The UMass ADVANCE program is working to ensure greater equity among faculty members through the power of collaboration. In this research brief, we describe some of the key findings from our initial survey, conducted in 2018-19. We will conduct the same survey in 2022-23 to measure the impact of our interventions.

419 UMass faculty from 32 STEM departments in CICS, CNS, COE, and CSBS responded to the survey. We also explored differences by college, and identify similar patterns, although women in CICS feel more included than women in other colleges.

Inclusion refers to feeling welcome and part of the UMass community. Yet, do faculty at the university have similar experiences regarding inclusion?

Key to inclusion is feeling connected to and accepted by colleagues. As Figure 1 suggests, UMass STEM faculty typically feel connected to their departments and accepted by colleagues. However, gender shapes these feelings of inclusion: women feel less connected to departments compared to men (findings are marginally significant at p<.10), and less accepted by their colleagues (statistically significant at p<.05).

Another indicator of inclusion is feeling satisfied with professional interactions in a person’s department. While STEM faculty on average report feeling somewhere between “neither satisfied or dissatisfied” and “somewhat satisfied” on this measure, women tend to feel less satisfied with their professional interactions than men (p<.05).

Implications for interventions: Building a healthy and inclusive community requires time and regular opportunities for faculty members to meaningfully interact with one another. ADVANCE will provide resources that summarize best practices regarding stimulating professional and social interaction, and will also work to develop long-term, sustainable opportunities for faculty to directly interact.

UMass STEM faculty members report, on average, feeling “somewhat valued” to “valued” by their departmental colleagues on a variety of measures, but many faculty members do not feel “very valued” for their work. The variation on these measures by gender is important to recognize, as reported in Figure 2. Men generally feel equally valued for their teaching and research. Women report feeling more valued for their teaching than research. However, women feel substantially less valued than men for their research (p<.001) and are marginally less likely to feel valued.
for their teaching compared to men (p <.10). The survey also asked whether or not faculty feel valued for their service. There are no significant gender differences on this measure; however, the trend suggests that women feel slightly less valued than men.

Implications for interventions: ADVANCE will provide interventions aimed at ensuring that all faculty feel valued in their departments. In particular, interventions will focus on institutional changes that ensure women feel valued for their research contributions, through promoting women’s research, and identifying how departments can better indicate valuing research, teaching, and service.

We asked UMass faculty how gender might impact their careers. Women and men perceive the effect of gender differently; as shown in Figure 3, men are significantly more likely to report that women and men faculty receive equal treatment in their department (p<.001). Additionally, when asked whether demands or expectations associated with their identity group have had an effect on their pursuit of career goals, women are substantially more likely than men to report experiencing negative effects on careers (p<.001).

Implications for interventions: Ensuring that all faculty feel included in departments starts with leadership. ADVANCE will provide resources and establish training programs for chairs and heads and administrators that focus on building supportive communities and ensuring voices are equally heard.

The survey asked faculty to rate their departments on a series of climate dimensions. On average, men and women tend to rate their departments somewhat positively, but again there are important gendered patterns in the data. As Figure 4 shows, women on average rate their departments lower than men on a number of climate measures, signaling that women STEM faculty find their departments to be less collegial, respectful, cooperative, supportive, equitable, fair, and inclusive than colleagues who are men.

Implications for Interventions: ADVANCE interventions aim to transform campus and departmental climates by providing best practices for mentors and mentoring programs, including training programs in faculty mentoring. ADVANCE interventions also include internal seed grants for collaboration, which can foster collegiality and cooperation. ADVANCE provides additional supports to foster inclusion, such as opportunities for researchers to connect with colleagues over shared interests.

Through the power of collaboration UMass ADVANCE transforms the campus by cultivating faculty equity, inclusion and success. ADVANCE provides the resources, recognition and relationship building that are critical to equitable and successful collaboration in the 21st century academy. UMass ADVANCE is funded by the National Science Foundation. For more information on ADVANCE go to https://www.umass.edu/advance/.