

A Department-Wide Mentoring Initiative to Encourage URM Student Success in Statistics
Emily Griffith, Herle McGowan, Alyson Wilson, Department of Statistics
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Background

The Department of Statistics at North Carolina State University grants more PhDs in Statistics than any other department in the United States, with 219 awarded from 2003-2015. However, we have struggled to recruit and retain under-represented minority (URM) students from within the United States. Of our 183 graduate students, only seven are non-international URM students. In our undergraduate program, 10 of 175 are URM students. In addition, of forty faculty members, three are URM. Our aim is to improve the retention and graduation of URM students in our department through creating a welcoming and inclusive work and learning environment that offers opportunities for and supports the success of all students, staff, and faculty.

Objectives and Impacts

Our project has taken a two-pronged approach. The first is to provide social and academic mentoring and support to the URM student community, and the second is to provide faculty training.

Student Mentoring

The funds from the University Diversity Mini-Grant were used to create the Conference Travel Grant: Supporting Inclusion in Statistics Travel Award. Eight students were awarded partial support to attend the Joint Statistical Meetings (JSM) in late July of 2017 in Baltimore, Maryland. JSM is the largest professional meeting for statisticians and provides key networking opportunities. Before the conference, the students have been involved in meetings and a reading group where we have discussed topics including how to make a professional introduction, how to “network” at mixers, presentation skills, and even what to wear. In July, we will work with the students to plan their conference schedule and will assign them a faculty mentor to help them navigate the conference and introduce them within the community. Attending JSM will also provide a learning opportunity for the students to observe talks and sessions before they give their first professional conference presentation or job talk.

The students selected are not only attending the conference, but several of them also are presenting. Our eight attendees are presenting two contributed papers, two contributed posters, and a “speed talk.” There are seven faculty members in statistics directing their work, in addition to the three faculty mentors from this grant program.

This fall, the conference preparation sessions will be extended into the monthly Professional Strategies Reading Group, which will be open to all graduate students in the department.

Faculty Training

Although we had initially planned to hold our faculty retreat in the spring, department scheduling has required us to move it to the fall. Planning for faculty training is underway. All faculty in the

Department of Statistics will complete training in unconscious biases conducted by Marcia Gumpertz, the former Assistant Vice Provost for Faculty Diversity and Professor of Statistics; Jo-Ann Cohen, the former Associate Dean for Academic Affairs in the College of Sciences and Professor of Mathematics; and Howard Bondell, Director of Graduate Studies and Professor of Statistics. The purposes of this training are two-fold. First, training faculty in unconscious bias will help even out mentoring for all students, in particular, career-oriented mentoring and sponsorship. As a secondary benefit, this training will strengthen our hiring practices.

Evaluation

Evaluation of the student mentoring program will be conducted using post-conference reflections written by the students. Informal oral feedback has been very positive so far.

Sustainability

The Professional Strategies Reading Group will begin in the fall semester of 2017. The reading group will read and discuss a wide variety of articles and books on professional development and mentoring with a focus on mentoring under-represented minorities. We are also developing a proposal for a one credit hour course that students can take the semester before their first conference. This course would cover the material from the mentoring meetings this spring and summer as well as include time for practice presentations with feedback. We will also consider applying for a Louis Stokes Alliances for Minority Participation Pre-Alliance Planning Grant using the knowledge we have gained from this pilot project.

Products

Once the students have completed their post-conference reflections, we plan to write an article about the mentoring program for *Amstat News*, the monthly membership magazine of the American Statistical Association. This publication would allow students and faculty in statistics programs across the country to read about what we have done and consider starting their own mentoring initiatives at their home institutions.