

Award for an Exemplary Program or Achievement in a Mathematics Department



The annual AMS Award for an Exemplary Program or Achievement in a Mathematics Department was established in 2004, first awarded in 2006, and fully funded by a gift to the AMS's permanent endowment by an anonymous donor in 2009. This award recognizes a department which has distinguished itself by undertaking an unusual or particularly effective program of value to the mathematics community, internally or in relation to the rest of society. Departments of mathematical sciences in North America that offer at least a bachelor's degree in mathematical sciences are eligible.



Citation

Smith College

The Postbaccalaureate Program at the Center for Women in Mathematics at Smith College is highly effective at preparing women mathematically and professionally for graduate school in the mathematical sciences. Students in the program come from backgrounds that do not fit the typical mold of graduate school applicants, for instance graduating from undergraduate institutions with limited mathematics coursework, or having discovered mathematics late in their college experience or indeed after spending years in the workforce, or wanting to pivot from sciences and social sciences into mathematics or statistics. Postbacc cohorts are notably diverse in race, ethnicity, socioeconomic status, age and employment background. During the program at Smith College, students develop mathematical talent and

confidence through intensive coursework and research projects and also receive mentoring and coaching about graduate school issues such as applications, qualifying exams, time management, choosing advisors, and more.

Response from Smith College

History of the Program

The Postbaccalaureate Program at Smith College was founded 15 years ago by Ruth Haas and Jim Henle, and is now directed by Patricia Cahn, Candice Price, and Julianna Tymoczko. The program was the first of its kind in 2007 and remains the national gold-standard, serving as a blueprint for the other postbaccalaureate and bridge-to-PhD programs that have started in the last few years. Each year, the program admits a cohort of students interested in graduate school in the mathematical sciences but who for whatever reason are not yet prepared (changed majors late, small undergraduate math program, illness during college, etc.). Without an on-ramp like the postbaccalaureate program, many would not be able to (re)enter the graduate pipeline in math. Since 2016, 50 postbaccalaureate alums have entered graduate programs like Dartmouth, Cornell, Duke, Rice, Michigan State, University of Minnesota, and Vanderbilt, and 2 are current NSF graduate fellows.

Response from the Program

We are honored and delighted to receive the AMS Exemplary Program Prize for the Postbaccalaureate Program at the Center for Women in Mathematics at Smith College,

and to carry on the tradition that Ruth Haas and Jim Henle started.

This program is their vision, based on the students they saw who left Smith College—and math—but who never stopped loving math. Haas and Henle reasoned that with a path back, some of those students could not just re-enter the field but thrive in it. They received the first of two NSF grants to fund the program in 2007.

For most of us, loving math is not enough to propel us to a PhD—we also need an environment that allows us to enjoy the experience of doing math. The core of the Postbaccalaureate Program is the warm and welcoming environment of the Smith College Department of Mathematical Sciences. Postbaccs and undergraduates support each other in their coursework and research. Faculty provide intensive, individualized mentoring to help students identify their own interests as well as graduate programs that fit their mathematical backgrounds and strengths. Alums frequently return to campus to connect with current students, particularly through our annual Women in Mathematics in the Northeast (WIMIN) Conference. One former postbacc said:

Smith's postbacc program made it possible for me to pursue graduate school in math. There is no way I could've gotten here without it. I've found my time as a graduate student really fulfilling, and I hope that I can continue on to work as a professor and give similar opportunities to my students. Smith's program boosted my love of math to new heights and gave me the inspiration to keep learning.

The on-ramp and support provided by the Postbaccalaureate Program have only become more important since the pandemic. Students found their coursework interrupted and lost social connections that keep mathematics fun. Across the country, ties between faculty and students have become attenuated. As faculty, we underestimate the impact of small actions—suggesting an REU, a grant application, graduate study—but our students have felt their absence.

We have found that diversifying mathematics starts when people are in an environment where they feel comfortable enough to experience the joy and wonder of mathematics. We hope that graduate programs and other academic institutions can carry on this work, training students not just with technical tools, but also cultivating an atmosphere that helps students thrive and prepares them for the broad range of careers represented in the AMS community.