HBCU-UP National Research Conference in Atlanta

The HBCU-UP National Research Conference will be attended by more than 700 students, faculty, and administrators. This conference will highlight undergraduate student research and institutional strategies to enhance the quality of undergraduate science, technology, engineering, and mathematics (STEM) education and research at HBCUs. The conference will be held at the Westin Peachtree Plaza in Atlanta, Georgia on October 23-26, 2008.

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Grant Spotlight

A National Science Foundation grant for $500,000 was recently funded that aims to increase the retention rate of majors in the Division of Science and Mathematics at Morehouse College. The Principal Investigator is Dr. Lycurgus L. Muldrow, and the Co-Principal Investigators are Drs. Subhash Bhatia, David Cooke, and Lance Shipman Young.

HBCU-UP Bridge Summer Program

The 2008 HBCU-UP Bridge Summer Program student participants are: (listed from left to right, front-row) Victor Browne, Jamal Traylor, Bakari Hassan; (left to right, back-rows) Adam Hayes, Anthony Gibson, Timothy Tribble, Graham Jackson, Phillip James, Christopher Moody, Michael Steward, Nelson Jenkins, Michael Smith, Christopher Robinson, Troy Brown, Christopher Gordon, Leighton Berry, Aniekan Ukanna, Issac Rose, William White, Alphonso Thomas.

The 2008 HBCU-UP Pre-Freshman Bridge Summer Science Program was designed to give participants an accelerated start in college and aid their adjustment to the regiment of college life. In this innovative six-week summer experience 20 students took course work in quantitative literacy and conducted guided inquiry laboratories in robotics, materials science, bioinformatics and biology. In addition the program offered mentoring and coaching workshops in careers in science, the nature of scientific research, Living in the Now™ time management and the Birkman Assessment behavioral tool that pointed out to the students their personal and professional interests and strengths. The students also participated in field trips to scientific research facilities and attended dynamic seminars presented by research scientists and upper level Morehouse students. The summer culminated in a robotics competition that was open to the general public in which 10 teams designed, constructed and programmed robotics to perform an original function.
The National Science Foundation (NSF) HBCU-UP Program and the American Society for the Advancement of Science (AAAS) sponsors the annual HBCU-UP National Research Conference to support the important role that HBCUs play in the preparation of African Americans for leadership at every level of STEM education and research.

The conference will include:
- Oral and poster presentations by undergraduate students
- Oral and poster presentations by program administrators about their programs

Exhibitors will promote:
- Faculty research programs
- Graduate school programs
- Fellowship opportunities
- Undergraduate student research programs

To register go to http://ehrweb.aaas.org/HBCU/index.php. For additional information contact Carol Shearer in the HBCU-UP office located in Merrill Hall, Room 202.

Dr. Willie Rockward is an Associate Professor in the Department of Physics, and serves as the Director of the Micro/Nano Optics Research and Engineering (MORE) Laboratory at Morehouse College. His current research interests include micro/nano optics fabrication, extreme ultraviolet interferometry, nanostructure characterization, terahertz imaging, crossed phase optics, sub-wavelength optical phase structures, and termite behavior. Since the 8-year existence of the MORE Laboratory, he has exposed and trained over 70 undergraduates and 10 high school students. Dr. Rockward has mentored and provided research activities for over 50 students that have been accepted into graduate doctoral programs. This impressive record has been accomplished in part because Dr. Rockward has established ongoing research collaborations with several research centers and institutions such as: the Gordon Center for Subsurface Imaging Systems at Northeastern University; the Center for Extreme Ultraviolet Research and Technology at Colorado State University; the Nanoscale Science and Engineering Center at Rensselaer Polytechnic Institute; and the Howard Hughes Medical Initiative at the University of Florida.

Dr. Rockward is a member of the American Association of Physics Teachers, the Council on Undergraduate Research, the National Society of Black Physicists, the National Technical Association, and the Optical Society of America. He also serves on a number of panel and program reviews for NSF and other funding agencies as well as the national council for the Society of Physics Students (Zone 6 Councillor). Dr. Rockward firmly believes in the nurturing of young scientists and engineers of all ages, so in addition to his extensive research, teaching and professional activities he is involved in hands-on science mentoring in primary (K-8) education, and he annually coordinates tours for Morehouse and Spelman students to visit majority graduate schools nationwide. Over 45 students from Morehouse and Spelman visit from five to seven schools each year under Dr. Rockward’s guidance.