UNIVERSITY SYSTEM OF MARYLAND

LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION

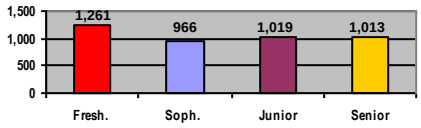
University of Maryland, Baltimore County (UMBC)
University of Maryland, College Park (UMCP)
University of Maryland Eastern Shore (UMES)

One USM LSAMP Scholar and two USM LSAMP Bridge to the Doctorate Fellows who presented posters of their research at the Rayburn House Office Building on July 22, 2010, are pictured with Eric Hammond, Legislative Aide to Congresswoman Eddie Bernice Johnson, and grandson of Louis Stokes for whom the LSAMP Program is named.

The USM LSAMP is a comprehensive program designed to increase both the quantity and the quality of underrepresented minority (URM) and other students who receive B.S. degrees and are well prepared to pursue graduate degrees in STEM fields.

- STEM baccalaureate degrees were awarded to 7,863 URM students, 1995-2010.
- Distribution of the 4,259 URM STEM students enrolled for 2009-2010 indicates a healthy pipeline with 2,227 freshmen and sophomores and 2,032 juniors and seniors.

URM STEM Enrollment, 2009-2010



- Many LSAMP students advance to the nation's top STEM graduate programs.
- 93 LSAMP alumni have been identified who have earned either STEM Ph.D. or M.D./Ph.D. degrees.
- Alliance institutions awarded 1,099 STEM master's degrees to URM students, 1995-2010.
- Alliance institutions awarded 300 STEM Ph.D. degrees to URM students, 1995-2010.

2009-2010 ALLIANCE HIGHLIGHTS:

- The Alliance has had great success in educating undergraduates who are well-prepared to compete in both the STEM workforce and STEM graduate programs. 273 (74%) of the 369 USM LSAMP direct participants completed the year with cumulative grade point averages at or above 3.0 on a 4.0 scale, and 152 (41%) had cumulative averages at or above 3.5.
- Of the 78 direct participants who graduated, 29 (37%) were graduated with Latin Honors. 45 (58%) of the 78 direct participant graduates continued to graduate school; 9 (12%) entered STEM master's programs, and 36 (46%) entered doctoral programs.

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ALLIANCE INSTITUTION CONTACTS:

UMBC, LEAD

Cynthia M. Hill,

Associate Provost

chill@umbc.edu

Phone: 410-455-2445

Fax: 410-455-1028

UMCP, PARTNER

Rosemary L. Parker,

Director, Center for Minorities in Science and Engineering

rparker@umd.edu

Phone: 301-405-3878

Fax: 301-314-9867

UMES, PARTNER

Carla R. Bailey,

Program Coordinator

crbailey@umes.edu

Phone: 410-651-7969

Fax: 410-651-7931

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IMPACT, 1995-2010

(L-R) Freeman A. Hrabowski, III, President of UMBC and USM LSAMP PI; Cynthia M. Hill, Associate Provost at UMBC and USM LSAMP Co-PI; C. Daniel Mote, President of UMCP at a USM LSAMP Leadership Team Meeting in 1999.

A Model for Growth and Excellence in STEM Degree Production

The University System of Maryland (USM) Louis Stokes Alliance for Minority Participation (LSAMP) was launched in 1995 with funding from the National Science Foundation. Currently a senior-level alliance, the USM LSAMP has succeeded in broadening participation in the science, technology, engineering, and mathematics (STEM) disciplines by groups that historically have been underrepresented in STEM. With direction charted by the presidents of the partner institutions who serve on the Governing Board for the Alliance, the administrators, faculty members, and staff members at the partner institutions work together to identify and remove barriers to the academic success of underrepresented minority (URM) students in STEM. Numerous strategies are used, including Summer Bridge and other structured programs of support, scholarships, curriculum review and revision, identifying and replicating best practices, rigorous program evaluation, securing supplemental funding, among others. These efforts have resulted in significant increases in both the number and the percentage of undergraduate URM and other students who begin and complete STEM degree programs and are well-prepared to either enter the STEM workforce or continue to STEM graduate programs.

Improved Campus Environments and Facilities

The USM LSAMP has helped to foster campus environments at the partner institutions that facilitate the academic success of URM students in STEM fields. Increasingly, URM students have developed interests and enrolled in STEM degree programs. More such students have earned STEM degrees and entered STEM graduate programs and careers. As a result of a new focus on broadening participation in STEM, many more USM undergraduates have been provided opportunities to work with faculty mentors on cutting-edge research. There has been extensive construction and renovation of buildings and laboratories for STEM education and research on the campuses. Examples include the Information Technology and Engineering Building (2003) at UMBC, the Sarbanes Coastal Ecology Teaching and Research Center (2005) at UMES, and the Jeong Kim Engineering Building (2005) at UMCP. Additional construction and renovation projects are underway (e.g., new Physical Sciences Complex at UMCP to be completed July 1, 2013). STEM faculty, staff, and students have benefited from the improved campus environments and the expanded facilities.

Catalyst for Additional STEM Initiatives and Synergy

The Alliance has been a catalyst for a number of additional initiatives that broaden participation in STEM. Initiatives funded by NSF and other sources have built on the momentum created by the LSAMP. Proposals for many of these initiatives have included references to the USM LSAMP, and synergy among and between the LSAMP and other initiatives has been built into their designs and carried out during their implementation. A few examples include PROMISE: Maryland's AGEP (NSF), ADVANCE (NSF), S-STEM (NSF), Robert Noyce Scholarship Program (NSF), Innovation through Institutional Integration (NSF), and there are many others. Funding for STEM initiatives also has been received from additional sources including NASA, NIBIB, NIH, NIEHS, HHMI, and many other government, industry, and foundation partners. In addition to achieving objectives and accomplishing goals that were planned regarding the target population, the existence of the USM LSAMP has resulted in a number of positive, yet unexpected outcomes. Particularly significant is that participation in STEM has been broadened for additional populations that previously had been both underserved and underrepresented.

URM STEM Degree Production Increased Significantly

In the baseline year of 1993-1994, the Alliance partner institutions awarded only 201 B.S. degrees to URM students in STEM fields. Significant increases were realized within the first five years (1995-2000), and the average number of degrees awarded annually to this population rose to 404, more than double the number awarded in the baseline year. The growth in degree production continued during subsequent funding cycles. An average of 566 degrees was awarded annually to URM STEM students during the 2000-2005 cycle, and an average of 602 degrees was awarded to this population annually during the 2005-2010 cycle.

Number of STEM B.S. Degrees Awarded to URM Students in First 15 Years