

FINDING AND KEEPING GRADUATE STUDENTS IN THE MATHEMATICAL SCIENCES

organized by

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Workshop Summary

The purpose of this workshop was to provide information, guidance, and structured planning time for the participant teams. Information was provided about successful initiatives to broaden participation in graduate study in the mathematical sciences. Each team drew up plans to help their home departments achieve better outcomes for their doctoral programs in the areas of recruitment, retention, and completion of degree. The focus for retention and recruitment of students was on students who did their undergraduate work in the U.S., and particularly on women and members of under-represented groups.

Another major emphasis of the workshop was building a collaborative community of programs that support success for all graduate students. Having informal time to interact and the use of peer critique facilitated this community building.

Graduate departments participating also received information about the National Alliance for Doctoral Studies in the Mathematical Sciences and the possibility of joining. As a result of this workshop four of participating departments (Harvard School of Public Health, University of Montana, University of Pittsburgh and Washington University) applied to join the National Alliance for Doctoral Studies in the Mathematical Sciences. They were admitted in the fall of 2012.

Facilitators

The following facilitators (including organizers) attended:

Tuncay Aktosun, University of Texas at Arlington

Loek Helminck, NC State University

Phil Kutzko, University of Iowa

James Lin, University of California San Diego

Leslie McClure, University of Alabama at Birmingham

William Velez, University of Arizona

Ulrica Wilson, Morehouse College

Unfortunately Carlos Castillo-Chavez and Kathryn Chaloner were unable to attend due to health issues.

Participating universities

Participant teams of two-three members each represented the graduate programs in mathematics from eight universities:

Harvard School of Public Health Kansas State University

Louisiana State University Oregon State University

University of Kentucky University of Montana

University of Pittsburgh Washington University

For the first three days of the workshop, the mornings were spent in panel discussions and the afternoons were devoted to structured team planning activities, in which teams discussed current challenges facing their graduate programs, long-term goals, and a short-term action plan for the next academic year. Each team met with several different facilitators each afternoon. At the end of the afternoon there was a period devoted to “friendly critique” in pairs or triples of teams, where each team would present its plans and get feedback.

Monday morning began with short presentations from the teams about the current state of their graduate programs, including past successes and current challenges. These presentations were followed by a panel discussion on building community at the institutional, regional, and national levels. Afternoon planning focused on recruitment and building community in the teams’ graduate programs.

Tuesday’s panel discussion and planning sessions focused on graduate student retention.

Wednesday’s panel discussions were on mentoring and professional development. The afternoon planning time was divided between discussions of mentoring and professional development, and preparing for Thursday’s team presentations.

On Thursday morning, each team presented a summary of their challenges, long-term goals, and short-term action plans, with time for feedback from the facilitators and other teams.