AMERICAN SOCIETY FOR MICROBIOLOGY

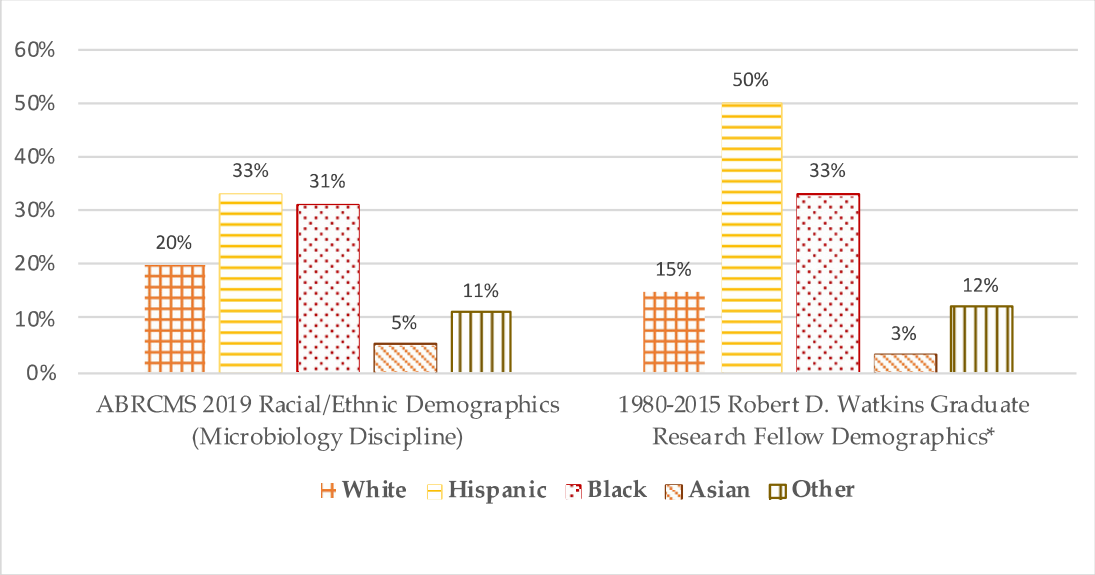
ASM DEI EFFORTS (1980-2015)

The most notable programs, managed by the ASM Education Department, are the student research fellowships and the Annual Biomedical Conference for Minority Students (ABRCMS). Other programs across ASM include the former ASM Faculty Enhancement Program (Education/2000-2010), ASM Minority Travel Grants (Meetings), and three minority awards – Alice Evans Women's Award, Hinton Award for Mentoring Underrepresented Minorities, and the Honorary Diversity Award (Academy).

For more than three decades, ASM has offered two highly visible minority student fellowships: (i) ASM Watkins Graduate Fellowship, and (ii) ASM Minority Undergraduate Research Fellowship (MURF). Around 1980, ASM under the former ASM public policy director and African American, Robert Watkins, established the Minority Predoctoral Fellowship Program for rising microbiology graduate students from underrepresented populations to complete doctoral education. The initial program, sponsored by a few pharmaceutical companies, provided research support and travel to present at the ASM annual meeting. The program expanded to undergraduate students and received a boost with 15 years of continuous support from the National Institutes of Health (NIH) Minority Access to Research Careers (MARC) program. In the mid-1990s ASM established a Fund for student research transferring the research and mentoring responsibilities to ASM from private and public sources. The highly sought after ASM fellowships were the pride of ASM and became an exemplary model for STEM professional societies. In 2000, US President Clinton bestowed ASM with the Presidential Award for Excellence in Mentoring Underrepresented Minorities in STEM, recognizing ASM for its contributions in advancing underrepresented scientists through doctoral education. ASM was the first professional society to receive such honor, paving the way for other professional societies to follow.

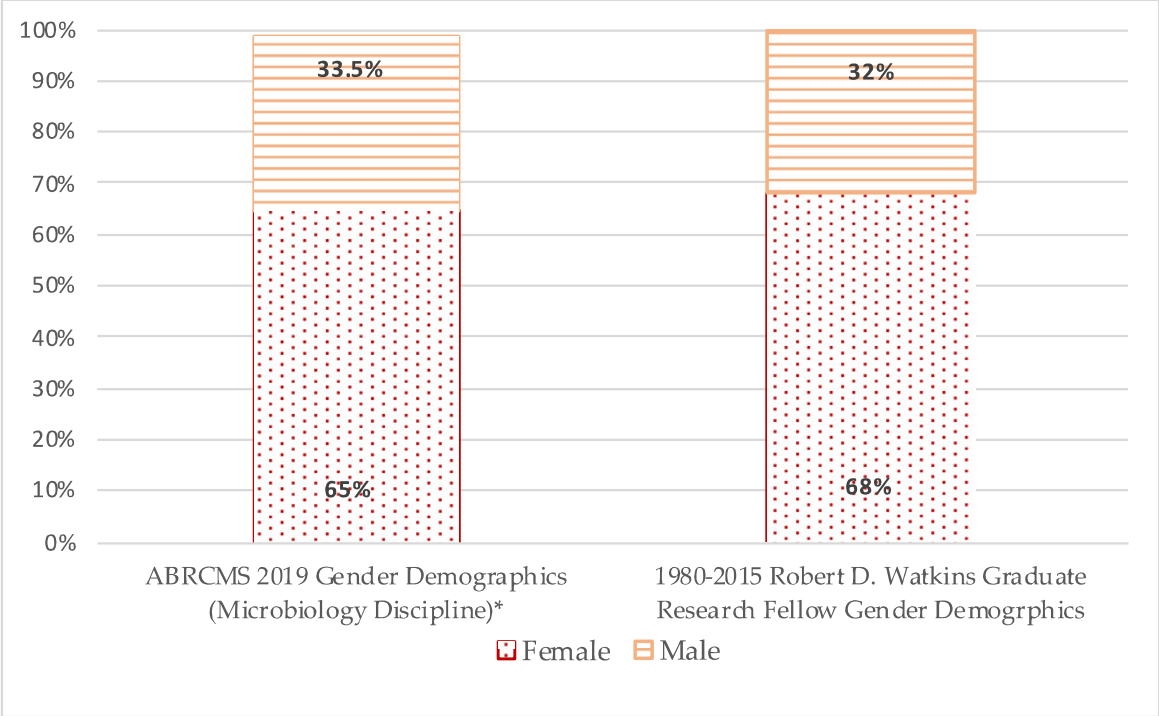
Based upon longstanding, continuous support for student research, the NIH named ASM a sole partner in sponsorship of the largest undergraduate student STEM conference dedicated to underrepresented and historically excluded groups, Annual Biomedical Research Conference for Minority Students (ABRCMS). In nearly two decades, ABRCMS became the premier undergraduate student STEM conference serving 4,000 participants annually. In 20 years, it is estimated that 50,000 STEM undergraduate students, primarily from historically excluded and underrepresented populations, have participated in ABRCMS. Figures 1 and 2 illustrate the gender, racial and ethnic diversity among ASM fellows and ABRCMS participants, providing clear paths to representation and participation of diverse populations of talented scientists.

FIGURE 1. RACIAL/ETHNIC DEMOGRAPHICS OF ASM WATKINS FELLOWSHIP AND ABRCMS



* Totals may exceed 100% as some respondents indicated more than one category.

FIGURE 2. GENDER DEMOGRAPHICS OF ASM WATKINS FELLOWSHIP AND ABRCMS



* Total is below 100% as some respondents did not wish to disclose this information or identify with the the provided gender options (male/female)

In 2015, the ASM hired an evaluator to conduct a retrospective evaluation of three ASM fellowships including the Watkins Graduate Research Fellowship. The study covered the program for 35 years from 1980 to 2015. During that period, 111 Watkins Fellows were supported; in 2015, the contact information was available for 90 Fellows. The vast majority of study respondents have remained in fields related to microbiology (e.g., microbial sciences, immunology, virology, public health, pharmacy, college teaching and administration). The respondents cited professional networking and research presentations as the highlight of their fellowship. Additionally, they cited exposure to other science conferences and connections to other researchers as important. Beyond science-relevant benefits, respondents highlighted several social and cultural benefits from the program. For example, participation in ASM contributed to their sense of themselves as scientists (science identity) and increased their confidence in becoming scientists and succeeding in science. Many cited a strong sense of belonging and attributed this feeling to ASM's programming. This sense of belonging was frequently highlighted in contrast to the isolation felt in their academic programs and in some cases, remained with them for years.

These social factors are critically important for individuals not part of majority populations. Unfortunately, only 37% of the original 111 fellows were ASM members in 2015. Membership participation has declined more since 2015. In a recent assessment of member status among Watkins fellows awarded between 2005 and 2015, only 17% (14 out of 80 fellows) were ASM members in 2020. More probing to assess why talented young scientists leave ASM is necessary.

Both the ASM fellowships dedicated to supporting historically excluded and underrepresented scientists and ABRCMS are positive steps towards increasing diversity in the microbial sciences. Both provide lessons learned and a foothold into increasing the proportion of underrepresented microbial scientists.

This information was originally published in ASM's DEI Task Force Report in 2020. Read the full report.