

University of Mississippi (Ole Miss)

Department of Mathematics

Description of Program:

The southern United States is home to many of the nation's African-Americans, and yet the universities in that part of the country have not historically been large producers of African-American Ph.D.s in mathematics. But the University of Mississippi (UM) has started to reverse this trend, becoming a national leader in nurturing and mentoring African-Americans in doctoral study. Over the past decade, eleven African-Americans have received mathematics doctorates from Ole Miss. That the university was once a symbol of educational segregation in the United States gives this success story special importance.

Since 2001 the UM mathematics department has received two GAANN (Graduate Assistance in Areas of National Need) grants from the U.S. Department of Education; the grants provide fellowships for graduate study. The fellowships proved to be transformational for the department, allowing it to quadruple the number of graduate students and to ensure that they are financially well supported. At the same time the department worked diligently to provide more careful nurturing of its graduate student population, both in research and in professional development.

Contributions to these achievements were made by the entire UM mathematics department, including ten faculty who have served as GAANN dissertation advisors. Among the key leaders have been the co-principal investigators of the GAANN grants, Gerard Buskes and Donald Cole. As an African-American faculty member and assistant to the chancellor for multicultural affairs, Cole has been a role model and mentor for the African-American graduate students, while Buskes serves as advisor and mentor to the GAANN students. Buskes eloquently described the department's efforts in an article, "Mississippi mathematics renaissance", which appeared in the January 2007 issue of the *Notices*. This article celebrated a high point in the department's efforts, the awarding of Ph.D.s to six African-Americans in 2006, which is the largest cohort of African-American mathematics Ph.D.s ever produced at any university in the United States.

Philip Kutzko of the University of Iowa, in his letter of nomination for the award, summed up the achievements of the mathematics department of the University of Mississippi: "By the work that it has done in welcoming and nurturing minority students as well as in building ties to nearby communities, the department is unique, as far as I know, nationally, in providing minority students with a place where they can do advanced mathematics without 'leaving home'."