The annual AMS Award for an Exemplary Program or Achievement in a Mathematics Department was established in 2004 and first given in 2006. 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
University of Missouri
The University of Missouri Mathematics Department’s outreach program under the leadership of Professor Stephen Montgomery-Smith has been highly successful in serving at-risk and low-income children in Columbia, Missouri by partnering with the Grade A Plus Academic Support and Enrichment program. Graduate students are recruited as tutors, and community students seeking tutorial support also are recruited. This experience for the graduate student tutors not only provides valuable assistance to the at-risk community but also gives the tutors the positive benefits of responsible community membership. The at-risk students commit to at least two hours a week of tutoring and many of them pursue mathematics beyond the basic two course minimum. The graduate student tutors are given an award at the end of each year by the Mathematics Department for their service to the community.

Response from University of Missouri
Stephen Montgomery-Smith and Janice Dawson-Threat started their collaboration in 2015. Dawson-Threat is the founder and chief executive officer of Grade A Plus, which operates an academic support and enrichment program in Columbia to help younger children gain academic skills and self-confidence in their academic abilities. Montgomery-Smith is a professor of mathematics at the University of Missouri-Columbia and at the time was the director of graduate studies in the department.

The Grade A Plus program originally relied on undergraduate students who volunteered for service credit. As the children in the program entered middle and high school and needed math support from more experienced tutors, Dawson-Threat approached Montgomery-Smith to collaborate with the graduate math program. Together, they
launched MathUp!, a program for tutoring 8th through 12th grade students experiencing inequities in access to academic support outside of school.

To provide math tutors, the University of Missouri Mathematics Department established a community service program. It quickly became apparent that math graduate students were extremely effective tutors. With their deep understanding of the subject, they were able to identify the weaknesses and gaps in the students’ abilities and knowledge through one-on-one tutoring. Soon, failing students were obtaining B or C grades, and B or C students became A or A+ students. Many students who previously had no love for mathematics suddenly found themselves becoming honors students, in some cases taking Advanced Placement math classes.

Tutors and tutees also developed cultural competency. The graduate students, typically from privileged backgrounds, began to see that many people in the US do not have the same access to academic support. Conversely, students who had previously aspired simply to make money at part-time jobs now realized that math graduate students were regular people just like they were, and that perhaps they too might aspire to take math classes beyond high school.

Each year, at least one tutor serves as a team leader. In that role, they communicate with Dawson-Threat and the school system math leaders on any issues that arise. They also guide new tutors on working with diverse students with various viewpoints and fears about math.

One of the tutors noted, “Through the MathUp! program I’ve had the opportunity to tutor middle and high school students. Despite the wide differences in topics that any two given students might be working on, my tutoring approach is basically the same: keep lecture-style presentations to a minimum, encourage conversations and questions, and periodically inject fun ideas from outside of the standard curriculum into our sessions. Working with MathUp! gives me an opportunity to contribute something meaningful to the local community and develop connections outside of the math department.”

The real heroes are the math graduate students. This award should be considered a win for the whole math graduate program and our community partner, Grade A Plus, Inc.

Credits
Photos are courtesy of Janice Dawson-Threat.