Silent Barriers: Gender Bias in STEM Faculty Evaluation and Promotion

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1.0 Introduction

Gender bias remains a persistent and consequential challenge within higher education, particularly in STEM (Science, Technology, Engineering, and Mathematics) disciplines where women continue to be underrepresented in senior faculty ranks and leadership roles. Despite decades of policy reforms aimed at improving equity, disparities in faculty evaluation and promotion outcomes remain evident across U.S. institutions. This conceptual paper examines how gender bias continues to shape women's experiences in faculty evaluation and promotion processes in contemporary higher education, with a specific focus on STEM fields. While prior research has documented gender disparities in academic careers, fewer studies synthesize psychological and sociological frameworks to analyze how bias operates within formal faculty evaluation and promotion systems, particularly in engineering and other STEM disciplines. By integrating multiple theoretical lenses and translating them for an engineering education audience, this paper clarifies how subtle bias mechanisms become embedded within evaluation structures and offers a theoretically grounded framework for institutional reform.

Although women's participation in STEM has increased over time, inequities persist in promotion rates, access to leadership positions, and recognition of scholarly contributions [13], [2]. Gender bias both explicit and implicit continues to influence faculty decision-making and is embedded within institutional norms that shape how teaching, research, and service are valued [1], [2]. These dynamics are particularly consequential in engineering colleges, where promotion systems often emphasize grant acquisition, publication metrics, and perceptions of technical authority that may interact with gendered expectations about leadership and competence. Historically, women's exclusion from higher education and scientific fields has shaped the cultural foundations of contemporary academic institutions. Early twentieth-century norms limited women's access to scientific training and professional roles, reinforcing assumptions about who belonged in STEM [3]. Although representation has increased, institutional cultures and evaluation systems continue to reflect these historical norms, with changes in demographic representation often outpacing reforms in promotion structures and organizational expectations [1].

A central concern is the unequal application of evaluation criteria across teaching, research, and service. Women faculty in STEM are frequently held to higher standards of performance while receiving lower student evaluations despite equivalent instructional effectiveness [4]. In research evaluation processes, women face disparities in grant funding, peer review judgments, and citation recognition, affecting perceptions of productivity and scholarly impact [5]. At the same time, women disproportionately shoulder service and administrative responsibilities that are essential yet undervalued in promotion systems [6]. This combination of heightened scrutiny and undervalued labor contributes to cumulative disadvantage within tenure and promotion pathways.

These inequities are further compounded by race, ethnicity, and other social identities. Women of Color often experience intersecting barriers, including reduced access to mentoring, unclear evaluation expectations, and exclusion from professional networks [7], [8]. They also encounter

microaggressions in everyday academic interactions, such as being mistaken for administrative staff, having their expertise questioned, receiving less credit for collaborative work, or being excluded from informal networks where opportunities are shared. These experiences undermine professional legitimacy, reduce visibility, and contribute to slower advancement within evaluation and promotion systems [9], [10].

The consequences of biased evaluation and promotion practices extend beyond individual careers. They affect faculty wellbeing, limit diversity in leadership, and constrain the range of perspectives shaping STEM research and education [11], [12]. Addressing these challenges requires institutional and leadership-level action, including more comprehensive promotion criteria, the use of disaggregated data to identify inequities, and sustained investment in mentoring and sponsorship structures [13], [14].

By critically examining how evaluation systems operate in practice, and by synthesizing Role Congruity Theory, Stereotype Threat, and research on microaggressions, this paper advances a theoretically grounded model of how gender bias accumulates within faculty evaluation structures. This model provides engineering colleges and institutional leaders with a clearer analytic framework for diagnosing inequities and implementing structural reforms.

2.0 Purpose and Research Question

The purpose of this conceptual paper is to examine how gender bias operates within faculty evaluation and promotion processes in STEM disciplines in U.S. higher education. Specifically, this paper synthesizes Role Congruity Theory, Stereotype Threat, and research on microaggressions to develop a theoretically grounded framework for understanding how subtle and cumulative bias mechanisms become embedded within formal evaluation systems, particularly in engineering and closely related STEM fields. Drawing on existing literature and established theoretical frameworks, the paper seeks to illuminate the structural, cultural, and evaluative mechanisms that shape women's academic career trajectories. Rather than documenting disparities alone, this paper advances a conceptual model that explains how institutional norms and evaluative practices interact to reproduce inequities in promotion outcomes.

The guiding research question for this study is: *How do institutional practices, evaluative criteria, and academic cultures shape women's advancement in STEM faculty evaluation and promotion processes within the United States, and how do these processes differentially affect women from marginalized racial and ethnic backgrounds? More specifically, how do formal evaluation standards and informal academic norms interact to produce cumulative disadvantage within engineering and STEM faculty promotion systems?*

3.0 Methodological and Analytic Approach

This study adopts a conceptual research approach grounded in a critical synthesis of peer-reviewed literature on gender bias in STEM faculty evaluation and promotion within U.S. higher education. Rather than collecting original empirical data, the paper critically synthesizes foundational and contemporary scholarship across higher education, STEM education, sociology, and psychology to identify recurring patterns, theoretical explanations, and institutional practices shaping women's advancement in academic STEM careers. Literature was identified through

targeted searches in ERIC, Scopus, Web of Science, and Google Scholar using keywords such as "gender bias in STEM faculty," "faculty evaluation bias," "tenure and promotion inequities," and "women of color in STEM academia." Priority was given to peer-reviewed studies published between 2000 and 2024, with selection based on relevance to faculty evaluation, tenure, and leadership advancement, particularly within engineering and closely related STEM disciplines.

The analysis was conducted through the lenses of Role Congruity Theory, Stereotype Threat, and research on microaggressions to examine how formal evaluation standards and informal academic norms interact to produce cumulative disadvantage. This interpretive synthesis supports the development of a conceptual framework explaining how bias becomes embedded within institutional promotion systems. Because this study does not involve human participants or the use of identifiable human data, Institutional Review Board (IRB) approval was not required.

4.0 Theoretical Framework

This paper is guided by three complementary theoretical perspectives that help explain how gender bias persists in faculty evaluation and promotion within STEM disciplines: Role Congruity Theory, Stereotype Threat, and research on microaggressions. Together, these frameworks illuminate how cultural expectations, psychological processes, and everyday interactions shape evaluation practices and contribute to unequal career outcomes for women faculty in higher education. While each of these perspectives has been examined independently in prior research, their combined application to faculty evaluation and promotion systems in engineering and STEM disciplines offers a more comprehensive explanation of how bias becomes structurally embedded.

Taken together, these theoretical perspectives provide an integrated framework for understanding how gender bias operates within academic evaluation and promotion systems, particularly within engineering colleges where formal criteria and informal norms intersect. In the following section, these theories are used to operationally define and contextualize the specific mechanisms through which gender bias manifests in STEM faculty careers, including evaluation practices, workload distribution, professional interactions, and institutional culture. By applying these frameworks to concrete academic contexts, the analysis illustrates how multiple forms of bias interact to shape women's promotion and advancement in higher education.

4.1 Role Congruity Theory and Faculty Evaluation

Role Congruity Theory posits that prejudice arises when there is a perceived mismatch between the characteristics culturally associated with a social group and those believed to be necessary for success in a given role [15]. Within STEM disciplines, faculty success is often associated with traits such as objectivity, competitiveness, assertiveness, and technical authority, qualities that are frequently stereotyped as masculine. In engineering departments in particular, norms of technical authority, grant acquisition, and individual research productivity may intensify these expectations. When women faculty do not conform to these expectations, they may be viewed as less competent or less suitable for leadership roles. Conversely, when women display these traits, they may face social penalties for violating gender norms.

In the context of faculty evaluation and promotion, role incongruity can influence how evidence of teaching effectiveness, research productivity, and leadership potential is interpreted. Women faculty may be required to provide more extensive documentation of their accomplishments or may receive less credit for comparable achievements. This dynamic helps explain persistent disparities in promotion outcomes, leadership appointments, and professional recognition within STEM departments [1], [2].

4.2 Stereotype Threat and Academic Performance

Stereotype Threat Theory explains how awareness of negative stereotypes about one's social group can negatively affect performance, confidence, and long-term aspirations [16]. For women in STEM, persistent stereotypes questioning women's competence in technical and scientific fields can shape experiences during evaluation processes. Even in environments that formally endorse equity, the anticipation of biased judgment can increase stress and self-monitoring, particularly in high-stakes contexts such as tenure reviews, grant evaluations, and leadership selection.

In faculty careers, stereotype threat may not only influence immediate performance but also affect professional engagement over time. Women faculty may be less likely to pursue leadership roles, negotiate workloads, or advocate for recognition due to concerns about being perceived as less competent or overly assertive. These dynamics contribute to cumulative disadvantages in promotion and evaluation outcomes within STEM academia [5]. Over time, repeated exposure to high-stakes evaluation contexts may reinforce self-monitoring and reduce access to visible leadership opportunities.

4.3 Microaggressions as Mechanisms of Institutional Bias

While role congruity and stereotype threat explain broader structural patterns of bias, research on microaggressions highlights how bias operates through everyday interactions. Microaggressions are subtle, often unintentional behaviors or comments that communicate devaluation or exclusion based on social identity [9]. In academic settings, microaggressions may take the form of questioning women's expertise, overlooking their contributions in meetings, or assigning them disproportionate service responsibilities. Importantly, microaggressions can also be embedded in habitual language and routine forms of communication that implicitly signal who belongs within academic spaces.

For women faculty in STEM, and particularly Women of Color, microaggressions contribute to environments in which professional legitimacy is constantly negotiated [10]. Although such experiences may not appear in formal evaluation criteria, they shape access to informal mentoring, collaborative opportunities, and professional networks that are critical for promotion and advancement. Over time, these interactions reinforce structural inequities within evaluation and promotion systems, affirming stereotype threat and perceptions of incongruity with normative academic leadership roles.

4.4 Integrating the Frameworks for STEM Faculty Evaluation and Promotion

Taken together, these frameworks provide a comprehensive lens for understanding gender bias in STEM faculty evaluation and promotion. Role Congruity Theory explains how cultural expectations influence perceptions of competence and leadership; Stereotype Threat highlights

the psychological consequences of operating within biased environments; and microaggressions illustrate how bias is enacted and sustained through everyday institutional practices. By integrating these perspectives, this paper examines not only whether gender bias exists in evaluation systems, but how it is produced, maintained, and reproduced within STEM academic contexts. This synthesis demonstrates that bias operates simultaneously at structural, psychological, and interactional levels, creating reinforcing feedback loops within engineering faculty evaluation systems.

5.0 Theoretical Analysis of Structural Barriers in STEM Faculty Evaluation and Promotion

Gender bias in STEM fields within higher education continues to create substantial barriers to women's advancement, particularly in faculty evaluation and promotion processes. These barriers are not isolated incidents, but are embedded within institutional structures, evaluation criteria, and disciplinary cultures that shape academic careers over time [2]. Drawing on the theoretical frameworks outlined earlier, this section examines how bias manifests across multiple dimensions of faculty work and contributes to persistent gender inequities in STEM academia. Rather than cataloging barriers alone, this analysis applies the integrated theoretical framework to demonstrate how evaluation standards, institutional norms, and everyday interactions interact to produce cumulative disadvantage within engineering and STEM promotion systems.

5.1 Discriminatory Evaluation and Promotion Practices

One of the most significant barriers facing women faculty in STEM is bias within evaluation and promotion processes. Research consistently demonstrates that women are subjected to heightened scrutiny and higher performance standards compared to their male colleagues [7]. This pattern aligns with Role Congruity Theory, which suggests that women's competence is often judged against gendered expectations that conflict with norms of scientific authority and leadership [15]. In engineering departments where technical authority and research productivity are central to promotion criteria, such role incongruity may shape how evidence of competence is interpreted during tenure review.

Teaching evaluations illustrate this dynamic clearly. Student evaluations, frequently used in promotion and tenure decisions, have been shown to disadvantage women faculty, even when instructional quality is equivalent [4]. These biased assessments can negatively influence perceptions of teaching effectiveness and contribute to cumulative disadvantage in promotion outcomes. Bias is also evident in research evaluation, where women's scholarly contributions may be perceived as less significant or rigorous. Studies report gender disparities in publication, citation rates, and grant funding, all of which are central metrics in STEM faculty evaluation [5], [13]. Over time, these patterns significantly constrain women's advancement to senior academic ranks. Viewed through the integrated framework, heightened scrutiny, biased performance metrics, and informal judgments operate as reinforcing mechanisms within evaluation systems rather than isolated disparities.

5.2 Unequal Distribution of Service and Administrative Labor

Another critical barrier is the unequal allocation of service and administrative responsibilities. Women faculty are disproportionately assigned committee work, student advising, and departmental service, forms of labor that are essential to institutional functioning but

undervalued in promotion and tenure decisions [6]. This service burden limits time available for research and reinforces gendered expectations that position women as supportive rather than scholarly or leadership-oriented contributors.

From a role congruity perspective, service work aligns with stereotypically feminine expectations of care and collaboration, further normalizing women's overrepresentation in these roles [8]. When service is not adequately recognized in evaluation processes, women experience cumulative disadvantage that directly affects promotion timelines and leadership opportunities. This dynamic illustrates how institutional definitions of merit, when aligned with masculine-coded productivity norms, structurally disadvantage faculty whose labor is essential but less visible within traditional evaluation metrics.

5.3 Stereotypes, Stereotype Threat, and Microaggressions

Stereotypes about women's abilities in science and engineering continue to shape academic climates and evaluation practices. Stereotype Threat Theory explains how awareness of negative stereotypes can undermine performance, confidence, and long-term career aspirations, particularly in high-stakes contexts such as tenure review and leadership selection [16]. For women faculty in STEM, the anticipation of biased judgment can contribute to heightened stress, self-monitoring, and reluctance to pursue leadership roles. These psychological processes intersect with formal evaluation systems, shaping how faculty engage in high-stakes promotion contexts and how their leadership aspirations are perceived.

In addition to these psychological dynamics, bias is enacted through everyday interactions in the form of microaggressions. Microaggressions, subtle, often unintentional behaviors or comments that convey devaluation, are common in academic settings and can include questioning women's expertise, overlooking their contributions, or assigning them disproportionate service tasks [9]. For women faculty, particularly in STEM disciplines, these experiences accumulate over time and contribute to feelings of marginalization and exclusion. Research shows that such climates are associated with decreased job satisfaction, increased stress, and higher attrition rates among women faculty [10], [11]. In this way, everyday interactional bias reinforces structural inequities within evaluation and promotion systems.

5.4 Intersectionality and Compounded Biases

Gender bias in faculty evaluation and promotion is further intensified by intersecting social identities such as race, ethnicity, and socioeconomic background. Women of Color in STEM experience compounded forms of bias that reflect a convergence of gendered and racialized expectations, leading to distinct challenges in promotion and career advancement [7], [8]. These faculty members are more likely to encounter restrictive evaluation criteria, limited access to mentoring, and exclusion from influential professional networks.

Intersectional analyses reveal that Women of Color often face heightened visibility and scrutiny while simultaneously experiencing marginalization and invisibility in decision-making processes [10]. These dynamics are rarely addressed through gender-neutral or race-neutral policies, which tend to favor those already in positions of privilege, underscoring the limitations of one-size-fits-all approaches to equity in STEM academia. An intersectional application of the integrated framework highlights how limited or misaligned evaluation standards may reproduce layered

inequities that disproportionately affect Women of Color in engineering and STEM faculty careers.

5.5 Mentorship, Role Models, and Institutional Culture

The persistent underrepresentation of women in senior faculty and leadership roles both reflects and reinforces gender inequities in STEM. Limited access to visible role models and mentors constrains professional development opportunities and can discourage early-career women from pursuing long-term academic careers [7]. Mentorship plays a critical role in navigating promotion expectations, building networks, and accessing informal knowledge that shapes evaluation outcomes. However, women, particularly those from marginalized backgrounds, often struggle to find mentors who can provide relevant guidance and advocacy.

Institutional policies and cultural norms further shape these barriers. Rigid tenure timelines, inadequate parental leave policies, and limited access to affordable childcare disproportionately affect women faculty, particularly during early and mid-career stages [17], [1]. The culture of overwork prevalent in many STEM disciplines reinforces expectations of constant availability and productivity, disadvantaging those with caregiving responsibilities and contributing to unequal career outcomes [18], [6]. These structural expectations reflect institutional norms that privilege uninterrupted productivity and align with role congruity assumptions about ideal academic workers, further embedding bias within promotion systems.

6.0 Implications and Recommendations for STEM Faculty Evaluation and Promotion

Addressing gender bias in STEM faculty evaluation and promotion requires coordinated institutional action that extends beyond individual awareness or isolated policy changes. The barriers described in the previous section point to the need for structural reforms, leadership accountability, and cultural change within higher education institutions. The following recommendations outline evidence-based strategies that can support more equitable evaluation and promotion practices for women in STEM. Each recommendation is directly informed by the integrated theoretical framework presented earlier, addressing structural, psychological, and interactional mechanisms through which bias becomes embedded in engineering and STEM promotion systems.

6.1 Reframing Evaluation and Promotion Criteria

One of the most critical steps toward equity is the revision of promotion and tenure criteria to more accurately reflect the full range of faculty contributions. Traditional evaluation systems often prioritize research output and grant acquisition while undervaluing teaching, mentorship, and service, areas in which women faculty are disproportionately engaged [6], [2]. Institutions should adopt more holistic evaluation frameworks that explicitly recognize excellence in teaching, advising, and service, and that account for unequal workload distributions. At the same time, equity requires attention to how service and administrative duties are assigned in the first place. When faculty are evaluated primarily on research productivity but disproportionately tasked with service responsibilities, structural misalignment undermines their likelihood of success. Ensuring a more equitable distribution of service and leadership responsibilities across faculty ranks is therefore as critical as revising evaluation criteria. Such revisions directly respond to role congruity dynamics by redefining merit beyond narrowly masculine-coded productivity norms that dominate many engineering promotion systems. Comprehensive, clear

and transparent criteria aligned with assigned responsibilities can reduce ambiguity in evaluation processes and limit opportunities for bias to influence promotion decisions [13].

6.2 Strengthening Leadership Accountability and Data Transparency

Institutional leaders play a central role in shaping evaluation and promotion systems. To promote accountability, institutions should systematically collect and analyze disaggregated data on hiring, tenure, promotion, and salary outcomes by gender and race [7]. Making these data visible to department chairs, deans, and faculty committees can help identify patterns of inequity and prompt corrective action. Leadership accountability mechanisms, such as equity audits or oversight committees, can further ensure that promotion decisions are consistent and fair across departments [14]. Without clear accountability structures, commitments to equity risk remain symbolic rather than transformative. Because bias operates through both formal standards and informal norms, transparent data systems can disrupt reinforcing feedback loops that perpetuate inequitable promotion outcomes.

6.3 Addressing Bias in Evaluation Practices

Implicit bias training remains a useful, though insufficient, tool for addressing bias in evaluation processes. When implemented, such training should be discipline-specific and embedded within broader structural reforms rather than treated as a one-time intervention [5]. National initiatives such as the National Science Foundation's ADVANCE program have emphasized the importance of coupling bias-awareness efforts with institutional transformation strategies aimed at revising policies, practices, and evaluation systems within STEM fields [19]. Evaluation committees should receive guidance on recognizing bias in student evaluations, peer reviews, and external letters, particularly given evidence that women faculty are often held to higher standards of evidence [1]. In engineering departments where grant funding, citation counts, and perceptions of technical authority carry significant weight, committee training should explicitly address how these metrics may reflect structural bias rather than purely meritocratic assessment. Institutions can also reduce reliance on biased metrics, such as uncontextualized student evaluations, by incorporating multiple forms of evidence in teaching and research assessment.

6.4 Expanding Mentorship, Sponsorship, and Leadership Pathways

Access to mentorship and sponsorship is critical for navigating promotion and advancement in STEM academia. Institutions should invest in structured mentoring programs that support early- and mid-career women faculty and provide guidance on evaluation expectations, workload management, and leadership opportunities [7]. In addition to mentoring, sponsorship initiatives that actively advocate for women's advancement into leadership roles can help counteract informal networks that often exclude women [6]. Increasing the visibility of women in leadership positions also contributes to cultural change by challenging assumptions about who belongs in positions of authority within STEM.

6.5 Supporting Work–Life Integration Through Policy Reform

Work–life policies are closely tied to evaluation and promotion outcomes, particularly in STEM disciplines with intensive productivity expectations. Institutions should implement family-friendly policies such as flexible tenure clocks, parental leave, and access to affordable childcare, recognizing their role in supporting sustained academic careers [17], [18]. Although many institutions have adopted parental leave and tenure-clock extension policies in recent years, the

effectiveness of these policies depends not only on their availability but on their cultural legitimacy and consistent application. Importantly, the use of these policies should not be penalized in evaluation processes. Promotion guidelines should explicitly clarify how productivity expectations will be contextualized when caregiving-related adjustments are made, preventing informal penalties rooted in ideal-worker norms. Even when tenure-clock extensions are formally available, stigma associated with "falling behind" or deviating from traditional timelines can discourage faculty from using them, thereby limiting their intended impact. For Women of Color, who often navigate intersecting expectations related to caregiving, service obligations, and cultural or community responsibilities, the absence of supportive and non-punitive work–life policies can compound existing inequities in evaluation and advancement [7], [10]. Normalizing policy use, clarifying evaluation standards after leave, and addressing stigma within departmental cultures are therefore essential components of effective reform.

6.6 Centering Intersectional Approaches to Equity

Efforts to address gender bias must account for the compounded challenges faced by women of color and other marginalized groups in STEM. Institutions should develop targeted support structures that recognize intersecting forms of bias and avoid one-size-fits-all approaches to equity [8]. Incorporating intersectional data into evaluation analyses and ensuring representation of diverse perspectives on promotion committees can strengthen institutional responses to inequity and improve outcomes for all women faculty. An intersectional application of the integrated framework highlights that structural reform must address layered inequities rather than assuming uniform experiences among women in STEM.

7.0 Limitations and Future Directions

This paper is limited by its focus on U.S.-based higher education and by its reliance on existing literature rather than original empirical data. While this conceptual approach allows for a broad synthesis of research on gender bias in STEM faculty evaluation and promotion, it cannot capture institution-specific practices or individual experiences in depth. As a theoretically grounded synthesis, the paper prioritizes structural and cross-cutting mechanisms over localized variation. Additionally, although the paper attends to intersectional dynamics, the available literature remains uneven across disciplines and institutional contexts, particularly within engineering subfields where empirical research on faculty evaluation remains limited.

Future research could extend this work through empirical studies that examine evaluation and promotion practices within specific departments, institutions, or career stages. Longitudinal and mixed-methods research would be particularly valuable in assessing how reforms to evaluation criteria, leadership accountability structures, and mentoring initiatives influence women's career outcomes over time. Department-level analyses within engineering colleges, including studies of tenure dossiers, committee deliberations, and evaluation language, could provide deeper insight into how bias operates in practice. Such studies would further support the development of evidence-based policies and practices aligned with the mission of ASEE Women in Engineering.

8.0 Conclusion

Gender bias in STEM faculty evaluation and promotion remains a persistent challenge within higher education, with consequences that extend beyond individual careers to shape institutional cultures and scholarly outcomes. Despite increased attention to diversity and inclusion, women

in STEM continue to encounter inequities in how their teaching, research, service, and leadership potential are evaluated. As this paper has shown, these inequities are sustained through interconnected mechanisms, including differential evaluation standards, service overload, microaggressions, and institutional norms that privilege narrow definitions of merit [6], [2]. Within engineering and closely related STEM disciplines, where promotion systems often emphasize technical authority and research productivity, these mechanisms can be particularly consequential.

By integrating Role Congruity Theory, Stereotype Threat, and research on microaggressions, this paper contributes a theoretically grounded synthesis of how gender bias operates within faculty evaluation and promotion systems. Rather than treating these theories as isolated explanations, the analysis demonstrates how structural, psychological, and interactional processes operate simultaneously to reinforce inequities within engineering and STEM promotion structures. This framework helps explain why formal commitments to equity have not translated into proportional representation of women in senior and leadership roles in STEM, and why evaluation reforms must address both structural criteria and everyday institutional practices [15], [16].

The analysis underscores that addressing gender bias in evaluation and promotion is not solely a matter of fairness, but a necessary condition for fostering inclusive, innovative, and resilient STEM academic communities. Institutions that fail to recognize and correct inequitable evaluation practices risk losing talent, narrowing scholarly perspectives, and limiting their capacity for innovation [5]. Conversely, transparent and well-aligned criteria, accountable leadership, and supportive institutional cultures can create conditions in which women faculty are more likely to thrive and advance.

For STEM education stakeholders, particularly leaders within engineering colleges and evaluation committees, this work highlights the importance of examining evaluation systems as sites of both constraint and possibility. Meaningful progress will require sustained institutional commitment, data-informed accountability, and leadership that actively prioritizes equity in promotion and advancement. By rethinking how merit is defined and assessed, higher education institutions can move toward more equitable evaluation practices that benefit not only women in STEM, but the academic community as a whole.

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