Bridge to the Doctorate Program

at Jackson State University



Building a Secure Pathway to the Doctorate in Science, Technology, Engineering and Mathematics

JACKSON STATE UNIVERSITY
College of Science,
Engineering & Technology

Pridge to the Doctorate Program

Table 1: Bridge to the Doctorate Productivity

Cohorts:	1	2	3	4	5	6	7
# of Students Funded	10	12	12	12	12	12	12
# of Bridged to Ph.D.	10	12	10***	10	8*		
# Earned Ph.D. to-date	4	1					
# left Ph.D. & entered workforce	0	4	2	1			
# Completing Dissertation	6	6	2	11 17 2			
# Completing Ph.D. Coursework		1	4	6	7		
# Joined workforce after MS Degree	0	0	2	4			
# Applying to Ph.D. Programs					4	12	
# Participated in International Programs	1	3	0	1	4	5	8**

Notes: *Four of the students started in the spring semester and are currently applying to PhD programs **Eight students will be researching in China this summer, 2010. *** Two dropped from program (too late to replace them)

The goal of the Louis Stokes Mississippi Alliance for Minority Participation (LSMAMP) Bridge to the Doctorate Program (BD) is to bridge LSAMP students who have received a baccalaureate degree in Science, Technology, Engineering or Mathematics (STEM) area into a STEM doctoral program.

Funds are provided for the first two years of graduate study through a grant received from the National Science Foundation. The objective of this grant is to broaden participation of under-represented students in STEM disciplines. It seeks to remove students' hesitancy about entering graduate school and the fear of creating financial indebtedness.

Assessment of our data and records of accomplishments are summarized in Table 1 and more details are shown in subsequent pages. The BD students' career outcomes as of the end of 2009 show that 91% of the students in Cohorts 1 through 4 were admitted in Ph.D. programs.

In Cohort 5, eight (8) students have been admitted into Ph.D. programs and four (4), who started one semester late, have applied to doctoral offering institutions and are expected to start during fall 2010. Also, members of Cohort Six are currently applying for Ph.D. admission, and we expect 100% success. Cohort 7 students are progressing well and are currently applying for summer internships. Eight students from this latest Cohort have also been selected to travel to China this summer for research.

Pridge to the Doctorate Program

Students receive a stipend along with full graduate tuition and fees, mentoring assistance, academic enrichment, and academic year and summer research experiences. They also receive assistance to travel to conferences and are involved in organizing workshops, seminars and speakers series involving scientists and engineers from across the country.

To be eligible for the Bridge to the Doctorate Program, applicants must have the following:

• proof of having been a LSAMP scholar at the undergraduate level • a B.S. degree in a STEM major • Minimum GPA of 3.0 • U.S. citizenship

• A commitment to pursuing a STEM doctoral degree • Acceptance into Jackson State University Graduate School and STEM Department



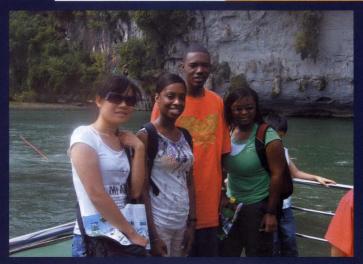
Cohort 2 Fellow, Kylie Nash, shown with her JSU Mentor, Dr. Loretta Moore, Chair of the Department of Computer Science.

Our BD Students have or are pursuing the Ph.D. at the following colleges and universities:

Albany Medical College
Carnegie Mellon
Emory University
Georgia Institute of Technology
Howard University
Jackson State University
Louisiana State University
Louisiana Technical University
Michigan State University
Mississippi State University
Princeton University
University of Alabama Tuscaloosa
University of Alabama Birmingham
University of California

Santa Barbara
University of Florida
University of Georgia
University of Maryland
Baltimore County
University of Maryland
Eastern Shore
University of Michigan
University of Mississippi
University of Mississippi
Medical Center
University of Nebraska

University of Nebraska University of Tennessee Memphis Vanderbilt University



Cohort 6 students enjoy a river cruise during their internship in China.

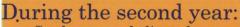
Bridge to the Doctorate Program Professional Development Activities

During their first year, the students:

- Satisfy the required core courses of the degree program chosen and select their research advisor.
- •Participate in a weekly Journal Club in which they read and present articles by leading scientists in their field of interest.
- Organize and conduct a Speakers' Series of renowned scientists, who spend time with and present to the Bridge Fellows and give a College-wide presentation of their research.
- Visit national or international laboratories, corporations and universities to experience scientific and technical workforce environments and to meet possible research advisors.
- Participate in a Laboratory Rotation through all of the multi-user core research laboratories.

During the summer:

- •Students complete a 12-week external research experience and present that reseach at a major national lab or university.
- During the summer and into the fall, students and their faculty advisors continually interact concerning their learning experiences and the initiation of research projects.



• Students are dedicated to research, presenting their research at professional conferences, writing the MS thesis, preparing and submitting publications, taking specialized courses, applying for admission to a doctoral program and for fellowships.



Cohort 6 Fellow, Tancia Boone shown with her mentor at UCSB, Dr. Linda R. Petzold



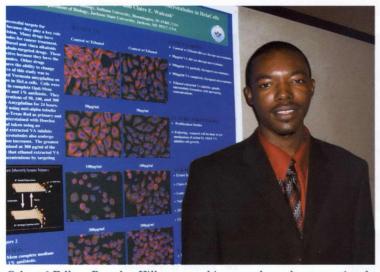
Cohort 6 Student, Chantain Greer (left), and Cohort 7's Jacqueline Mc-Comb (right) work on their research in their respective laboratories.



Pridge to the Doctorate Program

Professional Development Activities

During the summer the students are exposed to the scientific and technical workforce environments through internships with national or international laboratories and universities.



 ${\it Cohort~6~Fellow, Brandon~Hill, presents~his~research~results~at~a~national~conference.}$



Cohort 7 Student, Kristen Lewis, works on her research in the Computational Chemistry Laboratory.

Table 2: BD Summer Research Experience Partnering Institutions Armed Forces Institute Engineering Research & Development Center Lawrence Berkeley National Laboratory Lawrence Livermore National Laboratory National Institutes of Health University of Mississippi University of California Berkeley University of California San Francisco University of California Santa Barbara University of Southern California University of Hawaii US Army Research Laboratory Indiana Univ. Purdue University of Indiana China, Guilin, Guangxi Normal University China, Nanning, Guangxi University China, Xian, Schaanxi University Poland, Wroclaw University



Cohort 3 Alumna, Canelda Perry, works on her Summer Research at University of California Santa Barbara. She is currently completing her Ph.D. coursework at the University of Nebraska.

Who Have Achieved Their Doctorates



Tomekia Simeon May 2008

Jackson State University Computational Chemistry Currently serving a Post-Doc at Northwestern University



Jelani Griffin August 2009

Jackson State University Chemistry

Currently serving a Post-Doc at Michigan State University



Charity Mosley August 2008

Jackson State University Chemistry

Currently working for the Drug Enforcement Agency



Brian Napoleon December 2008

Jackson State University Computational Chemistry

Currently serving a Post-Doc at Jackson State University

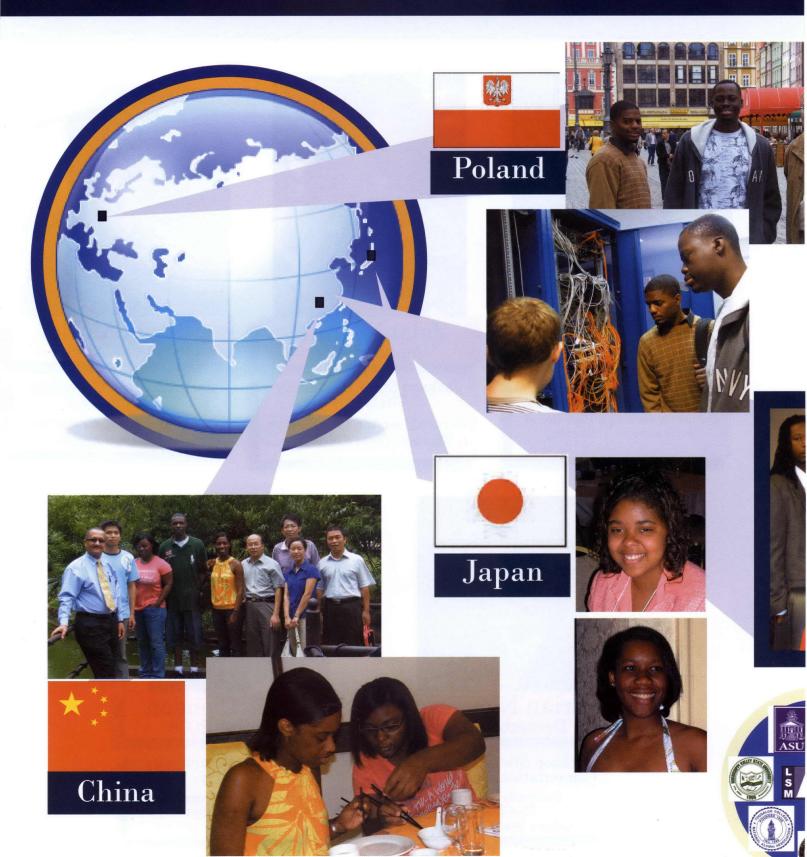


Eric McClendon December 2008

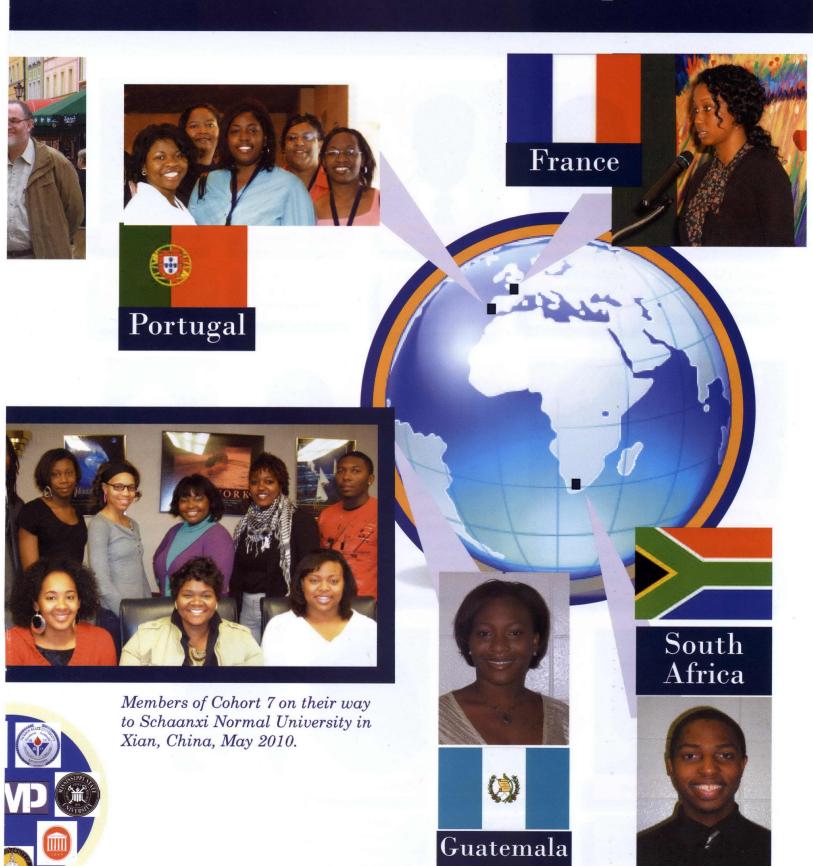
Jackson State University Chemistry

Currently in MD Program at University of Mississippi Medical Center

Bridge to the Doctorate Students *International*



l Conferences and Research Experiences



Currently Completing Their Dissertations



Howard University Biochemistry & Molecular Biology



Jackson State University **Environmental** Science



William Clay

University of California Santa Barbara Mathematics



Angela Fortner

Princeton University Chemistry



Samuel Haile

University of Maryland Baltimore Biology



Lenore Hicks

Jackson State University Organic Chemistry



Kylie Nash

MS State University Industrial Engineering



Shaneka Simmons

Jackson State University Environmental Science



Patrina Thompson

Jackson State University Computational Chemistry



Mekel Richardson

University of Tennessee Memphis **Biomedical Sciences**



Isi Tolliver

Vanderbilt University Biochemistry



Cornelius Toole

Louisiana State University Computer Science



Albany Medical College Neuropharmacology & Neuroscience



Jelani Zarif

Michigan State University Biology

Currently Completing Their Ph.D. Coursework



University of Alabama Birmingham Nursing

Cortessia Badie



Tisha Brown
University of
Mississippi
Computer Science



Teresa Demeritte

Jackson State
University
Chemistry



University of Maryland Eastern Shore Marine Biology

Eric Evans



Lousiana Tech Computer Engineering

Miquel Gates



University of Florida Chemistry



Carnegie Mellon University Molecular Biology



Vyvyca Jones

University of Michigan Chemistry



Danielle McShan

Jackson State University Chemistry



Caronda Moore

University of Nebraska Biology



Nancy Nkawanma

University of Georgia Biology



Wanda Payne

University of Mississippi Mathematics



Canelda Perry

University of Nebraska Biology



Justin Rice

Lousiana Tech Computer Engineering



Lungile Sitole

Jackson State University Chemistry



Jonathan Watkins

Jackson State University Environmental Science



Derrick White

University of Nebraska Biology



Jetaime Ross

Michigan State University Biology

Currently Applying to Ph.D. Programs



Diahanna Hackett

Biology



Ricky McGruder

Computer Engineering



Kelisha Turner

Biology



Ivan Walker

Computer Engineering



Anthony Powell

Environmental Science



Lamarious Carter

Computer Engineering



William Johnson

Environmental Science



Cohort 7 Student, Paxton Payton, a Biology major, shown working in his assigned laboratory.



Cohort 5 Student, Ivan Walker, is shown at an LS-MAMP National Research Symposium. Ivan has recently been accepted to a Ph.D. program at Georgia Institute of Technology.

Summer Research Institutions- 2009 Currently Applying to Ph.D. Programs and Fellowships



Tancia Boone

University of California Santa Barbara Mathematics



Crystal Boston

Indiana University Computer Science



Centdrika Dates

University of California San Francisco Biology



Chantain Greer

Oak Ridge National Laboratory Computer Engineering



Brandon Hill

Indiana University Biology



Shantelle Hughes

Indiana University Chemistry



Mohamed Idris

Oak Ridge National Laboratory
Computer
Engineering



Rosalyn Johnson

Indiana University Computer Science



Jarvis McWilliams

ERDC Computer Engineering



Carvey Patterson

Biology



Camara Saikou

Indiana University Computer Science



Baraka Williams

University of California Santa Barbara Biology

Cohort 7: Undergraduate Schools and Current Major



Antoinette Anderson

Jackson State University Computer Engineering



Jessica Davis

University of Southern Mississippi Biology



Crystal Harris

Jackson State University Computer Engineering



Eric Hollman

Mississippi Valley State University Mathematics



Kristen Lewis

Tougaloo College Chemistry



Ales-cia Malone

Jackson State University Computer Engineering



McComb

Alcorn State University Environmental Science



Terrance Moore

Jackson State University Computer Science



Paxton Payton

Alcorn State University Environmental Science



Nikeya Peay

Jackson State University Computer Engineering



Ashley Sanders

University of Southern Mississippi Mathematics



Celebrating 18 Years of Increasing Minority Degrees Awarded in Science, Technology, Engineering and Mathematics



Dr. Abdul K. Mohamed

Project Director, Jackson State University P.O. Box 18119, Jackson, MS 39217 601-979-1627: abdul.k.mohamed@jsums.edu

Alcorn State University Dr. Troy Stewart, Sr. Site Coordinator 1000 ASU Drive, #780 Alcorn State, MS 39096 601-877-6440 troy@alcorn.edu

Jackson State University Dr. Ashton Hamme Site Coordinator P.O. Box 18119 Jackson, MS 39217 601-979-3713 ashton.t.hamme@jsums.edu

Mississippi State University Dr. Tommy Stevenson Site Coordinator P.O. Box 9544 MSU, MS 39762 662-325-8449 tommy@engr.msstate.edu

Mississippi Valley State University Dr. Joseph Wahome Site Coordinator 14000 Hwy 82 West Itta Bena, MS 38941 662-254-3384 wahome@mvsu.edu

Tougaloo College Dr. Linden Haynes Site Coordinator P.O. Box 157 Tougaloo, MS 38677 601-977-7892 lhaynes@tougaloo.edu

University of Mississippi Dr. Don Cole Site Coordinator P.O. Box 157 University, MS 38677 662-915-1379 dcole@olemiss.edu

University of Southern Mississippi Andrè Heath Site Coordinator P.O. Box 5137 Hattiesburg, MS 39406 601-266-6593 andre.heath@usm.edu



Oral and Poster Presentation Award Winners (from left to right): Will Gray III from the University of Southern Mississippi, Ivan Walker-Bridge to the Doctorate Fellow, Justin Evans from Jackson State University, Fayetteville State University, Mohamed Idris-Bridge to the Doctorate Fellow, Brandon Hill-Bridge to the Doctorate Fellow, Justin Evans, Fayetteville State University, Toyin Alli from the University of Mississippi and Renada Scott from Alcorn State University.



Three young counselors for the LSMAMP Summer Bridge Program at Alcorn State University relax for a moment during the annual picnic meeting.