Broadening Participation in STEM Programs through LSAMP

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Dream Big
PURPOSE OF THE LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION – LSAMP

• To use institutional alliances to support sustained and comprehensive approaches that facilitate achievement of the long-term goal of increasing the number of students who earn doctorates in STEM fields, particularly those from populations underrepresented in STEM fields

KEY GOALS

• Increase the quality and quantity of students successfully completing science, technology, engineering and mathematics (STEM) baccalaureate degree programs
• Increase the number of students interested in, academically qualified for, and matriculated into programs of graduate study
Diversity Programs in Engineering

UPSTATE LSAMP PARTNERS

• Cornell University
• Clarkson University
• Syracuse University
• Rochester Institute of Technology
• Rensselaer Polytechnic Institute
• Onondaga Community College
• Monroe Community College

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CORNELL LSAMP – KEY AREAS OF FOCUS

• CU LSAMP Summer Research Program (CU LSAMP-R)
• CU LSAMP Scholars Program
• Joint Alliance Activities
• Recruitment Initiatives
CU LSAMP SUMMER RESEARCH PROGRAM

• Leverage Faculty Partnerships – Examples: Broader Impacts for CAREER Awards, TRUST, REU Supplements
• Leverage Alliance and other Institutional Partners to Cost-Share
• Leverage Cornell Partners to Cost-Share – Examples: Engineering Learning Initiatives & Office of UG Research

CU LSAMP SCHOLARS PROGRAM

• Scholars community for UG and M.Eng students
• Seminars and resources focused on preparing scholars for research experiences and graduate school

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UPSTATE LSAMP JOINT ALLIANCE ACTIVITIES

• ERN Conference in STEM
• GEM Grad Lab at Rensselaer
• Joint Research Symposia
• Upstate LSAMP Conference

CU LSAMP RECRUITMENT INITIATIVES

• Off Campus Recruitment – H.S., CBO, CC Visits
• Career/Grad Fairs: AISES, NSBE, SHPE, Big 10 Grad Expo, CSTEP, Brookhaven National Lab, etc.
• Diversity Hosting & Women in Engineering Weekends
Diversity Programs in Engineering

IMPACT ON ENROLLMENT: 2006-2010

• The percentage of URM Students in the enrolling class increased from 8.2% to 13.2% while the total enrollment of URM students in the College of Engineering rose from 7.4% to 10.2%

• The percentage of women in the enrolling class increased from 25.3% to 37.3% while the total enrollment of women in the college rose from 27.7% to 33.4%
IMPACT ON COMPLETION: 2002-07 vs. 2005-10

• 5-year graduation rate for all URM students entering and graduating from the College of Engineering increased from 64.8% to 74.6%

• 5-year graduation rate for all URM students entering engineering but graduating from any college at Cornell increased from 77.8% to 84.1%

• 5-year graduation rate for all women entering and graduating from the College of Engineering increased from 75.5% to 82.6%

• 5-year graduation rate for all women entering engineering but graduating from any college at Cornell remained stable at ~92%
Diversity Programs in Engineering

5 Year Completion Rate: 2005-2010

Completion in Engineering
- Male: 84%
- Female: 83%
- Black: 77%
- Hispanic: 82%
- Native Am.: 50%
- Asian: 83%
- International: 84%

Completion at Cornell
- Male: 89%
- Female: 92%
- Black: 73%
- Hispanic: 94%
- Native Am.: 25%
- Asian: 94%
- International: 86%

N = 4
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