  
Texas A&M University

**Lindsay Nicole Birt**



**Ph.D. Student** - Agricultural and  
Biological Engineering  
Purdue University  
**MS** - Biological and Agricultural  
Engineering  
**BS** - Agricultural Engineering  
Texas A&M University

**Mayra I. Mendez Pinero**



**Ph.D. Student** - Industrial  
Engineering  
**BS** - Industrial Engineering  
University of Puerto Rico

**Takesha Y. Henderson**



**MS** - Entomology  
**BS** - Entomology  
Texas A&M University

**Vanessa Alyss Chapa**



**Ph.D.** - Analytical Chemistry  
**BS** - Chemistry  
Texas A&M University

**Shantel Higgins**



**MS** - Electrical Engineering  
**BS** - Electrical Engineering  
Vanderbilt University



# Cohort III

*at Prairie View A&M University  
(2005-2007)*

**Tumeia Ford**



**MS - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Prairie View A& M University

**Ebony Towns**



**MS - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Prairie View A&M University

**Jolsone Augustin**



**MS Student - Computer Science**  
**BS - Computer Science**  
University of Maryland

**Jerrad Deason**



**MS Student - Chemical Engineering**  
**BS - Chemical Engineering**  
Prairie View A&M University

**Henry Lee III**



**MS - Electrical Engineering**  
**BS - Electrical Engineering**  
Prairie View A&M University

**Ebony Hawkins**



**MS - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Prairie View A&M University

**Lamesha Johnson**



**Ph.D. Student - Mathematics**  
Rice University  
**MS - Mathematics**  
**BS - Math**  
Prairie View A&M University

**Dana LeDoux**



**MS Student - Mathematics**  
**BS - Mathematics**  
Prairie View A&M University

**Crystal Robinson**



**MS Student - Electrical Engineering**  
**BS - Electrical Engineering**  
Prairie View A&M University

**Sharrone Marshall**



**MS Student - Electrical Engineering**  
**BS - Electrical Engineering**  
Prairie View A&M University

**Richard Tate**



**MS Student - Electrical Engineering**  
**BS - Electrical Engineering**  
Prairie View A&M University

**Randy Wilkins**



**Ph.D. Student - Mechanical Engineering**  
Texas A&M University  
**MS - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Prairie View A&M University

# Cohort IV

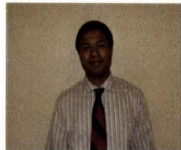
*at Texas A&M University*  
(2006-2008)

**LaToya C. Anderson**



**MS - Industrial Engineering**  
**BS - Applied Math Sciences**  
Texas A&M University

**Andron Creary**



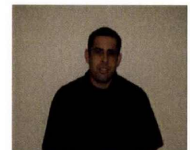
**MS - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Florida State University

**Chinedu Ezeka**



**MS Student - Mechanical Engineering**  
**BS - Mechanical Engineering**  
Prairie View A&M University

**John Flores-McLaughlin**



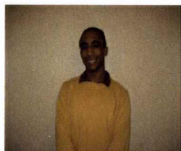
**Ph.D. Student - Nuclear Engineering**  
**BS - Nuclear Engineering**  
Texas A&M University

**Eyleen Hernandez**



**MS - Industrial Engineering**  
**BS - Industrial Engineering**  
University of Florida

**Justin Jackson**



**Ph.D. Student - Aerospace Engineering**  
Georgia Tech (*beginning Fall 2008*)  
**MS - Aerospace Engineering**  
**BS - Maritime Systems Engineering**  
Texas A&M University - Galveston

**Maya Johnson**



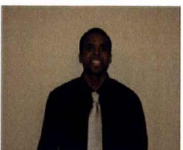
**Ph.D. Student - Mathematics**  
**BS - Mathematics**  
Lincoln University

**Marcus Lopez**



**MS Student - Electrical Engineering**  
**BS - Electrical Engineering**  
University of Puerto Rico, Mayaguez

**Ivory Mayhorn III**



**ME - Computer Engineering**  
**BS - Computer Science**  
Prairie View A&M University

**Jean Njoroge**



**MS Student - Material Science & Engineering**  
**BS - Chemical Engineering**  
Prairie View A&M University

**Aracely Rocha**



**MS Student - Mechanical Engineering**  
**BS - Mechanical Engineering**  
University of Texas - Pan America

**Jacob Torres**



**Ph.D. Student - Civil Engineering**  
John Hopkins University  
(*beginning Fall 2008*)  
**MS - Civil Engineering**  
**BS - Civil Engineering**  
Texas A&M University



Texas A&M University System  
Louis Stokes Alliance for  
Minority Participation

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**Dr. Karen Butler-Purry**

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Co-Principal Investigator / TAMUS  
LSAMP Director  
TAMUS LSAMP Associate Director /  
BTD Coordinator

**Ms. Shannon Walton**

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BTD Coordinator

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Co-Principal Investigator  
TAMU-CC LSAMP Coordinator  
TAMU-CC LSAMP Assistant  
Coordinator