Shirley Malcom leads a sea change for STEM equity
AAAS initiative draws upon a wealth of experience in improving diversity in science

By Andrea Korte

As a growing chorus of voices calls for systemic change to address the systemic problems of sexism and racism in science, technology, engineering, mathematics, and medicine (STEMM), the SEA Change initiative at the American Association for the Advancement of Science aims to support educational institutions as they transform into diverse, equitable, and inclusive spaces.

SEA (STEMM Equity Achievement) Change was formally launched by AAAS in 2017 but is the culmination of a career’s work in the making: that of the initiative’s director, Shirley Malcom.

The initiative has its history in the Athena SWAN charter, established in the United Kingdom in 2005 to boost the ranks of women in science, but it also draws upon long-standing collaborations to diversify the scientific enterprise. When Paula Rayman was investigating a home in the United States for an adaptation of Athena SWAN, she knew that Shirley Malcom, whom she had collaborated on diversity efforts since the 1980s, was the right person to oversee the effort.

“That’s one of the reasons that, now, this is so compelling to me at this stage in my career,” she said. “After spending decades learning about these interventions and yearning for a systemic approach, finally there’s the opportunity to help put one in place. And so that’s what we have with SEA Change: something actually challenging the structure of the system itself.”

Malcom went on to coauthor the first report related to women of color in STEM, published in 1976: “The Double Bind: The Price of Being a Minority Woman in Science.” The long-standing commitment at AAAS to the advancement of minority women in STEM. Malcom, noted, is one reason why SEA Change broadened the Athena SWAN focus on gender to include race and intersectionality. Malcom headed the AAAS Office of Opportunities in Science between 1979 and 1989 and served as head of the AAAS Education and Human Resources directorate for nearly 30 years before becoming a AAAS adviser and director of SEA Change in 2018—a role that draws upon everything she has learned throughout her career and allows her to do what she has always wanted to do: support systemic change.

The work of changing systems is a long road, but there is much worth celebrating so far, Malcom said. The community of SEA Change member institutions continues to grow. More and more resources are being made available, including the forthcoming launch of the Port of Call online hub for members. Three institutions earned SEA Change Bronze Awards in 2019 for the work they have already done to work toward sustainable, systemic change, and two more Institutional Bronze awardees were formally announced this month.

In a 2020 reflection on leading AAAS through social unrest in response to the continued impacts of racism and inequality, AAAS CEO Sudip Parikh called Malcom “a world-renowned leader in the conversation that we’ve been having for quite some time—but to which too few have paid sufficient attention.”

Others are joining that conversation. Malcom sees greater visibility and awareness of the issue of sexism and racism in STEM and a steadily growing interest among decision-makers at colleges and universities in SEA Change as an avenue to effect systemic change in campus climate and culture.

She ultimately hopes to see hundreds of institutions involved, to see Bronze Award winners earn Silver and Gold Awards for higher levels of excellence, and for students and faculty to say that their institutions are truly supporting them.

“That’s my dream,” Malcom said.
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