

WISCAMP PROJECT SUMMARY

What is the intellectual merit of the proposed activity?

Wisconsin (WI) is a state with a rapidly changing ethnic and racial demography. The number of Hispanics has more than doubled in the last decade to over 200,000, there are over 400,000 acres of American Indian tribal lands, and 25% of the nearly one million residents in the large urban area around Milwaukee are African American. While not counted in tallies of underrepresented minorities for this proposal, WI also has the third largest population of Hmong in the United States, a group also underrepresented in higher education. This proposal would establish the Wisconsin Alliance for Minority Participation (Wisc-AMP) through the NSF Louis Stokes Alliance for Minority Participation (LSAMP) Program. Wisc-AMP brings together 21 public and private institutions of higher education in Wisconsin committed to collectively doubling the number of underrepresented minority students (URMS) receiving baccalaureate degrees in science and engineering majors. Wisc-AMP partners are also committed to the more fundamental goal of transforming the culture of our institutions to support and sustain diversity at all levels. The University of Wisconsin-Madison (UW-Madison) will be the lead institution. Few universities can equal UW-Madison's capacity to enroll large numbers of students or match the breadth and depth of its cutting-edge research programs in science and engineering. Through individual interviews, data gathering, and document analysis, it was determined that the support provided through LSAMP would be best leveraged in two ways: 1) address retention and persistence of URMS in science or engineering majors at UW-Madison by expanding and improving on successful models already in place and 2) build the alliance. The initiatives at UW-Madison focus on several aspects of academic enhancement especially in the gate keeping courses with new efforts to tutor not only those struggling but those who can be pushed to excellence as well as an enhanced summer research experience that encourages undergraduate students to share personal experiences and scientific inquiries with a network of peers and trains graduate students to be more effective mentors to undergraduate URMS. Alliance building involves several efforts aimed at developing a Network of Champions at participating sites as well as a Small Grants Program to facilitate collaboration and encourage individual partners to customize initiatives to their local environments.

Wisc-AMP will be administered jointly by the Diversity Affairs Office and the Women in Science and Engineering Leadership Institute in the College of Engineering at UW-Madison. A Governing Board consists of Provosts/Vice Chancellors/Presidents from Wisc-AMP partners, students, an industry representative, and selected academic and community leaders in education and research. Increasing the recruitment and retention of URMS in science and engineering with the goal of transforming the institution involves buy-in from many departments and units. Therefore, at UW-Madison, the Provost is the principal investigator and two well-respected faculty members are co-principal investigators, faculty in prestigious positions are members of an internal Advisory Committee, staff who have been in the trenches working on the issues and administrators from the Admissions Office and the Registrars Office who are at key student entry points are involved as co-investigators or advisors. Formal evaluation of Wisc-AMP will use quantitative and qualitative methods to identify if and how well the goal of the program is met and which aspects of Wisc-AMP work.

What are the broader impacts of the proposed activity?

As the United States becomes an increasingly diverse society, it is imperative that institutions of higher education train a similarly diverse workforce. NSF has publicly proclaimed its commitment to broadening opportunities and enabling participation of all citizens as "essential to the health and vitality of science and engineering." By investing in efforts to increase the number of URMS graduating with baccalaureate degrees in science or engineering, this proposal directly aligns with NSF's goal. Project innovations will be disseminated locally through meetings, discussions, and presentations; regionally through the alliance structure; and nationally through publications in scientific journals, proceedings of scientific meetings, and participation in annual LSAMP meetings. The results of Wisc-AMP's formal evaluation can be used to continue or re-direct proposed efforts and to advise developing alliances on successful and unsuccessful elements of each initiative.