

## Alabama Louis Stokes Alliance for Minority Participation Bridge to the Doctorate Program

The Alabama Louis Stokes Alliance for Minority Participation (ALSAMP) Bridge to the Doctorate (BD) Alliance is composed of twelve (12) institutions consisting of seven (7) Historically Black Colleges and Universities (HBCU's) and five (5) majority institutions. The HBCU's are Alabama A&M University, Alabama State University, Miles College, Oakwood University, Stillman College, Talladega College and Tuskegee University. The majority institutions are Auburn University, The University of Alabama, The University of Alabama at Birmingham, The University of Alabama in Huntsville, and The University of South Alabama. These institutions represent public and private, large and small and teaching and research colleges and universities.

### The National Science Foundation Bridge to the Doctorate Program

The LSAMP program supports sustained and comprehensive approaches to broadening participation at the baccalaureate level. These approaches facilitate the production of students who are well prepared in science, technology, engineering and mathematics (STEM) and motivated to pursue graduate education. The BD program is designed to assist the designated LSAMP graduate institutional site with retaining, graduating and placing significant numbers of LSAMP graduates into doctoral-degree programs.

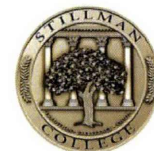
*Our experience with the BD program has shown that this program is attractive to underrepresented minority students. Given that students' financial earning power is increased by the acquisition of a graduate degree, it is becoming increasingly easier for students to make the decision to pursue graduate studies. The BD program provides an excellent incentive for highly qualified students to pursue graduate studies with a doctoral degree as a goal.*

*Louis Dale, Ph.D., Principal Investigator*



**Intellectual Merit** - The BD project is an important step in advancing the knowledge of underrepresented minority students in STEM. The experiences gained by these students working with science and engineering faculty will position them for excellent career advancement.

**Broader Impact** – The project broadens participation of underrepresented groups in graduate education with the real prospect of increasing the number of such groups attaining doctoral degrees in STEM and entering the professoriate. Discovery and understanding resulting from this project will be disseminated via a national BD publication to other institutions and programs focusing on graduate education.





## Alabama LSAMP Bridge to the Doctorate Program

The Alabama LSAMP is a National Science Foundation (NSF) Senior–Level Alliance and has an infrastructure that is uniquely positioned to implement a BD program. The BD program guidelines require that one alliance graduate institution be selected as the program site. Criteria for selection included the following:

1. Number, quality and variety of master's and doctoral degree programs at the site;
2. Connectivity to other Alabama LSAMP programs and institutions for placement of BD master's degree recipients into doctoral programs;
3. Recruitment and retention strategies;
4. Availability of mentors and a support system for master's students;
5. Institutional support for the BD program;
6. Documented success in graduating underrepresented minorities in STEM master's degree programs; and
7. The designated site coordinator's leadership and ability to organize and conduct seminars and workshops for participants in master's and Ph.D. degree programs.

The Alabama LSAMP Executive Committee (all site coordinators) determined that the BD program should rotate among the alliance's Ph.D. degree granting institutions meeting the criteria as follows:

Cohort I - Auburn University (2003); Cohort II - The University of Alabama in Huntsville (2004); Cohort III - The University of Alabama at Birmingham (2005); Cohort IV - Tuskegee University (2006); and Cohort V - The University of Alabama (2007). Thus, the Alabama LSAMP is truly a BD alliance.

Alabama BD programs are characterized by the following:

- The presence of effective strategies for recruiting, retaining, educating and graduating the participants.
- The recruitment of students is expected from all STEM disciplines.
- Documented past performance of retaining, graduating and placing significant numbers of LSAMP graduates into doctoral-degree programs.
- Regular meetings of BD students, assignment of mentors and seminars focusing on productive academic efforts and the intricacies of available career options.
- The provision of resources to support annual student participation at professional meetings.
- The requirement that all first year BD participants apply to NSF's Graduate Research Fellowship Program, the SREB Doctoral Scholars Program, Ford Foundation Diversity Fellowships and AGEF Fellowships.
- The presence of an action plan describing dollar support and sources for continuing students in years three and beyond towards doctorate degrees and a plan for formally connecting a significant number of newly matriculated LSAMP students, including master's degree graduates, to doctoral degrees.
- The presence of a tracking system for project participants into doctoral degree programs and into the workforce, including the professoriate.

### Institutional Support

Alabama LSAMP institutions participating in the BD program are expected to provide support for two or more additional BD students.



## Results from Prior NSF BD Support - Alabama BD Program Status – Cohorts I-IV

### Auburn University – Cohort I (2003-2005)



Auburn is a state-supported, comprehensive, Research I, land-grant institution with a long tradition of academic excellence and graduate education, awarding its first undergraduate degree in 1860 and its first graduate degree in 1870. The largest university in Alabama, Auburn has over 23,000 students including 2,930 graduate students in twelve colleges and schools, in addition to the Graduate School--Agriculture, Architecture, Design and Construction, Business, Education, Engineering, Forestry, Human Sciences, Liberal Arts, Nursing, Pharmacy, Sciences and Mathematics and Veterinary Medicine. More than 1,000 graduate faculty members have terminal degrees from about 150 universities.



*Dr. Overtoun Jenda  
Site Coordinator*

#### Doctoral Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Angela Bell	Ph.D. Program, Org. Chemistry	Auburn University	Auburn University	Alabama
2. Carma Cook	Ph.D. Program, Biochemistry	Auburn University	Auburn University	Alabama
3. Nicole Harris	Ph.D. Program, Materials Engr.	Auburn University	Auburn University	Alabama
4. Charmaine Porter	Ph.D. Program, Life Sciences	UNC	Chapel Hill	North Carolina
5. Kevin Toliver	Ph.D. Program, Statistics	Auburn University	Auburn University	Alabama

#### Other Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Iris Hill	Employee	Recycling Company	Atlanta	Georgia
2. Chioma Okekpe	M.S. Program	Auburn University	Auburn	Alabama
3. Michelle Williams	Voice Designer	Convergys	Reston	Virginia

### The University of Alabama in Huntsville Cohort II (2004-2006)



The University of Alabama in Huntsville (UAH) is nationally recognized for outstanding undergraduate and graduate science and technology education. Uniquely located in Cummings Research Park, a fundamental mission for UAH is to be a leader in the Southeastern U.S. for high quality education in disciplines such as STEM. UAH has made the commitment to increase the number of minority students receiving baccalaureate and graduate degrees as an important priority at the university.



*Dr. Adriel D. Johnson, Sr.  
Site Coordinator*

#### Doctoral Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Clarissa Byrd	Ph.D. Program, Engineering	UAH	Huntsville	Alabama
2. Kimberly Hobbs	Ph.D. Program, Biotechnology	UAH	Huntsville	Alabama
3. Andre Turner	Ph.D. Program, Engineering	UAH	Huntsville	Alabama
4. Tameka Walker	Ph.D. Program, Biotechnology	UAH	Huntsville	Alabama
5. Ambrey Watkins	Ph.D. Program, CE Engineering	UAH	Huntsville	Alabama
6. Khalid Holmes	Ph.D. Program, Biological Science	UAH	Huntsville	Alabama
7. Melody Jackson	Ph.D. Program, Mathematics	UAH	Huntsville	Alabama



## Other Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Calvin Elkins	M.S. Program, Atmospheric Sci.	UAH	Huntsville	Alabama
2. Michael Francis	Technician	Redstone Arsenal	Huntsville	Alabama
3. Christopher Harris	M.S. Program, Mechanical Engr.	Graduated	Huntsville	Alabama
4. Victor Harris	M.S. Program, Biological Sciences	UAH	Huntsville	Alabama
5. Veronica Hunter	Software Engineer II	Raytheon	Huntsville	Alabama
6. Eileen Rojas	Technician	Signature Research	Huntsville	Alabama

## The University of Alabama at Birmingham - Cohort III (2005 -2007)



The University of Alabama at Birmingham (UAB) is a 35-year-old comprehensive, urban university and medical center that encompasses 82 city blocks and has a student enrollment of 16,000. UAB also is home to a large graduate school, a world-renowned health care complex and more than 70 research centers, focusing on such diverse issues as AIDS vaccines, aging, the environment, urban affairs and telecommunications. UAB also offers numerous programs and services that enhance student education, including the Honors Program, Co-op Program, Study Abroad, Career Center and academic support services. UAB has a longstanding commitment to diversity. Indeed, increasing diversity has accompanied the growth of UAB – in just three short decades – into a world-class research university.



*Dr. Carolyn Braswell  
Site Coordinator*

## Doctoral Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Michael Burks, Jr.	Ph.D. Program, Computer Science	UAB	Birmingham	Alabama
2. Sheritta M. Cooks	Ph.D. Program, Chemistry	UAB	Birmingham	Alabama
3. Ajai I. Cribbs	Ph.D. Program, Mathematics	UAB	Birmingham	Alabama
4. Nicole Green	Ph.D. Program, Physics	UAB	Birmingham	Alabama
5. Christophe Jackson	Ph.D. Program, Biology	UAB	Birmingham	Alabama
6. Hugh E. Percy	Ph.D. Program, Computer Science	UAB	Birmingham	Alabama
7. Amanda Plain	Ph.D. Program, Chemistry	UAB	Birmingham	Alabama
8. Stephanie Watson	Ph.D. Program, Engineering	UAB	Birmingham	Alabama

## Other Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Mellany George	M.S. Program, Engineering	UAB	Birmingham	Alabama
2. Melody George	M.S. Program, Engineering	UAB	Birmingham	Alabama
3. Christopher Lindsey	M.S. Program, Engineering	UAB	Birmingham	Alabama
4. Aqueasha Martin	M.S. Program, Computer Science	UAB	Birmingham	Alabama
5. Lindsey McCall	M.S. Program, Engineering	UAB	Birmingham	Alabama

## Tuskegee University – Cohort IV (2006-2008)

Tuskegee University is an independent and state-related institution of higher education. Its programs serve a student body that is coeducational as well as racially, ethnically and religiously diverse. The university offers 49 degrees including 35 Bachelor's, 11 Master's, a Doctor of Philosophy in Materials Science and Engineering, Doctor of Philosophy in Integrative Bio-Sciences and the Doctor of Veterinary Medicine.



*General Daniel "Chappie" James  
Center at Tuskegee University*

Tuskegee enrolls more than 3,000 students and employs approximately 900 faculty and support personnel. Physical facilities include more than 5,000 acres of forestry and a campus on which sit more than 100 major buildings and structures.



*Dr. Shaik Jeelani  
Site Coordinator*



## Doctoral Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Rozlyn Chambliss	Ph.D. Program, Chemistry	Tuskegee University	Tuskegee	Alabama
2. Jennifer Cunningham	Ph.D. Program, Biology	UAB	Birmingham	Alabama
3. Charles Doxley	Ph.D. Program, Engineering	Prairie View	Prairie View	Texas
4. Jaronda Ingram	Ph.D. Program, Engineering	Tuskegee	Tuskegee	Alabama
5. Justin James	Ph.D. Program, Engineering	Prairie View	Prairie View	Texas
6. Sharina Richards	Ph.D. Program, Biology	Tuskegee University	Tuskegee	Alabama
7. CaLynna Sorrells	Ph.D. Program, Engineering	University of Alabama	Tuscaloosa	Alabama
8. Gregory Strawder	Ph.D. Program, Engineering	Tuskegee University	Tuskegee	Alabama
9. Tiffany Taylor	M.D./Ph.D. Program	UAB	Birmingham	Alabama
10. Sandra Young	Ph.D. Program, Engineering	Tuskegee University	Tuskegee	Alabama

## Other Students

<i>Name</i>	<i>Current Position</i>	<i>Organization</i>	<i>City</i>	<i>State</i>
1. Erica Hudson	M.S. Program, Nutrition	Tuskegee University	Tuskegee	Alabama
2. Kellee L. Jamerson	M.S. Program, Biology	Tuskegee University	Tuskegee	Alabama

## University of Alabama – Tuscaloosa – Cohort V (2007 – 2009)



The University of Alabama (UA) is a major, comprehensive, student-centered research university founded in 1831 as Alabama's first public college. Dedicated to excellence in teaching, research and service, we provide a creative, nurturing campus environment where our students can become the best individuals possible, learn from the best and brightest faculty and make a positive difference in the community, the state and the world. Not only is UA the oldest public university in the State of Alabama but also, in 1837, UA became the first in the state to offer engineering classes.



*Dr. Viola Acoff*  
Site Coordinator

Students currently enrolled in PhD Programs or intend to pursue a Ph.D.:

1. Edward Dillon	Plans on pursuing Ph.D. in Computer Science (Taking Qualifier exams in August 2008)
2. Alanzo Granville	Plans on pursuing Ph.D. in Mathematics
3. Nicole Gray	Accepted into Ph.D. Program in Chemistry
4. Marleshia Hall	Plans on pursuing Ph.D. (Biology)
5. Melody Kelley	Accepted into Ph.D. Program in Chemistry
6. Ekaette Mbong	Plans on pursuing MD/Ph.D. in Biology
7. DeAna McAdory	Accepted into Ph.D. Program in Chemistry
8. Diondra Means	Plans on pursuing Ph.D. in Metallurgical Engineering
9. Brandon Morgan	Plans on pursuing Ph.D. in Mathematics
10. Kathryn Picard	Plans on pursuing Ph.D. in Biology
11. Rachel Roberts	Plans on pursuing Ph.D. (Metallurgical Engineering)

## Bridge Program Summary

<b>Cohort</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>Total</b>
<b>Students completed, entered, or plan to enter Ph. D. Programs</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>39</b>
<b>Students in the workforce or still in school</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>21</b>
<b>Total</b>	<b>10</b>	<b>13</b>	<b>13</b>	<b>12</b>	<b>12</b>	<b>60</b>



## Bridge to the Doctorate Activities

### Mentoring



Cohort III BD students and mentors at The University of Alabama at Birmingham

### Research Activities



### Research Conferences





# Alabama/Mississippi BD Cohort V Winter Conference



The University of Alabama at Birmingham hosted the 2008 Alabama/Mississippi Bridge to the Doctorate (BD) Winter Conference on January 25-26



BD program requirements and expectations and current Alabama LSAMP and national BD data were discussed during the General Session.



Three panels, comprised of BD fellows from the Alabama cohorts, discussed the topics "Selecting Research Topics and Conducting Research", "Effective Laboratory Techniques for Successful Research" and "The Dissertation and Its Components."

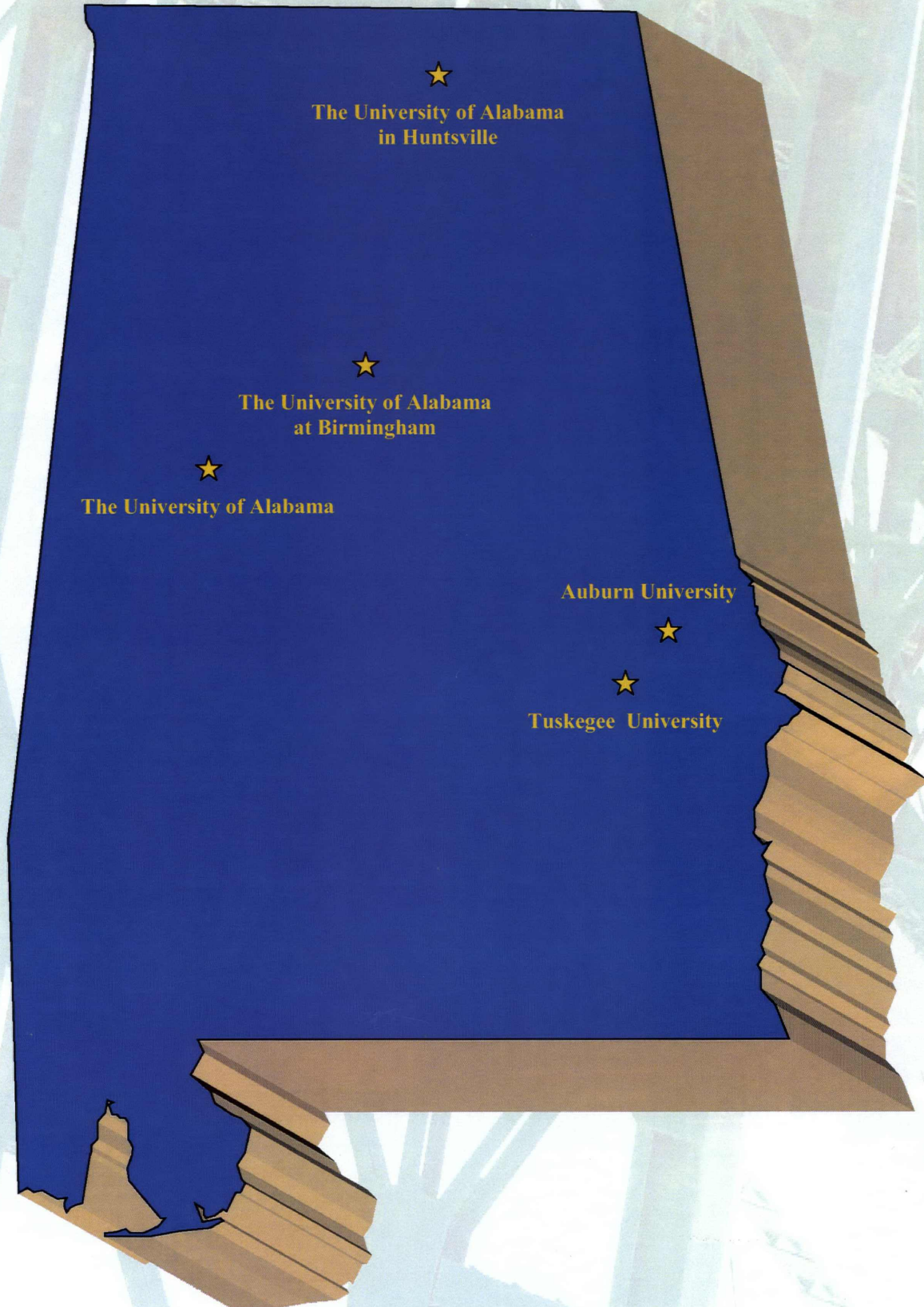


Dr. Samuel Jones, author and national speaker was the luncheon guest speaker.





# Bridge to the Doctorate Sites



The University of Alabama  
in Huntsville



The University of Alabama  
at Birmingham



The University of Alabama

Auburn University



Tuskegee University