

## THE CHALLENGE

Institutional contexts within which women STEM faculty are embedded play a significant role in their career advancement, providing support and/or barriers.



Austin, 2011  
 Bolman & Deal, 1991

VAULTS recognizes the complexity of systems within which women STEM faculty operate. Challenges to career advancement result from societal norms, disciplinary biases, and institutional culture. Addressing these provides opportunities for positive change, yet women are expected to excel as faculty, also serving as instruments of change with limited support. VAULTS External Mentor program facilitates these efforts:

1. ADDRESSING CAREER ADVANCEMENT
2. FOCUSING ON LEADERSHIP SKILLS
3. ENACTING POLICY/PRACTICE REFORM.

## THE PROGRAM

VAULTS participants reflected on goals they wished to accomplish and identified potential mentors from another institution best suited to help them work towards these goals.

VAULTS team connected participants with one of their mentors to begin a year-long formal mentorship. 75.86% of participants were matched with their first-choice mentor.

29 women from 10 partner institutions completed the VAULTS External Mentor Program in 2023.

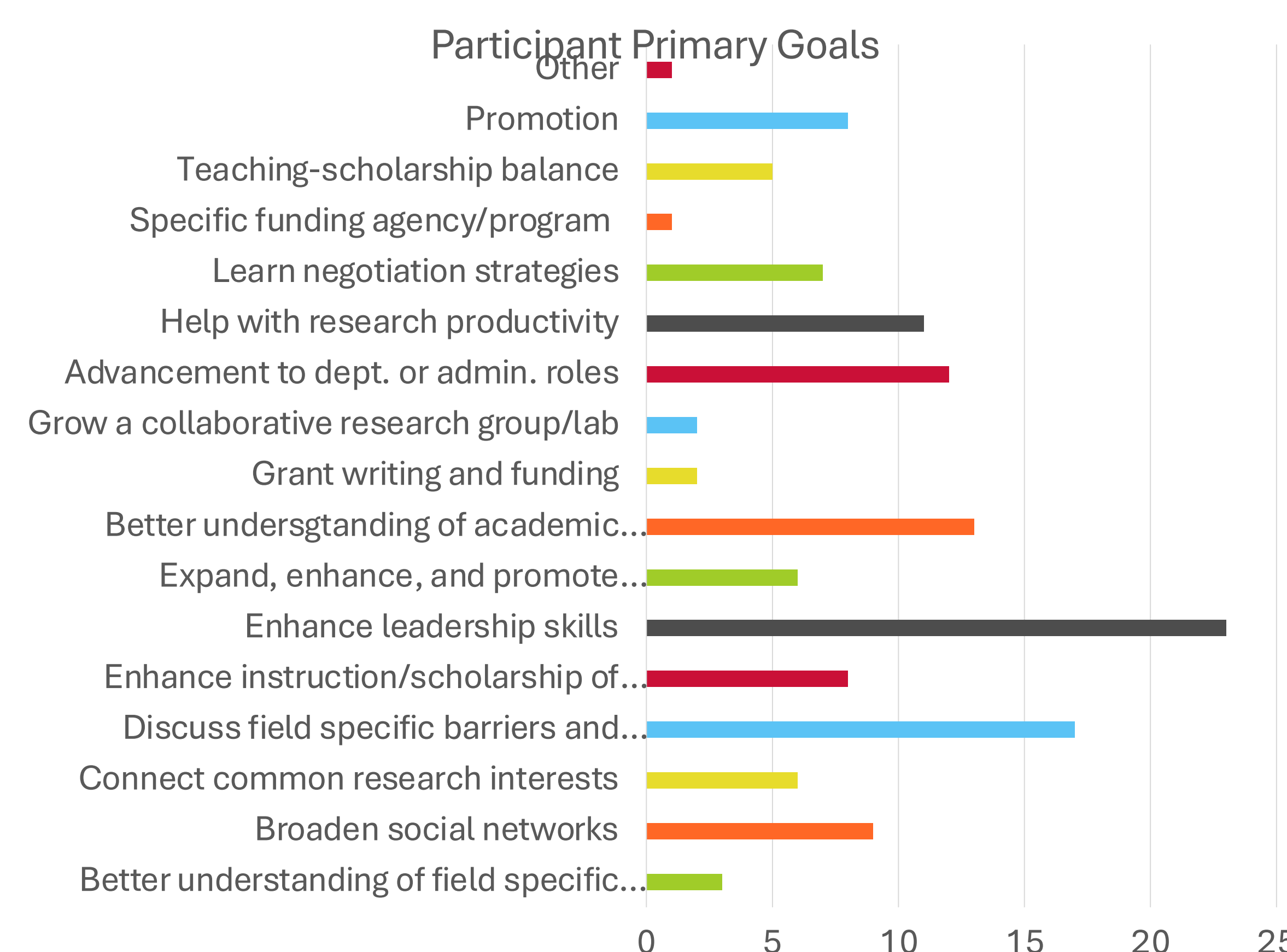
Participants completed a check-in survey about their experiences in the program every three months. Most participants report meeting with their mentor once a month (65.52%) or not regularly meeting with their mentor (34.48%).

## PARTICIPANT DEMOGRAPHICS

Variable	M	SD
Age	46.68	5.41
Years in current position	3.88	2.63
Year with current employer, any position	8.59	4.76
Variable	%	
Race/Ethnicity		
Native American or Alaskan Native	3.45	
Black	0	
Hispanic	13.79	
Middle Eastern	3.45	
White	68.97	
Asian or Pacific Islander	13.79	
Another race/ethnicity	0	
No response	3.45	
Relationship Status		
Single	6.9	
In a relationship	6.9	
Married	65.52	
Divorced or widowed	17.25	
No response	3.45	
Have Children		
Yes	65.52	
No	31.03	
No response	3.45	
Non-Child Caregiving Responsibilities		
Yes	24.14	
No	72.41	
No response	3.45	
Tenured		
Yes	72.41	
No	24.14	
Not applicable	0	
No response	3.45	

## PARTICIPANT GOALS

When entering the program, participants identified goals they wanted to work on with their mentors.



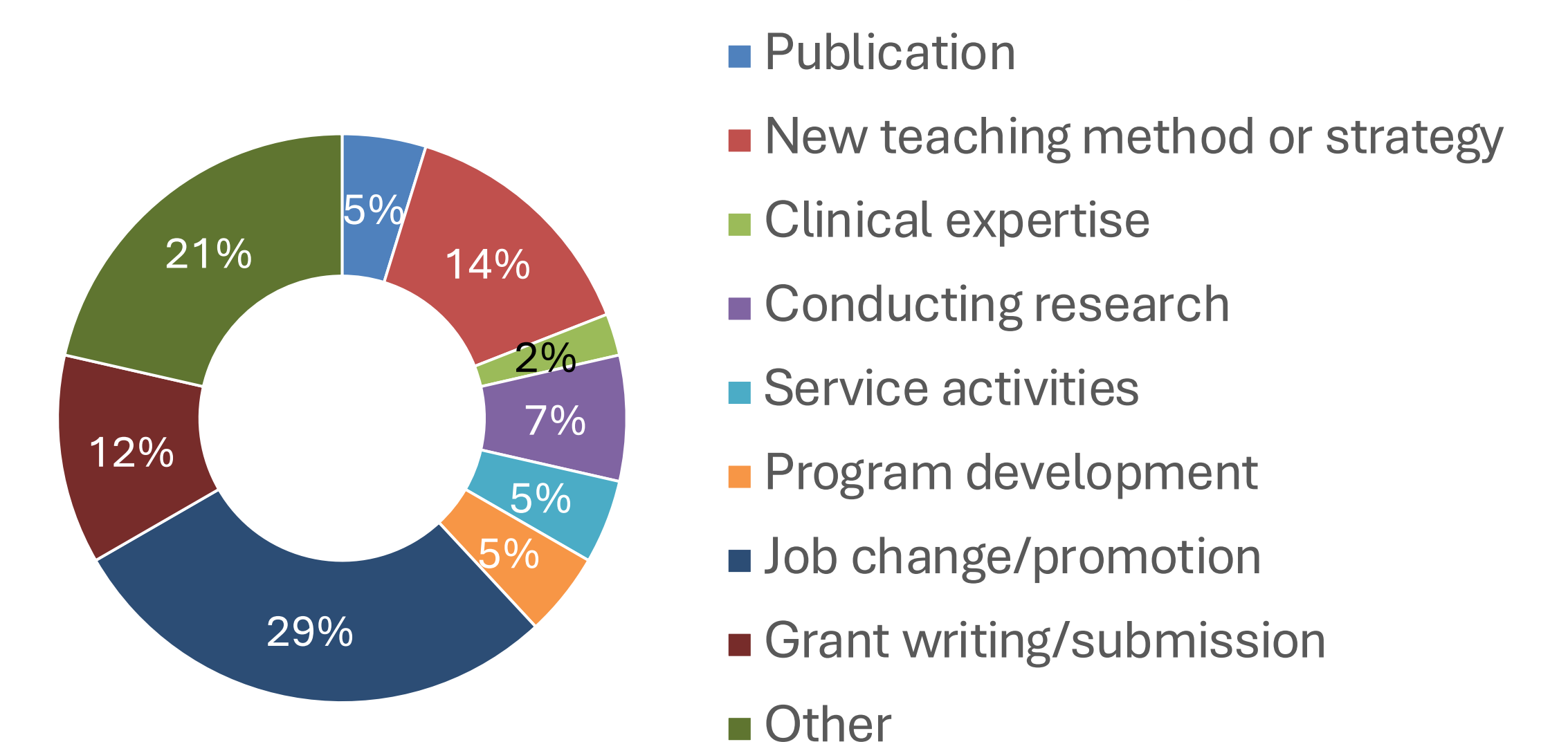
## LEARNING OUTCOMES

External mentorship for midcareer women in STEM promotes career advancement.

Overall, participants report being satisfied (67% extremely, 13% largely) with their experiences with the External Mentor Program. They also report the program was helpful in reaching their goals (54% extremely, 30% largely).

Participants reported benefits to their own career advancement through gaining outside perspectives, collaboration with more experienced scientists, and continued mentorship beyond the program. Specifically, participants indicate their mentoring relationships resulted in job change/promotion; learning new teaching methods or strategies; and grant writing and submission.

Outcomes Attributed to Mentorship



Other outcomes included: navigating leadership challenges; clearer idea of the academic pathway; more comfortable with self-advocacy; taking advantage of additional mentoring opportunities; extended network and visibility; new presentation opportunities; and further exploration of graduate school.

## REFERENCES CITED

Austin, A.E. (2011). Promoting evidence-based change in undergraduate science education. In *Fourth committee meeting on status, contributions, and future directions of discipline-based education research*.

Bolman, L.G., & Deal, T.E. (1991). *Reframing organizations: artistry, choice, and leadership*. San Francisco: Jossey-Bass., & Deal, 1999

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