Institutional Barriers, Strategies, and Benefits to Increasing the Representation of Women and Men of Color in the Professoriate

6

Looking Beyond the Pipeline

Kimberly A. Griffin

Contents

K. A. Griffin (✉)
University of Maryland, College Park, MD, USA
e-mail: kgriff29@umd.edu

Abstract

Women and men of color represent growing populations of the undergraduate and graduate student populations nationwide; however, in many cases, this growth has not translated to greater faculty representation. Despite student demands, stated commitments to diversity, and investments from national organizations and federal agencies, the demographic characteristics of the professoriate look remarkably similar to the faculty of 50 years ago. Many strategies to increase faculty diversity focus on increasing representation in graduate education, skill development, and preparation for entry into faculty careers. While these needs and strategies are important to acknowledge, this chapter primarily addresses how institutions promote and hinder advances in faculty diversity. Specifically, extant literature is organized into a conceptual framework (the Institutional Model for Faculty Diversity) detailing how institutional structures, policies, and interactions with faculty colleagues and students shape access, recruitment, and retention in the professoriate, focusing on the experiences of women and men of color. A failure to address these challenges has negative implications for teaching, learning, and knowledge generation; consequently, this review also presents research documenting how women and men of color uniquely contribute to the mission and goals of US higher education.

What many institutions have struggled with privately became a public and national issue in the Fall of 2015, when students at campus after campus demanded that institutional leaders pay attention to the racism Black students and students of color face. The protests at the University of Missouri (Mizzou) drew national attention when its football team refused to play, acting in solidarity with students who demanded justice, increased equity, and the resignation of the institution's president. Student activists confronted the Mizzou's then president during a Homecoming parade, formed and lived in a tent city at the center of campus, and stood alongside graduate student Jonathan Butler, who vowed not to eat until the president resigned. Presidents and provosts at campuses across the country witnessed their students engage in similar acts of resistance in support of the Mizzou students and articulated their own concerns about the environments minoritized[1] students have to navigate at historically white institutions.

---

[1]"Minority" speaks to numerical representation. The term "minoritized" acknowledges how social constructs like race, gender, ethnicity, religion, and sexual identity influence power dynamics and exposure to oppression. For more, please see https://www.theodysseyonline.com/minority-vs-minoritize

While protests at schools like Princeton University, Yale University, Brown University, Ithaca College, and Claremont McKenna College drew national attention, demonstrations were more widespread, and students at over 60 campuses presented institutional leaders with lists of demands, calling for renewed attention and focus on campus diversity and marginalization (see the demands at https://www.thedemands.org/). Each list of demands was unique, providing a glimpse into the differences and similarities between how students experience racism and marginalization at their respective campuses. Interestingly, the most consistent request across these lists was a demand to significantly increase faculty diversity, insisting campuses institute policies and programs that recruit and retain more women and men of color in the professoriate, providing students with the role models and support they need as they strive for success in sometimes hostile environments.

Colleges and universities have long struggled to address the diversity of their faculties, hiring and retaining women and people of color[2] at rates far below their representation in the US population and undergraduate student body. As scholars, leaders, and policymakers have tried to understand why increasing the representation of women and men of color in the academy has been so challenging, they have often turned to explanations that focus on the "pipeline," or the limited gains in the number of women and men of color entering and completing graduate programs (Cannady et al. 2014; Cress and Hart 2009; Gasman et al. 2011; Kulis et al. 2002; Smith et al. 2004; Tuitt et al. 2009). As a consequence of this pipeline framing, faculty diversity strategies have largely focused on increasing the number of individuals entering and completing graduate school, focusing on skill development and preparation for faculty careers.

There is certainly some merit in these strategies. There is much work to be done to encourage more talented women and men of color to pursue graduate education. It is also important to address how limited exposure to research and low levels of self-efficacy interfere with students' progress and discourage women and men of color from pursuing and completing graduate degrees. However, at the same time, there are deeper conversations colleges and universities must have about their role in perpetuating the lack of diversity in the academy. Specifically, campuses must question how they are attracting, hiring, and retaining recent doctoral graduates and faculty from minoritized groups generally, and women and men of color, in particular (Cannady et al. 2014; Cress and Hart 2009; Gibbs and Griffin 2013; Kulis et al. 2002; Trower and Chait 2002). Further, institutions must acknowledge how administrators, faculty, policies, and structures create and maintain (un)welcoming campus environments. Institutional leaders must understand and address how sexism and racism are embedded in academic structures, systems, departments, colleges, and programs in a comprehensive way to truly understand why they have failed to or

---

[2]In the context of this work, people of color refers to individuals who identify as one or more of the following: American Indian/Alaska Native/Native American, Asian American, Black or African American, Hispanic or Latina/o/x, Pacific Islander or Native Hawaiian, or Multiracial.

have made minimal progress towards increasing the number of women and men of color on their faculties.

This chapter offers guidance to scholars, faculty, practitioners, and institutional leaders, presenting insights into the complexities associated with increasing faculty diversity. I have completed an extensive review of the literature, searching Academic Search Ultimate, Education Source, ERIC, PsychINFO, and Google Scholar to identify over 200 peer-reviewed journal articles and foundation reports documenting the representation of women and men of color in the academy, exploring faculty experiences and outcomes at predominantly white 4-year institutions, and presenting the efficacy of programs and policies to promote faculty diversity and inclusion. There have been several thoughtful and thorough reviews of the literature documenting the challenges women (e.g., Blickenstaff 2005; Cress and Hart 2009; Lee 2012; Winkler 2000) and individuals from racially minoritized groups (e.g., Aguirre 2000; Laden and Hagedorn 2000; Tuitt et al. 2007; Turner et al. 2008) experience as they seek to gain access to and persist in the academy. This chapter adds to this body of work, synthesizing new and emerging research on how various aspects of historically white 4-year college and university environments limit the success of women and men of color in the academy, sabotaging efforts to increase diversity. While seminal works by leading scholars are incorporated into this review of literature, I focused on reading and synthesizing research published after 2000; over half of works cited were published in or after 2008.

This chapter also offers a path forward for institutions that want to engage in intentional and long-term action to increase the representation of women and men of color in the professorate. In addition to reviewing the literature on the barriers and challenges, I also completed an extensive review of journal articles and reports documenting the structure and outcomes of interventions designed to mitigate institutional barriers and promote faculty diversity. The findings of this research are presented and form the foundation of a proposed framework for understanding and addressing institutional barriers that prevent campuses from recruiting and retaining women and men of color and making progress towards faculty diversity goals. The chapter closes with a reflection on the unique contributions women and men of color make to 4-year institutions, highlighting what higher education and the next generation of students will lose if we do not act, as well as critiques of the extant literature base and areas for future study.

Conceptual Considerations

As scholars, leaders, and policymakers engage in conversations about how to increase the number and representation of women and men of color in the academy, it is critical to be mindful of how these discussions are framed. Thus, before exploring the factors and forces that mitigate institutional efforts to promote faculty diversity and engaging the extant literature on the experiences and outcomes of women and men of color in the academy, it is important to clarify my conceptual orientation to this topic. There are two conceptual frameworks grounding my

approach to this work and review of the literature: equity-mindedness and intersectionality. In this section, I describe these concepts by presenting how they have been applied and leveraged in the discourse on faculty diversity, how they guide my own work, and how they frame my understanding of why representational disparities persist and what should be done to address them.

From Diversity to Equity

National conversations about diversifying faculty tend to focus on the desired outcome: increasing the number of faculty from traditionally underrepresented backgrounds. Given that diversity, most simply stated, is the presence of heterogeneity and difference (Griffin 2017), progress and success have often been equated with substantial increases in the number of women or people of color employed at an institution. A focus on numerical outcomes and increases in representation are consistent with a diversity-focused perspective, which emphasizes preparation and access (Malcom-Piqueux et al. 2017), in this case to faculty positions. When guided by a diversity-focused perspective, institutional leaders may develop initiatives that aim to increase the number of women and people of color entering and completing graduate education or emphasize faculty hiring to increase the representation of women and men of color in the academy. A diversity-focused perspective also often situates both problems and potential solutions within the communities that are underrepresented or not persisting in the academy (Bauman et al. 2005; Malcom-Piqueux et al. 2017; Stewart 2017). Institutional leaders and administrators may develop interventions to "fix" what is perceived as wrong with graduate students and faculty, pushing them to conform to characteristics that are most valuable in the academic hiring and promotion process. In other words, when operating from a diversity-focused perspective, we would increase the representation of women and men of color in the academy with programs that help them develop CVs and cover letters that grab the attention of search committee members, spend more time on activities that are recognized as valuable within academic review processes, and teach in ways that translate to higher scores on student evaluations.

It is important to trouble this conversation and critically consider how we are thinking about the interventions we implement. A narrow focus on diversity and numerical representation, particularly through hiring or increasing the number of individuals from minoritized backgrounds with PhDs, may translate to short-term surges and shifts in faculty demographics. However, these initiatives often miss important dynamics that perpetuate inequality in the academy. Further, while professional development-based strategies have some value and can offer important resources, they are often deficit-oriented, blaming individual graduate students and faculty members for their lack of presence in the professoriate, and rely on their willingness to conform to existing structures and systems to see meaningful gains in faculty diversity (Malcom-Piqueux et al. 2017).

Long-term change in the composition of the professoriate requires a different approach, directly addressing the racism and sexism minoritized faculty face in the

academy (Harper 2012). An equity-minded perspective shifts attention from individuals to organizations, addressing how institutions perpetuate inequality, inhibit their own ability to increase faculty diversity, and sustain barriers that prevent minoritized individuals from gaining access to beneficial resources (Pena et al. 2006; Stewart 2017). Rather than assuming there is a deficiency in the work or motivation of women or men of color trying to enter the academy, equity-mindedness attributes persistent underrepresentation of women and men of color on organizational actors, policies, and structures (Malcom-Piqueux et al. 2017), such as faculty bias in hiring, tenure, and promotion policies that do not fully account for the contributions minoritized faculty make to the academy, and the stress and strain of challenging climates and environments. In addition, when new programs are developed that offer minoritized faculty resources or support, equity-minded perspectives remind leaders to assess whether all have equal access to and benefit from these resources (Stewart 2017).

In this chapter, I employ an equity-based perspective that focuses on how academia generally, as well as specific campuses, creates conditions that foster and perpetuate the underrepresentation and demographic disparities we observe in the US professoriate. I examine and present literature that focuses on the individual level challenges women and men of color face as they engage with their students and colleagues, as well as how those barriers are institutionalized and entrenched in organizational structures. I also highlight the racism and sexism embedded in workload imbalances and what is recognized as "valuable" or "prestigious" academic work, demonstrating how marginalization is maintained by structures and systems over time.

Intersectionality

As scholars, leaders, and practitioners make the shift from a diversity-focused to an equity-focused frame, it is also important to reconsider how identity is being conceptualized and operationalized. In many cases, minoritized identities are treated as singular and mutually exclusive. For example, individuals are either women, or people of color, or they have a disability, or are a member of the LGB community. This tendency to compartmentalize identities can be easily observed in the ways the challenges women and people of color face in the academy have been discussed. Higher education scholars, policymakers, and leaders have long underscored their shared experiences in studies, reports, and briefs. For example, in 1983, Menges and Exum wrote *The Barriers to the Progress of Women and Minority Faculty.* Johnsrud and Des Jarlais's (1994) manuscript similarly explored *Barriers to Tenure for Women and Minorities.* These foundational studies offer critical insights into the similar barriers both women and people of color face as they aim to navigate the academic spaces including the tenure and promotion process. Similarly, the National Science Foundation report, *Women, Minorities, and Persons with Disabilities in Science and Engineering* (2019), found inequitable outcomes in representation, workforce attainment, and degree completion across all three groups.

We often aim to address the needs and experiences of women *and* minorities, treating them as individual, mutually exclusive groups that share something in common. In other words, while unintentional, the "and" is often treated like an "or" (Bowleg 2012). According to Kimberle Crenshaw, "The tendency to treat race and gender as mutually exclusive categories of experience and analysis" creates "a problematic consequence" (1989, p. 140), missing how membership in multiple identity groups shapes how people are perceived and treated. A white woman could assume that her needs and concerns would be addressed by the programs and policies focused on women, and men of color may choose to participate in interventions or assume their stories are captured in research on people of color. But where do women of color fit? Their membership in both groups creates a distinct experience in the academy; they are exposed to racism in ways white women are not and encounter sexism men of color do not (Aguirre 2000; Museus and Griffin 2011; Turner 2002b). The needs and experiences of women of color are often missed in feminist discourses, which center the needs of white women, and anti-racist discourses, which center the needs of men of color (Crenshaw 1989). Thus, programs and policies focusing on women and people of color may leave women of color professors feeling like they have to choose which identity to prioritize, knowing they may not be fully seen in either category. This can leave women of color with questions about where they belong, who understands their stories, and who is centering and amplifying their unique narratives.

This then begs the question: how do we locate and treat the experiences of those who occupy multiple minoritized identity groups at the same time? Intersectionality can be a valuable tool in this endeavor, and is a framework that allows institutional leaders, scholars, and practitioners in and outside of higher education to explore "the process through which multiple social identities converge and ultimately shape individual and group experiences" (Museus and Griffin 2011, p. 7). Rather than isolate the influence of each of our separate identities, intersectionality suggests that there is a unique experience created at the intersection of our multiple identities (Collins 2015; Crenshaw 1991; Museus and Griffin 2011). Intersectionality discourages the notion of a hierarchy of oppression and goes beyond additive notions of identity (Berger and Guidroz 2010; Harris and Patton Davis 2019). For example, an intersectional framing would not argue that women of color are "double minorities" or twice as oppressed as white men. Rather, intersectionality highlights how those with a shared identity may be exposed to distinct and additional forms of marginalization based on the other identities they embody (e.g., race, ethnicity, sexual identity, physical ability) (Bowleg 2008; Crenshaw 1991). Thus, it is more accurate to say that women of color experience additional forms of marginalization as compared to white women because of their exposure to racism; and women of color are oppressed in ways different from men of color because of their encounters with sexism. A person's positionality based on their identities cannot be quantified with easy math; rather, having multiple minoritized identities amplifies marginalization as individuals experience different forms of identity-based oppression at the same time.

While useful and increasingly applied in higher education research and practice, intersectionality is conceptually complex, misunderstood, and often misapplied (Collins 2015; Harris and Patton Davis 2019). Intersectionality can be conflated with other frameworks that explore identity salience and acknowledge that every person has membership in multiple identity groups that shape their perspectives and daily lived experiences. Multiple identity frameworks offer important insights, yet are distinct from intersectional work (Harris and Patton Davis 2019; Jones and Abes 2013). Intersectionality insists that we go beyond acknowledging how multiple identities shift in salience based on context, addressing how power and oppression are ascribed to our identities and how they come together to create a unique experience of marginalization or privilege (Collins 2015; Harris and Patton Davis 2019).

Intersectionality goes beyond the study of race and gender,[3] and there are infinite ways in which a person can embody marginalized and privileged identities (Bowleg 2012). Similarly, there are infinite ways intersectionality can be used and applied to study diversity in the professoriate. I acknowledge that sexual identity, physical ability, religious identity, citizenship status, and other dimensions of identity can intersect with each other as well as a professor's race and gender, having an important influence on a faculty member's experiences and professional success. However, the intersections of certain identities may emerge as more salient in particular settings due to their likelihood of exposing individuals to a unique form of marginalization and oppression (Crenshaw 1991). Given this work's focus on the oppression faced by women and people of color, I will focus on the distinct experience of women of color in the academy.

Both an equity-based perspective and intersectionality guided this work and how I approached and presented the extant research related to efforts to increase faculty diversity. An emphasis on equity led me to focus on contextual factors and forces impacting the lives and experiences of minoritized faculty, balancing an analysis of individual and structural ways identity-based marginalization shapes experiences, access to opportunity, and satisfaction. Rather than assuming that individuals must conform to challenging environments to succeed, I assume that environments must change, removing barriers and becoming more inclusive towards minoritized scholars. Intersectionality further leads me to assume that while minoritized faculty generally may experience challenges in the academy, embodying multiple oppressed identities exposes women of color to unique and often amplified forms of marginalization. I intentionally use the phrases "women and men of color" and "white women and people of color" to locate women of color in our discourse. I also include literature that calls attention to the unique ways racism and sexism converge in the

---

[3]Although this work examines sexism and focuses on how it impacts women generally and women of color specifically, it is critical to acknowledge that gender is a social construct and a growing population identifies beyond the man/woman or male/female binary. I did not review any literature that addressed the experiences, outcomes, or structural oppression of transwomen or individuals who identify outside of the traditional gender binary, and acknowledge that the barriers they face and how they experience the academy likely are very different.

lives of Black, Latina/x, and Native American women whenever possible, drawing out distinctions in their experiences and outcomes.

Faculty Diversity: A Complex Demographic Landscape

Data tell a complex and uneven story about the representation of women and men of color in the professorate. The number of women and men of color in the faculty has increased over the past several decades. In 1987, women were 32% of all faculty (part and full-time) teaching in postsecondary institutions. Their representation has slowly, but steadily, grown By 2016, 49.3% of all individuals teaching on college and university campuses were identified as women (NCES 2017a). The number and percentage of Asian American, Black, Latinx, and Native American, and Multiracial scholars[4] in the US professoriate has also increased over time (Finkelstein et al. 2016). In 1993, people of color were 12.5% of all faculty; by 2013, this number had increased to 19.1% (Finkelstein et al. 2016). By 2016, 23% of all faculty, part- and full-time, were people of color (NCES 2017b).

While these gains may appear promising, it is important to acknowledge that growth in faculty diversity has not been consistent across all institutional types, disciplines, and appointment types. First, composition varies across institutional type, skewing overall representation and perceptions of the size and scope of diversity gains. For example, while Black scholars are 5.7% of all full-time faculty (Espinosa et al. 2019), a large proportion teach at Historically Black Colleges and Universities (HBCUs) (Trower and Chait 2002), and Black faculty are more concentrated in positions with less power and stability (e.g., lecturers, assistant professors, part-time faculty) at less prestigious institutions (Jackson 2008). Underrepresented minority[5] faculty more generally make up a larger proportion of faculty at 2-year (15%) as compared to 4-year (9.5%) institutions. The reverse is true for Asian American faculty; they represent 4.2% of faculty at 2-year campuses and 11.3% at 4-year campuses (Espinosa et al. 2019). The gender balance of the faculty also varies across institutional types. In 2013, the overall ratio of men to women in full-time faculty positions was 1.7–1 for tenured faculty, and 1.1–1 for faculty in tenure-track positions. However, the disparities in representation were greater, particularly between the number of tenured men and women, at private, 4-year, and research institutions. Women outnumber men at 2-year institutions, and women are more well represented than men on the tenure-track at Master's comprehensive institutions (Finkelstein et al. 2016).

In addition to disparities across institutional types, there are often differences in faculty representation within institutions by academic discipline. Much attention has been paid to the small numbers of women and men of color in science, technology,

---

[4]Referred to collectively as "people of color" or "scholars of color."

[5]Underrepresented minority usually includes Black/African Americans, Latina/o/x, and Native Americans/American Indians.

math, and engineering (STEM) fields. While there is still much work to do, women and men of color are more well represented in humanities and social sciences faculty roles than in STEM. An analysis of Integrated Postsecondary Education Data System (IPEDS) data tracking faculty representation across six academic departments (3 STEM, 3 non-STEM) suggests that the underrepresentation of Black, Latinx, and female faculty overall is at least partially driven by their small numbers in science (Li and Koedel 2017). Almost half of all full-time faculty are women; however, women are just over a third (37.8%) of faculty in STEM (Hamrick 2019). The representation of Black, Latinx, and American Indian STEM professors has increased to 8.9%, but is still far lower than their representation in the US population (Hamrick 2019). These disparities are exacerbated when we examine data focusing specifically on Black, Latina/x, and Native American women. Although they are 12.5% of the US population, Black, Latina/x, and Native American women comprise only 2.3% of tenured/tenure-track and 5.1% of non-tenure–track faculty in science and engineering (Ginther and Kahn 2012). As compared to underrepresented minority women, there are 10 times as many white women and 20 times as many white men scientists and engineers working in academia (Ginther and Kahn 2012).

Further, progress in faculty diversity has coincided with increases in the number of contingent, part-time, and non-tenure–track positions (Finkelstein et al. 2016; NCES 2017a, b). Notably, women and men of color are better represented in these positions than tenure-track roles. In 2016, 51% of all instructors and lecturers were women (NCES 2017a). Roughly three-quarters of all female faculty are in non-tenure–track or part-time roles, as compared to 65% of male faculty (Finkelstein et al. 2016). In 2013, over half of underrepresented minority faculty were employed in part-time positions, and they represented 14.2% of part-time faculty and 12.0% of all non-tenure–track faculty, as compared to 10.2% of all tenured faculty (Finkelstein et al. 2016). Similarly, the largest percentages of Black, Latinx, and Native American faculty are lecturers, instructors, or have no specified rank (Espinosa et al. 2019).

There are also distinctions in how women and men of color are distributed across academic rank within tenure and tenure-track faculty. Recent gains for women and men of color in doctoral degree completion have translated to a body of assistant professors (pre-tenure) that is more diverse than associate and full professors (Li and Koedel 2017); thus, much of the diversity we see in the professoriate is concentrated in the pre-tenure ranks. While one quarter of men in the professorate are tenured, 16% of women have obtained tenure and 9% of all female faculty have reached full professor. When examining racial and ethnic differences, white and Asian American faculty are better represented at the highest levels of the academic hierarchy than Black, Latinx, and Native American professors (Espinosa et al. 2019). For example, 80% of all full professors at 4-year institutions are white, and they are more heavily represented among full professors and those with tenure than at the associate and assistant professor levels. Alternatively, Black and Latinx faculty were more heavily represented among assistant professors (Espinosa et al. 2019). Women of color tend to be concentrated at the lowest levels of the academic hierarchy. For example, Black women have higher rates of educational attainment and representation in undergraduate and graduate education as compared to their male counterparts; however, Black

men are more likely to be tenured and serve in the top levels of the academic hierarchy (Gregory 2001).

There have been some visible and important gains in faculty diversity, especially in the representation of women. However, disparities persist, and measures of progress are inflated if faculty demographic data are not disaggregated by institution, discipline, and rank. Institutionally, the faculties with the largest concentrations of women and men of color appear to be those with special missions to serve communities of color and 2-year institutions. Despite the important work these campuses do to promote access and equity in higher education, these institutions are often perceived as less prestigious due to their open access missions and lower levels of research activity and have fewer resources to support faculty and students due to limited tuition revenues and government support. When examining the specific roles and rank of women and men of color at 4-year institutions generally, and research universities specifically, it is clear that they are more heavily represented among pre-tenured faculty, lecturers, and part-time instructional staff. While individuals in these roles perform important institutional functions and carry much of the teaching load at many campuses, faculty in these positions do not have access to the protections of tenure, are more likely to be on temporary contracts, and have the least power in the academic hierarchy (Finkelstein et al. 2016; Hart 2011). Thus, women and men of color appear to be most often present at institutions and in positions that are the least supported and most vulnerable, while the positions and institutions that have the most power, prestige, and resources remain largely white and male.

An Insufficient Solution: Understanding and Rethinking the Pipeline

The next generation of professors will be drawn from today's graduate students. Therefore, scholars and institutional leaders have often relied on the rate at which graduate education is diversifying to gauge the potential of changing the demographics of the professoriate. A pipeline metaphor is often invoked in these conversations. The pipeline represents a journey from one place to another, one timepoint to another, often raised more generally to explain why there are supply shortages in various careers (Ryan et al. 2007). Describing the progression towards a faculty career as a pipeline suggests a linear process, where potential candidates transition from undergraduate to graduate school, and then into a faculty career (Shaw and Stanton 2012). Educational leaders and administrators note the importance of "building the pipeline" or "increasing the flow," assuming that a more diverse group of students enrolled in and completing doctoral programs will translate directly to more diversity in the faculty (Kulis et al. 2002). At the same time, they acknowledge that pipelines are faulty, "leaking," and losing students along the path from undergraduate to and through graduate education, leaving fewer eligible women and men of color with PhDs to assume faculty roles (Kulis et al. 2002; Ryan et al. 2007).

Scholars, practitioners, faculty, and institutional leaders who engage in discourse about the continued low rates of faculty diversity often blame the pipeline as the source of the problem (Cannady et al. 2014; Gasman et al. 2011; Husbands Fealing and Myers 2012; Kayes 2006; Kulis et al. 2002; Smith 2000; Tuitt et al. 2007). In other words, many argue that faculty diversity goals are nearly impossible to reach because of the small numbers of women and men of color completing graduate degrees. As a consequence, higher education institutions and organizations have invested time and energy on efforts that "increase flow" or "prevent leaks," largely by focusing on students and their performance. For example, the National Science Foundation (NSF), National Institutes of Health (NIH), and other agencies have invested significant resources in addressing the pipeline towards a faculty career, funding mentoring, research, and professional development programs that encourage more students to pursue science or aim to retain them in the field (Husbands Fealing and Myers 2012).

While the pipeline metaphor and argument are powerful and pervasive, scholars have increasingly critiqued the notion that a lack of faculty diversity is an issue of supply. National data suggest that there are more potential faculty candidates from minoritized groups than there have been in previous decades. Albeit slowly, the number of women and underrepresented minority men pursuing graduate work is growing, and minoritized scholars make up larger proportions of students in Master's, doctoral, and professional degree programs than they once did. In 1980, women were 46.2% of all graduate students. They were over 51% of graduate students by 1990, and in 2008, 59% of all students enrolled in post-baccalaureate programs were women. Interestingly, Black, Latina/x, and Native American women were also more well represented in graduate programs than their male counterparts, and the gender gaps were wider than those observed between white men and women (Espinosa et al. 2019). Women were 71% of all Black, 63% of all Latinx, and 63% of all Native American graduate students (NCES 2010). Additionally, Black, Latinx, and Native American students gained ground in their representation among graduate school completers between 1996 and 2016, increasing from approximately 10% to 17% of all degree recipients (Espinosa et al. 2019).

Policymakers have largely focused on trends in doctoral degree completion, where there have been gains, as well. Women were over half (53.8%) of all doctoral degree recipients in 2013 (NSF 2014). The representation of Latinx, Native American, and Black PhD recipients increased from approximately 8% to over 13% between 1994 and 2014 (NSF 2015). There were also notable increases in the number of underrepresented minority men and women receiving PhDs in the life sciences, physical sciences, and engineering – fields where Black, Latinx, and Native American scholars are present in particularly low numbers. While these data suggest that graduate education still has a long way to go before its population mirrors the diversity in undergraduate education or the nation more generally, they also indicate that there are indeed more women and men of color in the pipeline, and diversity in the faculty applicant pool should be growing.

Increases in diversity among PhD recipients have outpaced progress towards faculty diversity goals, and multiple studies suggest that women, underrepresented

minorities, and women of color in particular are less likely to transition to faculty careers after completing their graduate training. For example, Gibbs Jr et al. (2016) used degree completion and employment data to examine the differences between the size of the underrepresented scientist population and the number of assistant professors of color in the sciences. The size of the potential applicant pool in 2013 (recent PhD graduates from underrepresented backgrounds) was nine times larger than it was in 1980, but the number of assistant professors from underrepresented backgrounds in medical school science departments only increased two and a half times over the same time period. Kulis et al.'s (2002) study of faculty in science or science-related fields similarly found that the share of the professoriate composed by women fell far short of their representation among doctoral students and was not just an issue of supply.

Lower rates of representation are connected to multiple factors. This review will certainly engage research that suggests individual and structural discrimination in the hiring process are partially to blame; however, it is also important to consider whether students are as interested in pursuing faculty careers as they once were. Graduate students from all backgrounds are increasingly reporting that they are not interested in faculty careers, and researchers have found that students' interests in pursuing academic research careers significantly decreases as they progress through their doctoral training (Fuhrmann et al. 2011; Sauermann and Roach 2012). According to Golde and Dore (2001), many graduate students across the arts, humanities, and sciences did not want to manage the ambiguities and challenges often associated with faculty life. Similarly, 91% of the graduate students that participated in Fuhrmann et al.'s (2011) study who lost interest in becoming academic principal investigators raised concerns about the lack of funding for research and heavy competition for a declining number of academic positions. Further, trainees expressed concerns about the length of the academic training process, which may include several years of postdoctoral work before securing a faculty position (Fuhrmann et al. 2011; MacLachlan 2006). Perhaps more relevant to science disciplines, the low salaries associated with postdoctoral training can discourage some from pursuing faculty careers, as they compare their financial resources and stability to peers who are at their age but have spent less time in school (Gibbs Jr and Griffin 2013; Stephan 2012).

While several of these factors may be consistent across various identity groups (e. g., students from all racial backgrounds may be similarly frustrated with low postdoctoral pay or the all-consuming nature of faculty work and life), declines in interest in academic careers are particularly notable for women and men of color. Women are more likely to leave the academy to pursue nonacademic careers, and if they enter the academy, they are more likely to choose non-tenure–track appointments or depart before being reviewed for tenure and promotion (August and Waltman 2004; Marschke et al. 2007; Mason and Goulden 2002). Research on biomedical scientists and their career interests showed that underrepresented minorities and women, and underrepresented minority women in particular, had the lowest levels of interest in faculty careers at research universities at the end of their graduate training (Gibbs et al. 2014). Gibbs and colleagues conducted a quantitative study,

analyzing data collected from 1500 biomedical scientists who reflected on their career interests before graduate school, after graduate school, and currently. Women from underrepresented racial and ethnic minority groups reported higher interest than their peers in careers outside of research, and white and Asian women, underrepresented minority men, and underrepresented minority women all reported less interest in careers as research faculty than white and Asian men. Importantly, controlling for faculty support, research self-efficacy, and first-author publication rate did not fully account for differences across groups.

Research suggests women and men of color are more likely than their peers to leave the academy after completing their doctoral degrees for multiple reasons. First, graduate students face racism and sexism from faculty and peers in their graduate programs which could potentially influence their desire to pursue academic careers (e.g., Felder et al. 2014; Griffin et al. 2015; Robinson et al. 2016). As stated by Trower and Chait (2002),

> . . . even if the pipeline were awash with women and minorities, a fundamental challenge would remain: the pipeline empties into territory women and faculty of color too often experience as uninviting, un-accommodating, and unappealing. For that reason, many otherwise qualified candidates forgo graduate school altogether, others withdraw midstream, and still others – doctorate in hand – opt for alternative careers. (p. 34)

Women, particularly in science, face multiple challenges, including a lack of role models and invested mentorship, chilly climates, and gendered stereotypes that leave many isolated and less interested in pursuing careers in the academy (Blickenstaff 2005; De Welde and Laursen 2011; Griffin et al. 2015). Similarly, graduate students of color face stereotypes, marginalization, and unwelcoming climates as they navigate graduate education (e.g., Carlone and Johnson 2007; Felder 2015; Felder and Barker 2013; Gasman et al. 2008; Gildersleeve et al. 2011). Williams et al.'s (2016) study of underrepresented minority scientists revealed that not having the opportunity to see or interact with other underrepresented scientists, particularly faculty, left trainees wondering whether they had the skills necessary to be successful in the field as faculty themselves. Similar themes were observed across interviews with 45 physicians from diverse backgrounds, and participants blamed a lack of faculty from underrepresented racial and ethnic minority backgrounds in academic medicine on an unwelcoming environment where their competence was regularly questioned. In addition to encounters with bias and stereotyping, they explained that a lack of role models who had chosen the academic path made them doubtful of their own potential success and less interested in pursuing academia (Price et al. 2005).

Scholars have also connected disinterest in faculty careers to a perceived lack of alignment between trainees' interests in work-life balance, the culture of the academy, and the nature of faculty life and work. Graduate students have generally reported dissatisfaction with high faculty workloads, which leave limited time for personal interests and commitments due largely to demands for scholarly productivity and success in securing external funding (Fuhrmann et al. 2011; Gibbs Jr and Griffin 2013; Griffin et al. 2015; Mason et al. 2009). While such general phenomena

exist across graduate students overall, these appear particularly distinct for women and men of color. For example, multiple scholars have found that factors related to caregiving and family responsibilities are central to women's decision making about pursuing faculty careers post PhD (Cannady et al. 2014; Mason and Goulden 2004a). Van Anders (2004) studied 458 graduate students at the University of Western Ontario and found that women were less likely to say yes and more likely to say no to faculty careers, not because of their interest in teaching or research, but due to their perspectives on parenthood and family mobility. Men and women were equally likely to plan to have children, but women were less likely to agree that having children was compatible with having a faculty career. Further, seeing an incompatibility between parenthood and academia was predictive of women's interest in faculty careers, but not their male colleagues. Men and women from underrepresented minority backgrounds reported similar concerns about balancing academic and family life, decreasing their interest in a potential faculty career (Haley et al. 2014; Jaeger et al. 2013). Participants shared their desire to be present for their families, leading some to express doubts about faculty opportunities that would displace them geographically or demand too much of their time (Jaeger et al. 2013).

A lack of alignment between potential candidates' interests and the values of the academy may also lead women and men of color to choose non-academic careers. Black, Latinx, and Native American students may be particularly invested in doing work that addresses persistent social problems, serves their communities, and diversifies higher education, but may not see faculty life and work as a way to reach these goals, given the emphasis placed on research and more abstract discoveries (Gibbs Jr and Griffin 2013; Johnson 2007). Women of color participating in Johnson's (2007) study described the ways in which science was decontextualized in academic spaces, focusing on micro-level phenomena that seemed disconnected from larger, and in their mind, more interesting, practical applications of science knowledge. This dissonance between personal values and those endorsed by and necessary for success in the field was discouraging and led to questions of belonging, fit, and ultimately identity as a scientist. Thus, we must consider whether we will have any success increasing faculty diversity if we do not address whether faculty positions are even appealing to minoritized scholars given their perceived disconnection from making an impact or addressing community needs.

As a field, we must acknowledge that these gaps between doctoral degree completion and entry into an academic career are more than leaks that need to be patched. The pipeline metaphor creates a certain image of the progression from graduate school to an academic career. A pipeline conjures a picture of a straight line from enrollment, through graduate school, ending at a faculty position (Shaw and Stanton 2012). However, a faculty career is not a given; career development is more of a branching pathway than straight line, where individuals must make decisions that could take them closer or further from academic research (Gibbs Jr and Griffin 2013; Husbands Fealing and Myers 2012). These choices are often made with intention and do not represent accidental "leaking" from a linear path. While becoming a professor is not necessarily the best or only the viable career choice for individuals completing doctoral degrees, an equity-based perspective redirects

our attention towards why women and men of color are more likely to choose non-academic careers, and insists that scholars examine how academic environments push minoritized trainees out of academe.

Understanding Institutional Barriers to Increasing Faculty Diversity

Consistent with this chapter's equity-based perspective, it is important to consider how the racism and sexism in the environments women and men of color are attempting to and ultimately enter serve as barriers, impacting their satisfaction, professional success, and desire to remain in the academy. Thus, this review addresses institutional factors and forces that influence institutions' abilities to attain and maintain faculty diversity, focusing specifically on 4-year historically white institutions. I specifically explore how institutional administrators, departmental leaders, campus policies, faculty colleagues, and students can inhibit institutional progress towards faculty diversity goals across three domains: the recruitment and hiring process, transitions into institutions and faculty roles, and institutional retention.

Barriers in Recruitment and Hiring

Scholars have engaged in research to better understand how hiring policies and practices continue to perpetuate and maintain the lack of representation of women and men of color in the academy (see Tuitt et al. 2007 for a comprehensive review). While increasing the "flow in the pipeline" is not a panacea, increased diversity in the applicant pool does translate to increased likelihood of hiring a woman or man of color in a faculty position (Bilimoria and Buch 2010; Glass and Minnotte 2010; Smith et al. 2004). Much of this work takes place through outreach to candidates, encouraging applications from a broad range of scholars to generate a pool that increases the likelihood of hiring a White woman and/or person of color.

Partially due to pervasive narratives about the pipeline and small numbers of viable candidates from underrepresented backgrounds, institutional leaders and members of search committees have described increasing diversity in the applicant pool as outside of their control (Gasman et al. 2011; Roos and Gatta 2009; Smith et al. 2004). Early work by Turner et al. (1999) revealed that institutional leaders perceived a lack of qualified candidates as the root of their difficulties attracting a diverse faculty and instituted few outreach policies to encourage applications to open positions. Roos and Gatta (2009) analyzed qualitative and quantitative data from a college of arts and sciences and from a public research university to explore access to faculty positions, as well as trends in mobility, rank, and earnings. Their analysis of personnel data, surveys, and interviews with senior women faculty showed that search committees often argue that high-quality women candidates are just too hard to find, and members rarely educate themselves on ways to engage in candidate

outreach. Similarly, Gasman et al. (2011) completed a comprehensive case study of efforts to increase diversity in the college of education at an elite institution. They examined hiring trends, considered outreach and recruitment policies, and interviewed faculty involved in searches as evaluators and candidates. The scholars found that search committee members often perceived the diversity in their applicant pools as outside of their control and knew little about strategic practices to engage potential candidates from diverse backgrounds.

Campus leaders generally and search committees specifically miss opportunities to institutionalize recruitment strategies into formal policy and practice. According to Turner et al. (1999), while three quarters of the institutions surveyed indicated that increasing the recruitment and retention of faculty of color was a high priority, very few had formal policies and programs in place to help their institutions reach these goals. Similarly, according to Gasman et al.'s (2011) case study, recruitment processes are often informal, with few established policies or formalized procedures focused on increasing diversity in the applicant and finalist pool beyond the campus affirmative action policy. Bilimoria and Buch's (2010) analysis STEM departments across two institutions revealed that a passive approach is often taken to the search process, with the anticipation that candidates will locate the position and apply without much effort on behalf of the search committee. When institutions do require search committees to submit formal recruitment plans, the committees are often overly reliant on traditional outreach strategies, such as sharing positions on listservs and sending emails. When these strategies do not lead to increased diversity in the applicant pool, search committee members often blame candidates for not recognizing opportunities (Kayes 2006; Light 1994).

Further, some scholarship suggests search committee members may not put forth significant effort to recruit women and men of color as candidates, assuming that they will not accept a position if it is offered. Myths and narratives are often circulated suggesting that a small pool translates to high levels of competition for top candidates from underrepresented backgrounds, (Aguirre 2000; Lumpkin 2007; Smith 2000; Tuitt et al. 2007). Scholars of color in particular can be perceived as expensive to recruit and hire, and more likely to benefit from bidding wars across multiple institutions trying to hire them (Aguirre 2000; Lumpkin 2007; Smith 2000). Smith (2000) examined these assumptions in her research on high-quality candidates from underrepresented backgrounds. Smith interviewed 299 recipients of the Ford, Spencer, and Mellon Fellowships, and found that most of the assumptions about the competition for women and men of color faculty applicants were unfounded. Most participants did not receive a lot of attention in the search process, with 11% of the pool reporting they were recruited to apply to faculty positions. Black, Latinx, and Native American candidates are also often assumed to be regionally bound and difficult to move to areas that are more rural or far away from family (Gasman et al. 2011). Smith (2000) found that the participants in her study were open to different institutional types in regions across the country, and rarely limited their searches to urban areas or prestigious institutions alone.

Members of search committees can also be roadblocks in the process. While it is critical for institutional leaders to articulate a commitment to increasing faculty

diversity, much of the decision making takes place at a local level, and the faculty serving on search committees must commit to diversity goals to advance progress (Bilimoria and Buch 2010; Lumpkin 2007; Tierney and Sallee 2010). More senior colleagues, who are largely white and male, have been described as superficially supportive of increasing faculty diversity, but often resistant to changing how they engage in the hiring process or critical of the materials presented by women and men of color in the application pool. Tuitt et al. (2007) noted that "personal preferences and connections supersede espoused commitments to diversity" (p. 518) within search committees; the prestige assigned to where candidates went to school and who they worked with can often interfere with how women and men of color are perceived. Search committee members often hold implicit and explicit biases that lead them to diminish the skills and achievements of minoritized candidates and amplify the qualities of candidates that are white or Asian, male, or US citizens. Multiple studies in and outside of the academy have shown that women and men of color are often perceived as having less potential and being less skilled, and are subsequently less likely to be hired than white and Asian men, despite having very similar (or in some cases identical) backgrounds and professional experiences (e.g., Bendick and Nunes 2012; Carnes et al. 2012; Eaton et al. 2019; Isaac et al. 2009; Moss-Racusin et al. 2012; Segrest Purkiss et al. 2006). Bias can often manifest in assessments of the prestige and rigor of minoritized candidates' work. For example, in their case study of efforts to increase faculty diversity in a college of education, Gasman et al. (2011) found that senior colleagues often turned conversations about diversity into discussions about maintaining quality, and scholars of color were not perceived as doing work that was prestigious enough for serious consideration.

Some of the critique and resistance senior scholars and search committee members exhibit may be a function of their tendency to seek candidates that mirror their own training, research interests, skills, and values, knowing that these candidates would be a fit in already established cultures and hierarchies (Bilimoria and Buch 2010; Kayes 2006; Light 1994; Tierney and Sallee 2010). According to Light (1994), "This tendency to search for minority candidates who mirror ourselves is easily the greatest – though hardly the only – obstacle we place in the path of recruiting a more diverse faculty" (p. 165). This bias excludes women and candidates of color who are pushing the norms of the field and challenging traditional conceptions of teaching and scholarship. Women and men of color are often missed in faculty searches when curricular needs are defined in traditional ways, and members of the search committee do not consider or place as much weight on the expertise minoritized scholars offer in emerging fields (Kayes 2006). For example, Tierney and Sallee (2010) warned of search committees' tendencies to define open positions based on current curricular needs. This practice replicates the faculty that are already in the department rather than creating opportunities to develop depth and expertise in new or emerging fields in which women and scholars of color may be innovating or more well represented.

It is important to note that the effort to recruit a new faculty member is not complete when a candidate is offered a position. While less often articulated as a barrier in the extant literature on hiring, institutional leaders must be mindful of how

they encourage candidates to accept the positions that they ultimately offer. As candidates navigate a search process, they are interpreting signs and signals that they receive from the institution, assessing whether they would like to ultimately accept a position if offered (Tuitt et al. 2007). In their analysis of the search and hiring process at two campuses, Bilimoria and Buch (2010) found that women were more likely than men to reject offers when made, and Latinx faculty were more likely to reject than accept an offer. The researchers offered some hypotheses regarding why the offers were not accepted; however, there was little data collected to confirm or disprove these assumptions. Institutions that are not attentive to the needs of dual-career couples, particularly when they are recruiting to more rural regions of the country, may also be at a disadvantage when trying to get candidates to accept their offers (Tierney and Sallee 2010). While both men and women may be sensitive to the employment needs of their spouses and partners, dual-career hiring opportunities may be particularly important and salient for women scholars. Most women academics who are married have partners with advanced degrees; conversely, most men who are academics are not married to women with advanced degrees (Laursen et al. 2015; Mason and Goulden 2002).

There are multiple challenges and roadblocks to navigate as institutions aim to address the underrepresentation of women and men of color in the faculty through recruitment and hiring. They are perhaps best categorized as issues with the processes and issues with the people engaged in those processes. Processes have limited impact because of their informality, passivity, and lack of intentionality in recognizing the value and importance of what women and men of color add to the academy. The people engaged in the process as members of search committees carry their own biases and beliefs, leading them to make decisions that recreate the academy as it is rather than promote innovation towards what it could be. Increasing diversity in the professoriate requires increased hiring of women and men of color into open positions, and unless institutions address both people and processes, progress towards increasing equity in academe will continue to stagnate.

Barriers in Transition and Socialization

The challenges mitigating efforts to promote faculty diversity do not disappear once more women and men of color have been hired. As newly hired faculty enter their new institutions and try to become members of their academic communities, institutions must consider whether they are creating barriers to success or facilitating new faculty members' transitions. There are decades of discourse in the higher education literature about socialization into the academy and how one adopts the identity of faculty member and understands the norms of academic life (e.g., Austin 2002; Berberet 2008; Nyquist and Woodford 2000: Rice et al. 2000); however, the field less has often considered organizational socialization, or how newcomers to an organization move from being outsiders to insiders, adopting the norms and values of the organization (Bauer et al. 2007; Tierney and Bensimon 1996).

There are multiple ways in which we can understand the process of organizational socialization generally, and its implications for minoritized faculty and increasing diversity more specifically. Tierney and Bensimon's book, *Community and Socialization in Academe*, is perhaps one of the most widely known and cited texts addressing how new faculty come to understand their roles in the academy. The book documented narratives from over 300 interviews with faculty across a diverse set of institutions, chronicling their experiences and challenges learning the norms and values of the academy, codified in an often-challenging tenure and promotion process. Bauer et al. (2007) offered a slightly different conceptualization of organizational socialization, applied broadly in and outside of higher education. Bauer and colleagues argued that organizational socialization relies heavily on newcomer adjustment, which incorporates three dimensions: role clarity, self-efficacy, and social acceptance.

Role clarity captures an understanding of the tasks necessary to be successful in the job, as well as an understanding of the appropriate amount of time to allocate to each task. In the case of full-time tenure-track faculty, success is often akin to obtaining tenure and being promoted through the academic ranks (Tierney and Bensimon 1996). Self-efficacy is related to mastery of the tasks necessary to be successful and confidence in one's ability to complete these tasks. Finally, social acceptance is related to community connections and whether one feels like they are welcomed, liked, and accepted. In addition to performing better, those who are able to attain greater role clarity, self-efficacy, and social acceptance are more likely to have higher levels of job satisfaction, organizational commitment, and intentions to remain in their positions (Bauer et al. 2007).

While several scholars have used organizational socialization as a framework to understand the experiences of early career faculty as they learn to navigate their respective institutions, others that have not applied the frame and have come to similar conclusions about how role clarity, self-efficacy, and community membership relate to satisfaction, productivity, and successful navigation of professional reviews and tenure processes (e.g., Cole et al. 2017; Kelly and McCann 2014; Ponjuan et al. 2011). Much of the foundational research in this area does not explicitly address the unique experiences of minoritized scholars in the socialization process, but does provide valuable insights into the challenges early career faculty face as they transition from graduate school to faculty roles.

Much of the research in this area has placed emphasis on role clarity, or how new faculty understand their responsibilities and how the tenure process works, and self-efficacy, or developing confidence in their skills and abilities. Role clarity and self-efficacy often work hand in hand, and early career scholars generally struggle to understand the necessary dimensions of faculty life and feel confident in the skills necessary to fulfill these roles as they transition to faculty careers (Austin et al. 2007; Rice et al. 2000; Sorcinelli and Austin 2006). According to Austin and Sorcinelli's (2007) review of literature on the experiences of new faculty, graduate programs often leave new PhDs underprepared for the realities of the academy and the multidimensional nature of their work. While they were well trained to engage in research, most new professors knew little about how to be an advisor or mentor,

develop a curriculum, write and manage grants, or participate in public service and outreach. Further, while institutions publish their tenure and promotion criteria in an effort to create greater role clarity, many scholars perceive the pathway to success in the academy as hidden and wish the advancement process was more clear, fair, and included more opportunities for formative feedback (Austin and Rice 1998; Austin et al. 2007; Sorcinelli and Austin 2006). Twelve new faculty in higher education administration departments described unclear expectations about how to become an effective teacher and develop a curriculum and syllabus, as well as expectations about the volume of productivity necessary to make adequate progress towards tenure (Eddy and Gaston-Gayles 2008). Similarly, a diverse groups of over 300 faculty participating in focus groups explained that despite stated guidelines, the expectations of colleagues in their department and college often were in conflict with those in central administration, and they often received vague or contradictory advice on how to spend their time and develop a record that would result in a successful tenure review (Austin and Rice 1998).

While many of these challenges may be shared across identity, they manifest differently for women and men of color (Cole et al. 2017). According to research by Boice (1993), women and men of color reported role-related challenges that were unique and distinct from their white male colleagues. New faculty who were women felt pressure to perform and demonstrate their skills as teachers and researchers in ways men did not, and over time doubted their abilities as teachers and writers. Professors with minoritized racial and ethnic identities were most likely in the sample to perceive the need to prove their abilities and felt that they were expected to cope without help, support, or complaint. Similarly, a study of three women of color professors who left their institutions before going up for tenure revealed that they experienced challenges in role-clarity and self-efficacy. The women felt like they did not learn what they were supposed to during their doctoral programs, making their transitions to faculty life more difficult (Kelly and McCann 2014). They also found their mentoring relationships unhelpful and that mentors did not provide clarity about expectations or information regarding how to fulfill those expectations in ways that would make them successful in the tenure and promotion process. In addition to feeling that they were being unfairly judged by white male standards, Latinas participating in Medina and Luna's (2000) qualitative study shared that there was little support or guidance for their research, and they did not know how to get funding to support their work. Thus, while the needs to demonstrate skill and gain access to role clarity may be similar, women and men of color may face racism and sexism that limit access to support and lead to doubts about their abilities, challenging their development of self-efficacy.

Transitions can be challenging, even when they are welcomed and anticipated (Schlossberg 2011). While it is perhaps easiest to identify how transitioning to a new institution can be especially challenging for an early career scholar who is learning what it means to be a professor, they can also present issues for more experienced faculty who have to learn what their new context means for what role looks like, the quality of social connections and networks, and colleagues' expectations. Little research has directly addressed how institutions do or do not promote more

successful transitions for women and men of color, nor is there work that critically considers how challenges experienced during the organizational socialization process translate to long-term efforts to retain individuals from minoritized communities.

Barriers in Retention and Advancement

Researchers have perhaps most well documented the barriers and challenges women and men of color face as they aim to survive and thrive once in their faculty roles. Campuses often focus on hiring without addressing retention issues, leading to a revolving door of hires and departures (Gasman et al. 2011; Kayes 2006; Kelly et al. 2017; Tierney and Sallee 2010; Tuitt et al. 2007). For example, based on their analyses of 10 years of data collected from tenure-track faculty at a large, research universities, Marschke et al. (2007) concluded that gains in the representation of women stagnated due to the increased likelihood of women leaving the academy before they were promoted. Approximately two-thirds of men who left the institution did so after becoming full professors; over half of women who left the institution departed before receiving tenure. While women were hired at rates comparable to their representation within the pool of doctoral graduates, their elevated rates of departure meant that there was no change in their representation on the faculty. Using differential equations models, the authors concluded that women would not reach parity without significant gains in hiring *and* reductions in departures.

Job satisfaction is intimately related to institutional retention, often measured through intention to leave (e.g., August and Waltman 2004; Hagedorn 2004; Laden and Hagedorn 2000; Ropers-Huilman 2000; Rosser 2004). While there are certainly many factors and forces that can lead to faculty being dissatisfied with their work, a review of the literature documenting the experiences of women and men of color suggests that issues fall into four interrelated categories: campus and departmental climate; relationships and support; professional experiences and nature of faculty work; and experiences navigating merit, promotion, and tenure processes.

Campus and Departmental Climate

Many efforts to promote faculty diversity and the retention of women and men of color are undone by hostile or unwelcoming climates at the institution (campus climate) or in faculty members' respective departments (departmental climate) (Aguirre 2000; Kelly et al. 2017; Settles et al. 2007; Turner et al. 1999). Climate for diversity is broadly defined as attitudes, beliefs, behaviors, and perceptions of community members (including faculty, students, administrators, and staff) as they navigate issues of difference (Hurtado et al. 1998).

Findings across multiple studies confirm that women and men of color perceive the climate on campus and in their specific departments and disciplines as hostile and exclusionary. Maranto and Griffin (2011) noted that there is a broad literature confirming that women perceive the climates in their departments as less welcoming than men, reporting higher rates of exclusion and lack of belonging. They confirmed

this finding with their own analysis of data collected from faculty employed at a private midwestern university, which revealed that women across racial background and discipline perceived more exclusion and a chillier climate than their male colleagues. Multiple studies by Settles (Settles et al. 2006, 2007) focused specifically on women in science. These studies resulted in similar conclusions, and confirmed the negative relationship between sexist, hostile departmental climates and job satisfaction for women in STEM. Turner et al. (1999) completed a study focusing on the underrepresentation and institutional experiences of Black, Asian, Native American, and Latinx faculty across eight states. After they analyzed federal data (US Equal Employment Opportunity Commission, Department of Commerce, the Census Bureau), institutional surveys, and data from interviews and focus groups, they concluded that while the number of graduates from underrepresented back-grounds and market forces played a role in persistent underrepresentation of people of color in the academy, the biggest cause was a chilly, unwelcoming climate. Similarly, the 28 Black faculty participating in Griffin and colleagues' (2011) qualitative study on perceptions and responses to the climate also affirmed that the racism they faced because of their identity greatly influenced their experiences on their respective campuses, presenting challenges and negatively impacting their satisfaction.

Compositional diversity, or the representation of individuals from different racial and ethnic groups, is a key part of campus climate (Hurtado et al. 2008, 1998; Milem et al. 2005). Having a critical mass of individuals from marginalized groups is a necessary component to improving the climate. Women and men of color are often hired in token numbers, meaning that they are one of few, or the only, person with their identity in their department or program (Laden and Hagedorn 2000). The small numbers of faculty of color on many campuses and the clustering of women and men of color in certain departments means that minoritized faculty can experience stark underrepresentation and isolation that is intensified in departments that are less diverse. Maranto and Griffin (2011) described the importance of relational demog-raphy, or the percentage of women faculty in a department, to shaping the climate. The researchers found that women in departments that were predominantly male perceived more exclusion than those that were more gender balanced. Similarly, a longitudinal study of Black women as they navigated the tenure and promotion process revealed that participants felt isolated and marginalized as the only Black women in their departments and programs (Kelly and Winkle-Wagner 2017).

Climate also addresses the quality of interpersonal interactions and relationships between faculty and their colleagues (Hurtado et al. 1998; Griffin et al. 2011b). Sandler and Hall (1986) were early scholars who describe a "chilly" academic climate for women faculty, marked by professors and administrators who perceive women as less able scholars and leaders, use sexist language, and overlook or ignore women's contributions. In the years since, scholars have developed a robust body of literature examining the campus climate for women faculty, and revealed that women are more likely to perceive their interactions with students, colleagues, and administrators as aggressive, sexist, exclusionary, and unwelcoming (e.g., Croom 2017; Gardner 2012, 2013; Ropers-Huilman 2000; Settles et al. 2013). Similarly,

decades of research suggest that faculty of color have frequent experiences with stereotyping, microaggressions, and harassment (e.g., Croom 2017; Griffin et al. 2011b; Kelly et al. 2017; Menges and Exum 1983; Pittman 2012; Turner et al. 2008). Plata (1996) notes that many faculty of color are the target of ethnic jokes and teasing, which distract from work responsibilities and diminish likelihood of retention. Similarly, Eagan and Garvey (2015) found increased exposure to stress related to discrimination translated to lower rates of productivity for faculty of color. Sixteen interviews with faculty of color revealed that they regularly faced racist comments and jokes, as well as dismissive comments about the importance of social justice and equity (Martinez et al. 2017). Croom's research on Black womyn full professors documented multiple incidents throughout their careers, including insinuations that their promotion was dependent on a "sexual quid pro quo situation" (p. 573) rather than their merits as scholars.

While overt acts of racism and sexism still occur, in many cases, they manifest in more subtle ways (Laden and Hagedorn 2000). In many cases, racism is subtly "manifested in the everyday experiences described by [minoritized] faculty members in which they are devalued as individuals by stereotyped expectations and treated as second class citizens that must prove themselves in ways not expected from their white peers" (Johnsrud and Sadao 1998, p. 334). Some of the marginalization women and men of color face has been linked to the existence and misunderstanding of affirmative action policies by white and male colleagues. It is often assumed that women and men of color were hired only because of their marginalized identities and ability to help the institution reach diversity goals (Griffin et al. 2011b). Participants in Kelly and Winkle-Wagner's (2017) longitudinal study of Black women faculty noted that it was assumed that they were only successful or persisting because standards had been lowered for them. Similarly, 19 Black faculty participating in focus groups at a large, public research university felt that they had to work doubly hard to prove themselves when colleagues shared perceptions that they were only hired to fulfill diversity goals (Kelly et al. 2017).

While minoritized faculty are proud of all of their identities, they are frustrated to be perceived by their race or gender first, and their scholarly roles and abilities second (Griffin et al. 2011b; Laden and Hagedorn 2000; Turner 2002b; Turner et al. 1999). According to Laden and Hagedorn's (2000) review of the literature, the minoritized identities of faculty of color are often emphasized and commented on, as opposed to their scholarly work or contributions to the academic community. Further, given biases and assumptions about their academic abilities and stereotypes about who professors are and look like, women and men of color are often misrecognized and not assumed to be faculty. For example, women of color participating in Ford's (2011) study were often mistaken for graduate students or university staff. Similarly, a Black male faculty member in Griffin and colleagues' (2011b) study recounted when he was asked if he was at a colloquium to move the furniture, mistaken for a member of the facilities team rather than a professor.

Encounters with racism and sexism can be frustrating and hurtful, making scholars more dissatisfied with their experiences and leading to early departure from an institution or, more significantly, from academe (Croom 2017; Hesli and

Lee 2013; Jayakumar et al. 2009; Ropers-Huilman 2000; Trower and Chait 2002; Turner et al. 1999). Gardner (2012, 2013) analyzed interview data collected from 11 women faculty (their racial and ethnic identities were not reported) who left positions at a large research university, and learned that they experienced sexism in their work, particularly from senior male colleagues. They perceived the campus as a hostile environment and grew frustrated with the institution talking about the challenging climate for women, but not doing anything about it. Similarly, analyses of survey data collected by the Higher Education Research Institute (HERI) confirmed a strong relationship between negative perceptions of racial climate, satisfaction, and intentions to leave, particularly for Black and Latinx professors (Jayakumar et al. 2009). Given the connection between climate, satisfaction, and intentions to leave, as well as the increased rate at which women and men of color identify their campus environment as hostile or uncomfortable, institutions interested in increasing faculty equity and diversity would be well served by directly addressing their climates.

Relationships and Support

Collegiality, or positive relationships and camaraderie between colleagues, can have an influence on the retention of women and men of color in multiple ways. Having collegial relationships with peers was predictive of satisfaction for untenured women in August and Waltman's (2004) study of tenured and tenure-track women at a large research university. However, across multiple studies, faculty who identified as women and people of color were less likely to be satisfied with their co-workers and perceive that they were being treated unfairly, and left out of social interactions (Bilimoria et al. 2008; Seifert and Umbach 2008). For example, women scientists in a study by Fox (2010) reported feeling less included in their home departments than their male colleagues, and they were less likely than male faculty to speak with their colleagues about research. Similarly, Gardner (2012) surveyed 472 faculty at a large, public, land grant university and found that women felt more isolated and outside of their area's informal networks. McKay (1997) suggested that white men and women often ignore the presence of African American faculty in informal situations. Black faculty participating in Griffin and colleagues' (2011b) study also noted that their significant underrepresentation and solo status led them to feel a lack of fit in their departments and a lack of social connection.

The isolation many minoritized faculty experience is often rooted in experiences with racism, sexism, and identity-based marginalization. Consistent with the literature on campus and departmental climate, several studies show that women and men of color are treated based on stereotypes and regarded with suspicion. The auto-ethnographies that Stanley (2006) analyzed suggested that faculty of color feel both visible and invisible because of their racial identities in the presence of their white colleagues. They felt invisible in that they were left out of social networks and relationships, but, given stereotypes about the academic abilities and scholarship of people of color, they felt that their performance was highly visible and that they needed to prove their worth as scholars that should be trusted and respected. In an exploratory quantitative study of full-time faculty employed at a Minnesota medical

school, women from all racial and ethnic backgrounds reported more negative feelings about interactions with their peers than male participants. These women were more likely to indicate that they felt scrutinized and closely watched by their colleagues, and that they had to work harder to be perceived as legitimate scholars (Shollen et al. 2009). In a study by Thomas and Hollenshead (2001) comparing the perceptions of white women, white men, men of color, and women of color, women of color most often reported that their working environment was unfriendly, they faced high levels of scrutiny and low expectations, and that they were not respected by their colleagues.

In addition to exclusion from informal networks and a lack of interaction with colleagues, there is research suggesting women and men of color have less access to support through mentorship. While there is a body of research that suggests there are few differences across identity groups in terms of who does and does not have a mentor (Johnson 2016), there is also compelling evidence that suggests access to mentorship is not equitably allocated. Women of color participating in Thomas and Hollenshead's (2001) secondary analysis of qualitative and quantitative data collected at a large state university seldom reported they had mentors, and when they did, rarely connected with mentors who shared their racial or gender identities. Some researchers have found that women of color who are faculty and administrators develop extensive networks of support to promote their advancement; however, this support often comes in the forms of faith and spirituality, peers, friends, and family rather than meaningful professional mentoring relationships, particularly from those in their programs or units (Patitu and Hinton 2003; Thomas and Hollenshead 2001).

Literature on access to quality mentoring relationships has largely focused on the experiences of faculty of color. While some faculty of color describe powerful and supportive mentoring experiences, others describe relationships where mentors are unhelpful or give bad advice (Stanley 2006; Zambrana et al. 2015). While many underrepresented racial and ethnic minority faculty are assigned formal mentors through institutional programs, manifestations of racism through benign neglect, a lack of support, and devaluation of identity and community-based research agendas limit the efficacy of these relationships, leaving mentees frustrated and without access to key resources that could advance their careers in meaningful ways (Zambrana et al. 2015). Further, relationship quality can also be diminished when mentors are reluctant to recognize their mentees' identities, intentionally or unintentionally ignoring how they may impact junior faculty members' experiences in the academy (Zambrana et al. 2015). When identity is minimized, it can be difficult to build the trust necessary to reap the personal and professional benefits of mentoring relationships; mentees may feel like they cannot share an important aspect of themselves and their experiences, and mentors may give advice that is off the mark or miss the impact and implications of marginalizing experiences (Zambrana et al. 2015).

In addition to highlighting the impact of relationships within faculty members' departments and programs, scholars have addressed how family relationships and responsibilities, and the ways in which they are and are not considered, impact faculty retention. While men and women have the potential to become parents while

in the academy, decisions about whether and when to have children appear to have a more significant impact on women and their career decision making and progression (Finkel and Olswang 1996; Finkel et al. 1994; Mason and Goulden 2002, 2004a, b). Women often describe parenthood as joyful, and they appreciate the flexibility that a faculty career can offer (Ward and Wolf-Wendel 2004, 2005). However, research also suggests that women devote more time to caregiving and household tasks, potentially limiting their ability to engage with their work, particularly their research (Mason and Goulden 2002; Sallee et al. 2016; Shollen et al. 2009). Many women see workload issues as most likely to be a challenge in advancing to tenure; however, research also suggests women perceive the time they have to invest in parenting as a significant barrier (Finkel and Olswang 1996).

Mason and Goulden (2002, 2004a, b) and Ward and Wolf-Wendel (2004) wrote about women trying to have children and start families just as they are beginning the tenure-track, highlighting the unfortunate ways the biological clock and tenure clock co-occur. Mason and Goulden (2002, 2004a, b) argued that conversations about equity in the academy must include a discourse about whether faculty have equal access to desired outcomes in both their personal and professional lives. While Mason and Goulden (2004a, b) acknowledged that not all scholars want to be married or have children, their quantitative analyses of data from collected at the University of California, Berkeley and the Study of Doctorate Recipients (SDR) showed that tenure-track women are less likely to be married, less likely to have children, and are more likely to be divorced than their male colleagues on the tenure track and women who are in non-tenure–track teaching positions. Similarly, a quantitative study of women who were assistant professors on the tenure-track found that their decisions about whether and when to have children were significantly impacted by their careers. Over 40% had no children, 30% had decided to never have children, and 49% had decided to postpone having a child due to perceived work responsibilities and constraints (Finkel and Olswang 1996).

The relationship between having children and productivity is complicated, with some studies showing that faculty who are parents are in fact more productive than their colleagues who are not (Stack 2004). However, given patriarchal gender dynamics and expectations, women take on the majority of the responsibilities and time commitments associated with parenting, which can have negative implications for their ability to balance workload, stress, and career development. Interviews with 39 full-time, tenure-track women faculty revealed that having children added stress to already busy schedules (Ward and Wolf-Wendel 2005). In a study that aimed to disentangle the complicated relationship between productivity, gender, and parenting, Stack (2004) found that while having children over the age of 10 was unrelated to scholarly productivity, women with pre-school-aged children published less than others. Similarly, Misra et al.'s (2012) research on gender differences in faculty time allocation showed that individuals with children under 12 spent 30 more hours a week on caregiving than those without children, and that being a mother of a child under 12 had negative implications for research time. A study comparing the perspectives of women and men who are science faculty found that women were more likely to indicate that work interferes with family time and commitments

(Fox 2010). Although this literature offers important insights into how women who are mothers and primary caregivers experience challenges navigating the demands of academic work, there is little scholarship that directly considers whether and how these phenomena manifest differently for women and men of color.

Professional Experiences and the Nature of Faculty Work

Faculty worklife, or how professors spend their time and experience their professional roles, interests, and quality of life, is closely connected to their satisfaction, and ultimately decisions about whether or not to stay in the academy (Rosser 2004). While faculty responsibilities rarely fall into the discreet categories of teaching, research, and service, this common heuristic is used to organize the section below, documenting research on how women and men of color allocate their time to each area. In addition to understanding time allocated and workload across teaching, research, and service, I present scholarship that offers insight into how racism and sexism influence how academic work is done and judged.

Multiple scholars have utilized large quantitative datasets to examine whether women and men of color teach more courses and invest more time and energy in teaching. Overall, these studies suggest women teach more than their male colleagues, and that the time invested in teaching by scholars of color and their white peers is fairly comparable. Allen (1997) analyzed 1993 National Study of Postsecondary Faculty (NSOPF) data and found that women teach more than men overall, and that Native American men had the highest teaching loads; however, there were few differences between the teaching loads of Black, Latinx, and white faculty. Bellas and Toutkoushian (1999) also analyzed data from the 1993 NSOPF and came to similar conclusions; women spent significantly more time in teaching and less time in research than men. Winslow's (2010) analysis of data from the 1999 NSOPF revealed that women spend more time than men on teaching, and less time on research. Winslow acknowledged that some of these differences may reflect an affinity for working with students in the classroom or women's significant representation in positions where teaching is the primary activity (e.g., lecturers and instructors). However, there are also data that suggest these time allocations are not congruent with women's interests. For example, women participating in Winslow's study indicated that despite spending more time on teaching, they would prefer to spend more time on research.

Rather than quantifying differences in time spent teaching, scholars in the past two decades have focused more on articulating how the classroom experiences of women and men of color are distinct from and more marginalizing than those of their white and/or male colleagues. The extant scholarship largely supports Turner's (2003) assertion: "what is taught, how it is taught, and who teaches always affects classroom dynamics" (p. 116). Ropers-Huilman (2000) analyzed five texts that chronicle the lives of women faculty to gain a deeper understanding of their experiences in the academy and their satisfaction with their work. She found that women across all five texts cared about the quality of their learning experiences with students, but felt that they and their courses were judged based on factors unrelated to the quality of their curriculum and pedagogy. Challenges while teaching was the

strongest theme emerging from Stanley's (2006) analysis of 27 autoethnographies from faculty of color chronicling their experiences working at predominantly white institutions. While participants still expressed joy from their teaching experiences, they often struggled with how students engaged them.

One of the most common issues women and men of color face are assumptions about their levels of skill and competence. This is a particularly salient theme in research on faculty of color generally, and women of color specifically. Martinez et al. (2017) interviewed sixteen Asian American, African American, Latinx, and international faculty members employed at a variety of institutions and found that faculty experienced challenges in the classroom regardless of context. Students questioned their abilities and competency as faculty and often engaged in acts of resistance, particularly in courses that focused on diversity or social justice. Tuitt et al. (2009) combined their experiences and constructed a counternarrative capturing the experiences of faculty of color in the classroom, touching on many of these themes. The authors highlighted how their credibility was questioned and challenged, coupled with expectations that they would entertain the class and be funny and engaging. Women of color that participated in Kelly and McCann's (2014) longitudinal study also noted the challenges that arise when they teach classes that engage topics related to diversity and inclusion; students refused to engage, expressing discomfort in discussing these topics. In addition to making their teaching experiences more challenging, faculty across multiple studies expressed concerns about or experienced students' negative reactions to course content, translating to lower ratings on their teaching evaluations (Ford 2011; Kelly and McCann 2014; Martinez et al. 2017; Ropers-Huilman 2000; Stanley 2006).

Challenges in the classroom may be particularly salient for women of color, who simultaneously experience race- and gender-based oppression (Ford 2011; Pittman 2010; Turner et al. 2011). Ford (2011) conducted interviews with 21 Black, Latinx, and Asian American women teaching at a large research university in the Midwest, highlighting their interactions with white students. Participants shared examples of the multiple ways in which white students challenged their authority and questioned their competence in the classroom, resisted conversations about social justice and equity, and expected a higher level of caregiving and fewer boundaries. They also explained that it was difficult to disentangle the impact of their age, gender, and race, and recounted how their physical presentation (as a person of color, as smaller, as a woman) heightened the disrespect and disregard with which students engaged them. Pittman (2010) explained that the marginalization women of color experienced in the classroom was amplified as compared to white women and men of color, documenting the experiences of seventeen women of color faculty at a predominately white research university in the Midwest. While they were rarely challenged by students of color, participants in Pittman's study noted that white males regularly questioned their competence, disrespected their expertise, and were physically intimidating.

While generally frustrating, these experiences are additionally problematic because women and men of color perceive students treating their white and male colleagues differently. Survey responses collected from academic chemists revealed

that women think graduate students take male faculty more seriously (Lewis and Richmond 2010). Multiple studies reported that women and men of color particularly dislike when students engage them in an informal tone or call them by their first names, while they refer to other colleagues (who are usually older, white, and male) as "Doctor" or "Professor" (Ford 2011; Patton and Catching 2009; Pittman 2010; Ropers-Huilman 2000). In response, minoritized scholars may take additional steps to be perceived as legitimate scholars in the classroom. Ford's (2011) participants recounted their degrees and training to establish their legitimacy and were mindful of their clothes, hairstyles, and tones, wanting to be perceived as "professional." Women of color in Pittman's (2010) study also explained that they had their guard up around students, feeling that they could not be too friendly for fear of being perceived as less serious scholars or having more negative interactions.

Much like the observations of time allocations associated with teaching, there are some key differences across demographic groups in the amount of time faculty spend on research, translating to disparities in rates of productivity. Findings across quantitative analysis of faculty time allocation are fairly consistent. On average, men spend more time engaging in research-related activities than women, and white and Asian faculty spend more time on research than Black, Latinx, and Native American faculty (antonio 2002; Bellas and Toutkoushian 1999). Based on analyses of NSOPF data from 1993, Toutkoushian (1999) found that women spend an average of 4.7 h a week on research and men spend 7.6 h per week. Based on an analysis of almost 350 surveys from faculty at the University of Massachusetts Amherst, Misra et al. (2012) similarly concluded that women spent less time on research than men. After controlling for parenting, Stack (2004) found that gender differences in engagement in research and scholarship remained; women spent less time on research and published at lower rates.

When assessing a professor's qualifications for promotion, faculty evaluators focus not only on how much has been published, but also what kind of work has been done and where it appears in print (Blackwell 1988). There can be questions regarding whether the work of women and men of color is "legitimate," determined by colleagues' assessments of levels of productivity and conformity to scholarly norms. According to 50 faculty across multiple institutions, "legitimate" scholars work constantly, are highly productive, and are primarily engaged in traditional research; legitimacy in these forms are most recognized by the institution as having value (Gonzales and Terosky 2016). Thus, to be successful and perceived as legitimate scholars, some minoritized faculty have noted the importance of publishing as much work as possible in top-tier journals to avoid questions and negative professional assessments (Griffin et al. 2013).

While not all women or faculty of color want to study issues directly related to marginalized communities, those who do contend that community-focused research is judged as less valuable and rigorous by the standards of a pervasive white, Western orientation (Johnsrud and Sadao 1998; Menges and Exum 1983; Stanley 2006; Turner and Myers 2000). Individuals with marginalized identities engaging in research addressing the needs and experiences of those in their own communities are assumed to be biased (Turner et al. 2011), and applied, problem-based research

that addresses the needs of marginalized communities is often viewed as less rigorous and unimportant (Thompson 2008). Thompson and Dey (1998) analyzed data collected from Black participants in the Higher Education Research Institute (HERI) Faculty Survey and found that having research interests connected to communities of color was a significant source of stress. Women participating in Gardner's (2012) mixed-methods study felt that their research was not perceived as "mainstream," and as such, not as valued. Narratives collected during a qualitative study of Black faculty employed at two large research universities similarly revealed that these professors felt that their work was often judged as less prestigious, rigorous, and valid than their colleagues' (Griffin et al. 2011a).

Finally, the vast service demands on women and men of color have been well documented (Bellas and Toutkoushian 1999; Thompson 2008; Turner et al. 1999). In a study about gender difference in work time and caregiving, Misra et al. (2012) found that while men and women both reported working approximately 60 h a week, men spent more time on research and women spent more time on mentoring. O'Meara et al.' (2017) study of time diaries from over 100 faculty at Big 10 institutions revealed that women associate and full professors spent more time than men advising students and supporting their work. Data also consistently show that racially and ethnically minoritized scholars engage in service more often than their white peers. According to Bellas and Toutkoushian (1999), Black and Latinx faculty spend more time engaged in service activities than their white peers. These findings were affirmed by Misra et al.'s (2012) research on faculty time allocation, which showed that faculty of color spent more time on service activities than their colleagues.

Much of the elevated rate of participation is based on institutional and community demands, as administrators and colleagues need and expect women and men of color to add diversity to campus committees and offer guidance on equitable and inclusive policy and practice. Turner et al. (1999) added that faculty of color are often asked to manage anything that is related to diversity. For faculty of color, this is often referred to as "cultural taxation," or the pressure to fulfill multiple demands related to an institution's diversity and inclusion needs (Padilla 1994; Tierney and Bensimon 1996; Turner 2003).

Cultural taxation often comes in the form of advising and mentoring students. Given their desire to connect with scholars that understand their own experiences of marginalization, students from underrepresented and marginalized backgrounds frequently reach out to faculty of color for advising, mentorship, and support (Dancy and Brown 2011; Griffin and Reddick 2011; Menges and Exum 1983; Patton 2009; Tierney and Bensimon 1996). Sharing a minoritized identity can also be an important location from which to build trust and deep connections based on shared experiences of marginalization (Johnson 2016), and students of color often seek support from individuals that understand what it is and means to embody their identity in the academy (Baker et al. 2014; Patton 2009). For example, in a paper recounting her mentoring relationship with Sharon Fries-Britt, Bridget Turner Kelly shared the importance she placed on connecting with and being mentored by her first

Black woman professor, feeling that she would be able to help her understand how to navigate work and life in the academy (Fries-Britt and Kelly 2005).

Cultural taxation was expanded to include women and scholars with other minoritized identities by Hirshfield and Joseph (2012), who wrote about the prevalence of "identity taxation" for women generally, and women of color in particular. Women are more often called upon to and actually provide emotional labor than their male peers, engaging in a form of care work that leaves students feeling heard, affirmed, and supported (Bellas 1999; Griffin et al. 2013; Griffin and Reddick 2011; Tierney and Bensimon 1996). Gonzales and Ayers (2018) wrote about the expectations community colleges place on faculty to engage in emotional labor to compensate for a lack of institutional infrastructure, resources, and services to support students. Institutions increasingly rely on and exploit faculty's willingness to invest in emotional labor because of their love for their work or their students, but do not compensate faculty for this work (Gonzales and Ayers 2018). A similar phenomenon manifests at 4-year institutions, and women of color carry a particularly heavy burden in this regard. In many cases, students, faculty, and administrators not only expected women of color to do more, they also expected a deeper emotional investment and a level of care not expected of their male colleagues (Aguirre 2000). Latina professors that participated in Medina and Luna's (2000) study shared that there were a lot of community demands to manage, and they carried heavy advising loads. Studies by Griffin and colleagues revealed gendered dimensions of mentoring among Black professors. While Black men and women described being sought out frequently by students and their colleagues to engage in different kinds of service, men noted the importance and their ability to say no, drawing clear boundaries to protect their time. Black women, however, explained that they were still learning to decline service requests, and were expected to engage with students in close, personal ways that required more time and emotional energy (Griffin et al. 2013; Griffin and Reddick 2011).

While how women and men of color engage in mentoring and advising of students and junior scholars is perhaps most well documented in the literature, it is also important to acknowledge the commitments women and men of color make to campus governance. As institutions aim to include more diverse identities and perspectives on committees, leaders may repeatedly tap women and men of color to serve, given their small numbers. Women and men of color may also be expected to develop institutional policy, develop diversity recruitment or retention plans, or craft responses to racist and/or sexist incidents on campus. In a survey of African American and white faculty at six institutions, Black faculty were more likely to be involved in committee work especially concerning issues related to communities of color, than their colleagues (Allen et al. 2000). Women of color may be perceived as "checking two boxes," and asked to represent their race and/or their gender on a variety of committees (Turner 2002).

Professors' feelings about engaging in this labor are complex. Baez (2000) addressed the distinctions professors make between participation in general service versus race-related service, which involves activities connected to their racial and ethnic identities, such as community outreach, mentoring students of color, or

participating on committees related to diversity and inclusion. Professors of color had greater difficulty saying no to race-related service activities due to their commitment to the issues these activities address, choosing to participate in community-oriented activities over more general service obligations. Faculty may see their decisions to engage in service as an affirmation of their purpose and motivation behind becoming professors and cultivating opportunities to support students and communities of color can be sustaining (Griffin 2013; Martinez et al. 2017; Reddick 2011).

However, participation in service activities is not always in alignment with how faculty want to spend their time. Women and men of color do not necessarily want to engage in service more than research, nor do all intend to center these forms of labor in their professional work. Olsen et al. (2006) conducted interviews and administered a career development questionnaire to 147 participants and found that women and men of color did not articulate a bias towards service and less commitment to research. Rather, they emphasized the importance of and their commitment to scholarship and research just as much as their colleagues. Participants in O'Meara et al.'s (2017) time diary study recorded how often they were asked to engage in additional work and service to the institution. On average, women reported 3.4 more asks per week than their male colleagues. Stanley (2006) found that faculty of color often have heavy service loads, whether they want them or not, and felt that it was challenging to draw boundaries and say no to the numerous requests they received. While faculty are often urged to say no to requests that feel too time-consuming and overwhelming, Winkler (2000) relayed there are often political consequences when service requests are declined. Also, some faculty felt used by institutions that relied on their labor for diversity and inclusion work, wondering whether the institution valued their scholarly contributions (Garrison-Wade et al. 2012). Thus, service demands can be complex to navigate, and telling scholars to reallocate their time oversimplifies the personal and professional repercussions women and men of color may experience if they decline requests from students and colleagues.

Institutional Rewards Systems, Tenure, and Promotion

How women and men of color experience climate, relationships with their colleagues, and workload all have implications for their progression through institutional rewards systems, particularly as they navigate the tenure and promotion process. Demographic trends and decades of research suggest that women and men of color do not experience the same success as their white and male peers as they work towards tenure and promotion in the academy. The professoriate becomes increasingly homogenous as one ascends the academic hierarchy, with white men making up large proportions of tenured faculty and full professors at 4-year institutions (Espinosa et al. 2019; Finkelstein et al. 2016; Perna 2001; Toutkoushian 1999). Perna (2001) conducted a series of analyses on the 1993 NSOPF dataset to better understand the extent and reasons behind differences in the representation of women and men of color among tenured and full professors. Descriptive statistics suggested women in full-time faculty positions at 4-year institutions were less likely to be tenured than men, and Black, Latinx, and Asian faculty were less likely to be tenured

than white faculty. However, when controlling for standard measures of scholarly productivity, field, and institutional type, women and men were roughly equally likely to be tenured, but women were still less likely to be full professors. When controlling for these variables, Black, Latinx, and Asian faculty were as likely as their white colleagues to be full professors, but still less likely to be tenured.

Perna's (2001) research suggests that some of the differences in rates of tenure and promotion are due to how women and men of color engage in their work and whether they are productive in the ways most recognized in the academy. For many universities and comprehensive institutions, success is primarily judged by the extent to which faculty are engaged in and productive researchers (Tierney and Bensimon 1996). More time spent on research translates to greater scholarly productivity (Bellas and Toutkoushian 1999), and multiple scholars suggest women and men of color are often engaged in activities that are both unrewarded and draw time away from research. Lee (2012) argued that the heavy teaching and service loads women and men of color carry are negatively related to engagement in research. Time spent teaching is negatively related to promotion to full professor and time spent on research is positively related to advancement to full professor (Perna 2001). Similarly, faculty who are more invested and spend more time engaging in service generally, and mentoring and advising specifically, have less time for research and scholarship (Bellas and Toutkoushian 1999; O'Meara et al. 2017). Thus, time invested in these relationships may not only go unrewarded and unrecognized; it may translate to more negative outcomes because service detracts from activities that are celebrated in the academy.

In addition to being judged by criteria that do not fully represent their contributions to the academy, women and men of color face racism and sexism as their applications for promotion are reviewed. Institutional policies and decision makers often privilege certain forms of research over others, viewing work that does not fit within their notions of "rigorous scholarship" as unworthy of serious consideration and its authors undeserving of promotion. Research addressing the needs of underserved and underrepresented communities, employing qualitative and critical methodologies, or exploring the experiences of women and men of color is often perceived as outside the mainstream and may be judged negatively by tenure and promotion committees (Griffin et al. 2013b; Johnsrud and Des Jarlais 1994; Tierney and Bensimon 1996; Turner et al. 2008). While teaching is perceived as not counting in meaningful ways towards tenure and advancement, some describe negative teaching evaluations as being judged particularly harshly when they are assessments of women of color (Griffin et al. 2013; Tierney and Bensimon 1996). For example, Griffin et al. (2013) interviewed Black men and women employed at two predominantly white research universities and found that participants perceived the importance placed on teaching very differently. Black men noted that teaching was unimportant in the evaluation process and rarely considered, while Black women were mindful that a negative evaluation could be amplified and ultimately derail their promotion process.

Finally, while often framed as meritocratic and based on an assessment of a professor's work, perceived collegiality and relationships matter in the tenure and

promotion process (Aguirre 2000; Menges and Exum 1983; Tierney and Bensimon 1996; Turner et al. 2008). Tenure and promotion decisions are often at least partially based on subjective factors and assessments of whether or not a faculty member is a good colleague; therefore, likeability and connections to colleagues can come into play in somewhat unexpected ways (Menges and Exum 1983). While finding connections in other departments can be identity affirming, they cannot be a replacement for relationships in one's own department. Focusing solely on the cultivation of external relationship can leave women and men of color with fewer advocates and allies in their own programs to support their work, particularly during professional reviews (Griffin et al. 2011b).

Although they are presented separately, campus climate, navigation of tenure and promotion, access to support, and managing workload are intimately related to one another and the satisfaction of women and men of color in the academy. Perhaps most simply, how a scholars' work is judged and whether they have the time and energy to engage in the activities most rewarded in the academy are critical factors in navigating the tenure and promotion system successfully. However, it is also important to acknowledge that, in many cases, how the work of women and men of color is judged, experiences with social isolation and a lack of support, and how work allocated are fundamentally shaped by campus climate, the behaviors and biases of students and colleagues, and the racism and sexism inherent in campus structures and systems. Further, the cumulative effects of underrepresentation, exclusion from networks, racist and sexist climates, and lower rates of satisfaction combine to negatively influence the personal and career outcomes of women and men of color (Lewis and Richmond 2010). A comprehensive understanding of these challenges and how they are related to one another is a critical step in addressing them and promoting increased equity in the academy.

Promising Practices: A New Model for Increasing Faculty Diversity

The challenges documented in this chapter are difficult to navigate and address. Given the extent to which these problems are interrelated, individual, and institutionalized in structures and systems, there is no "silver bullet" policy or program that will translate to increases in faculty diversity, and piecemeal plans or solo strategies will not produce substantive changes in the demography of the US professorate (Bilimoria et al. 2008; Laursen et al. 2015). Solutions must be holistic, considering both how faculty are recruited and retained, and simultaneously addressing institutional culture, work practices, and structures that perpetuate inequity (Bilimoria et al. 2008; Kelly et al. 2017; Laursen et al. 2015).

The Institutional Model for Increasing Faculty Diversity (Fig. 1) offers a complex, multidimensional framework that helps institutions organize and understand the factors and forces that impact their ability to recruit and retain a diverse faculty. The Model was developed as part of APLU INCLUDES Project, funded by the National Science Foundation (Award Number 1649199), which supports the development of resources and implementation of strategies to increase faculty diversity in
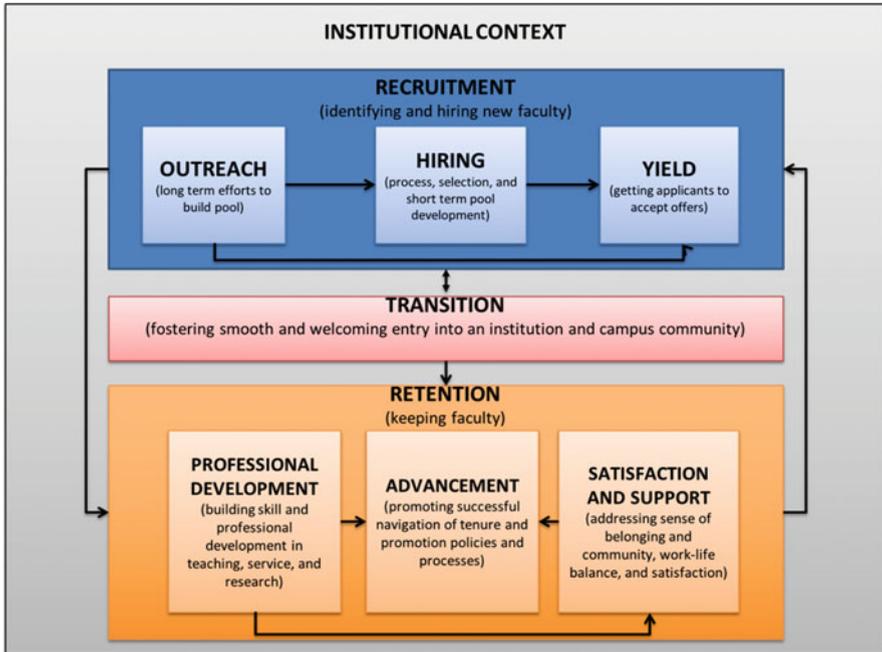
Fig. 1 The Institutional Model of Faculty Diversity

science, technology, engineering, and math (STEM). I was a Co-PI on the project and developed an initial draft of the model based on a review of the scholarly literature on the nature of faculty work, recruitment and retention strategies, and the experiences of underrepresented populations in the academy. I then worked closely with Alan Mabe, then Chief Academic Officer and Vice President for Academic Affairs at APLU and a Co-PI on the grant, to revise the Model, clarifying the relationships between and across dimensions.

Consistent with the collective impact approach undergirding the APLU INCLUDES project (see Kania and Kramer 2011), the Model went through multiple rounds of revision with community stakeholders and subject matter experts. Meetings and discussions with members of the APLU INCLUDES team (Howard Gobstein, PI; Kacy Redd, Co-PI; Travis York, Co-PI; Eugene Anderson, SP) informed early versions of the model, and Travis York was particularly active as a thought partner as we reviewed the literature, revised the Model's dimensions, and aimed to represent how institutional action could promote equity and increased representation in the professoriate.

Once we developed a version of the Model that had been approved by the APLU INCLUDES team, we met with an eight-member Faculty Diversity Task Force, composed of leading scholars in higher education, university presidents, and senior administrators, for feedback. The task force was co-chaired by Roy Wilson, President of Wayne State University, and Ruth Watkins, who was the Provost of the

University of Utah (she later became President). These meetings led to substantive revisions that added clarity to the dimensions and specified what was and was not included. Alan Mabe and Travis York also presented the Model at the APLU Council of Presidents and Council on Academic Affairs (Provosts) meetings to gain feedback on the Model's feasibility and appropriateness as a frame for institutional efforts to promote faculty diversity.

The Model was then shared with attendees at the APLU INCLUDES Summit in the Spring of 2017 and 2018, which convened faculty, administrators, and leaders of organizations that have attempted to increase faculty diversity and implement programs and policies to reach these goals. Summit participants also had an opportunity to provide guidance and feedback, which was subsequently incorporated in the Model. The Model and accompanying institutional assessment tools were also shared with 16 campuses that reviewed the materials and offered detailed feedback on whether the dimensions aligned with their understanding of where there were institutional barriers and opportunities to develop interventions to support women and men of color in the academy. Thus, dimensions of the Model are based on knowledge gleaned from a thorough and thoughtful engagement with both extant scholarship and practice.

While the Model was initially developed to support efforts to diversify the STEM professoriate, the concepts, research, and theories underlying it have broad implications and can guide institutional efforts across campuses and in multiple disciplines. I revisited and modified the Model for this chapter based on a broader review of the literature beyond the STEM fields that includes both barriers women and men of color face and institutional actions aimed at fostering faculty diversity across disciplines.

The Model includes four primary dimensions, highlighting where barriers lie and where interventions must be focused to foster a more equitable environment and to increase faculty diversity:

- Institutional context, or the overarching commitment and investment the campus has made in promoting diversity and inclusion.
- Faculty recruitment, or short- and long-term efforts to bring faculty from diverse backgrounds to campus.
- Transition, or the process by which faculty are welcomed and incorporated into campus communities between their hiring and formal initiation of employment.
- Retention, or efforts focused on promoting faculty success and satisfaction that keep them at the institution.

Some of the connections between recruitment, transition, and retention may seem intuitive, and speak to the linear progression of the process from one step to the next. For example, recruitment precedes transition, and transition programming addresses socialization needs with the goal of increasing the likelihood of retention. However, there are additional relationships captured in the Model that highlight the interconnectedness of these dimensions. First, there are arrows from recruitment to retention that go in both directions. Scholars are increasingly calling attention to the

connections between retention and recruitment, noting that a welcoming climate, access to professional development resources, and the presence of a diverse faculty that appears to be performing well are key to successful recruitment efforts (Gasman et al. 2011; Smith 2000; Tierney and Sallee 2010; Tuitt et al. 2007). Potential candidates are attentive to the signals that they receive about the campus climate, observing the extent to which women and men of color are welcomed and included in their departmental and campus-wide communities, as well as whether diversity is treated as an institutional priority (Price et al. 2005; Tuitt et al. 2007). Further, given that a critical mass of women and men of color appears to influence minoritized professors' sense of isolation and access to support (Kelly and Winkle-Wagner 2017; Stanley 2006; Trower and Chait 2002; Turner et al. 1999, 2008), successful recruitment programs and strategies that result in more diverse hires can also support retention efforts. Similarly, the recursive arrow between transition and recruitment suggests that effective programming in this area can have an impact on candidates' decision making about accepting faculty positions. Comprehensive programs which promote successful transitions to the campus community and access to professional support not only increase the likelihood that faculty will be retained; these programs also may make it easier to recruit potential new hires eager to enter environments offering these forms of support (Tuitt et al. 2007).

Institutional Context

Institutional context refers to the overall campus environment in which faculty diversity is to be addressed. Each institution's unique context must be considered as institutions develop their diversity recruitment strategies (Laursen and Austin 2014). Tierney and Sallee's (2010) research on organizational structures and strategies for increasing faculty diversity suggested that there are no "best practices" that work for all institutions. Based on their assessment of 18 research universities and their practices, they concluded "that no discernable patterns exist to indicate which strategies are most effective in increasing faculty diversity" (p. 177). This is not to say that there were no successes or policies and programs that worked; rather, the authors note that success requires selecting and implementing strategies that align with a campus's specific context and constraints. Similarly, Laursen and Austin (2014) studied organizational change at 19 institutions that received ADVANCE Institutional Transformation grants. ADVANCE is an NSF-funded initiative focused on increasing the representation of women in the STEM professoriate, which supports institutional transformation efforts and the implementation of evidence-based initiatives that promote equity and inclusion, broaden participation, and address systemic inequities. They found that there were no "best practices" that would work equally well across all campuses; rather, institutional leaders had to develop a deep understanding of the specific challenges their institution was facing in promoting faculty diversity and the context within which they wanted change to occur before deciding what combination of interventions and strategies would be most likely to promote faculty equity and diversity.

Institutional context also captures campus-wide factors relevant to whether and how the university has articulated and enacted a commitment to diversity and inclusion. Some institutions may see hiring a Chief Diversity Officer (CDO) as a commitment to faculty diversity, assuming that the person in this role will spearhead faculty diversity initiatives. While CDOs play an important part in diversity planning and improving campus environments for diversity and inclusion, research conducted by Bradley et al. (2018) suggested that the hiring of a CDO is unrelated to increases in faculty diversity. Similarly, Tierney and Sallee (2010) found that out of the seven institutions in their study that had CDOs, only three had made substantive progress on their faculty diversity goals. Instead, presidential leadership and advocacy appear to be key to spurring institutional change and commitment to increasing faculty diversity. Knowles and Harleston (1997) studied 11 research universities that were trying to increase the diversity of their faculty bodies and found that the institutions that were the most successful had a strong commitment from their presidents, and there was a clear sense that faculty diversity was an institutional priority. Kezar (2008) also reminds that university presidents are key to advancing a diversity agenda and are uniquely positioned to institutionalize programs and policies that promote increasing the representation of women and men of color in the professoriate.

While presidential leadership is important, meaningful progress on issues of diversity and inclusion cannot be siloed in one office or be the responsibility of a few select individuals. Progress requires a team of senior-level administrators to make a visible and vocal commitment to holistic engagement across the campus (Smith 2000). Bilimoria and Buch (2010) documented the work of two campuses that received funding from the ADVANCE program, describing promising strategies. They noted that part of the organizational change effort on both campuses included provosts, deans, and senior leaders, who all became more active in the search process, not only through written statements articulating a commitment to diversity, but also speaking at trainings for search committees (Bilimoria and Buch 2010). Similarly, an analysis of the work of 19 ADVANCE Institutional Transformation grantees revealed that it was critical to have an invested and engaged team of senior leaders to make meaningful progress (Bilimoria et al. 2008).

Recruitment

Recruitment refers to efforts to attract and hire a diverse faculty body. Recruitment is not one activity; it is a multistage process (Griffin and Muñiz 2015; Laursen and Austin 2014). For faculty, recruitment can involve generating interest in faculty careers, encouraging people to apply for positions, successfully navigating a selection process, and ultimately getting someone to accept an offer. Griffin and Muñiz (2015) described the recruitment process for graduate students as sharing multiple similarities with faculty recruitment, and used qualitative data collected from administrators charged with increasing graduate student diversity to develop a recruitment framework. In addressing where administrators can have the greatest impact, they

noted the importance of differentiating between: efforts to connect with potential candidates and generate interest amongst a diverse pool of potential applicants (outreach); how applicants are reviewed and selection decisions are made (admissions); and how selected applicants are recruited and encouraged to ultimately enroll at a given institution, particularly when they have multiple offers (yield). This framing is adapted and applied to guide an approach to addressing institutional recruitment of more women and men of color in the professoriate and is similarly divided into three subdimensions: outreach, hiring, and yield.

Outreach

Outreach focuses on long-term efforts to build pools of candidates for faculty positions that will be available at some time in the future. While many campuses may wait until there is a specific position open to cultivate a pool of candidates, establishing relationships with talented women and men of color well in advance of openings may make the institution more familiar and increase the likelihood of matriculation (Aguirre 2000; Lumpkin 2007). Bilimoria and Buch (2010) studied the implementation of recruitment and hiring strategies at two campuses participating in the NSF ADVANCE program. Both institutions changed their thinking about searches, moving from short-term hiring strategies to longer-term, ongoing recruitment. In addition to revising how they reached out to candidates for specific positions, all faculty were expected to engage in recruitment all of the time. Faculty were encouraged to think about making connections to promising scholars from minoritized backgrounds at conferences and invited talks, regardless of whether or not there was an open position. Materials were centrally created and shared that offered detailed information about their respective departments to ensure consistent messages were sent to potential candidates.

In addition to building networks and relationships, some institutions have instituted programs that allow them to develop or leverage relationships with early career scholars. Collins and Johnson (1988) recommended hosting women and men of color for informal talks and visits before positions open to build relationships and a connection to the campus, noting that this strategy was key to increasing faculty diversity on their campus. A similar strategy was implemented at an elite college of education. A lecture series for scholars of color allowed the institution to identify and begin building relationships with potential future applicants (Gasman et al. 2011). Institutionally-funded postdoctoral programs have also become increasingly popular. These programs target individuals underrepresented in the academy or doing work that focuses on marginalized communities, offering scholars an additional one to 2 years to cultivate their research agendas and build their curriculum vitae before beginning a faculty position (Knowles and Harleston 1997; Tuitt et al. 2007). While not all programs explicitly connect the postdoc to a faculty position, it is the hope that the scholars will be retained at the host institution and be offered a tenure-track role. Finally, while they are somewhat controversial, some have recommended "grow your own" programs, where institutions train doctoral students and subsequently hire them into faculty positions (Gasman et al. 2011; Lumpkin 2007; Tuitt et al. 2007).

Hiring

Hiring addresses all efforts related to cultivating an applicant pool and candidate selection for a specific open position. Many institutions have focused efforts in this area as they have developed faculty diversity plans, attending to how the construction of position announcements, advertising, and the behaviors of search committees influence who applies, is invited to campus, and ultimately is offered a faculty position (Laursen and Austin 2014).

Job descriptions must be carefully constructed and framed to be interesting to and attract attention from a diverse audience. Sensoy and DiAngelo (2017) recommended the inclusion of a clear, operationalized definition of diversity and communication of its value to the institution. Further, a study of over 700 searches at three institutions found that including diversity in the job description was connected to the increased likelihood of hiring women and men of color (Smith et al. 2004). Sample advertisements and inclusive text were also helpful to search committees at two ADVANCE institutions seeking to increase the diversity of their applicant pools and hires (Bilimoria and Buch 2010).

Once a job description is completed, searches must be active rather than passive, and multiple scholars recommend building broad networks to identify potential candidates (Gasman et al. 2011; Glass and Minnotte 2010; Smith 2000; Turner 2002a). In her guidebook for faculty search committees, Turner (2002a) recommended that position descriptions be widely circulated beyond traditional networks, reaching out to organizations and individuals that support minoritized professionals and doctoral students. Gasman et al. (2011) found that the personal networks of faculty of color already employed at the institution were valuable resources in generating a diverse applicant pool, allowing search committees to make more focused and personal connections with potential candidates. These strategies translate to meaningful outcomes. Glass and Minnotte (2010) studied the search process in STEM departments over a 6-year time period at a research university. They found that placing advertisements in venues that target women increased the percentage of women applicants in the pool.

In addition to ensuring that job descriptions are widely seen, deans and department chairs must be mindful of the role of the search committee and its power to accelerate or slow progress towards faculty diversity goals. First, institutional leaders should consider inviting a diverse group to participate as members of the search committee. Research suggests more diverse search committees result in more diverse hires. For example, search committees that include women are more likely to have women as finalists, and ultimately hire women scholars (Glass and Minnotte 2010). Further, Smith (2000) acknowledged the subjectivity of the search process and reminds that including the diverse perspectives of women and men of color on the search committee will benefit the process, as well as efforts to reach out to minoritized candidates given their ability to leverage their own networks. Turner (2002a) added that when adding women and men of color to search committees, they should be senior rather than junior scholars, if possible, both to highlight the seriousness of the search and not burden assistant professors with an unreasonable

service load before their tenure review. Diversity in the committee should extend beyond identity, including diversity of perspective and openness to equity and inclusion (Gasman et al. 2011; Sensoy and DiAngelo 2017; Tuitt et al. 2007; Turner 2002a).

The provision of training for search committees is also key to increasing the likelihood of hiring women and men of color (Laursen and Austin 2014). Turner (2002a) noted that committees must be aware of institutional affirmative action policies and come to a common understanding about how diversity and inclusion will be integrated in the hiring process. In addition, implicit bias training has been the focus of a great deal of attention, with the goal of mitigating the ways in which search committee members' deeply held and often unconscious beliefs about the abilities and interests of women and men of color shape their decision-making (Bilimoria and Buch 2010; Carnes et al. 2012; Girod et al. 2016; Kayes 2006; Laursen and Austin 2014). Trainings on recognizing and addressing implicit bias have translated to increases in the number of women in hiring pools, finalist lists, and hires (Bilimoria and Buch 2010; Devine et al. 2017; Sensoy and DiAngelo 2017). Devine et al. (2017) studied the impact of an intervention designed to break participants' tendencies to rely on prejudices, which included trainings to become more aware of implicit bias, understand its consequences, and learn strategies to reduce its impact on behaviors and decision making. The researchers conducted a randomized trial at the University of Wisconsin to determine the intervention's efficacy, which revealed that there was an 18% point increase in the proportion of women hired by departments completing the intervention, while those that did not hired women at the same rates. Similarly, a study of hiring patterns at Montana State University revealed that science search committees that engaged in an intervention that included training how to gain better control over their implicit biases were over six times more likely to make an offer to a woman candidate than those who did not (Smith et al. 2015).

The campus visit and interview are also important dimensions of the hiring process which are often overlooked (Turner 2002a). Institutions may focus largely on their need to assess the candidate and their qualifications, forgetting that candidates are critically considering the campus and whether it is a place at which they would like to work. A study presenting the autoethnographies of three minoritized search candidates (a White lesbian, Latina, and Latino) highlighted the importance of the campus visit in assessing fit. The candidates took note of who attended, how their research was received, and the extent to which there were resources to support their work (Hughes et al. 2012). How the day is scheduled can also have a powerful impact on how women and men of color view the campus and their thinking about whether they want to become a member of the campus community. Tierney and Bensimon (1996) recounted the negative experience a woman had interviewing at one campus, where she was not given any breaks in her schedule or opportunities to engage with other women at the institution. While the institution made her a competitive and attractive financial offer, she chose to accept a faculty position at another institution with a hiring process that was warm and collegial, with more opportunities to rest and connect with future colleagues. Sensoy and DiAngelo

(2017) reminded that it is important to provide candidates with opportunities to meet with students from minoritized communities as well, particularly student activists, so they could better understand the institution's areas for growth. Light (1994) added that candidates should be provided with opportunities to meet community leaders and people who may be relevant to their work and life beyond the institution to foster a sense of comfort and connection.

Finally, search committees, deans, and department chairs must make key decisions about what it means to be a "strong candidate," going beyond traditional metrics of reputation of doctoral institution and advisor or number of publications. Smith (2000) pointed to the elitism embedded in faculty search processes and recommends that institutions create strategies to recognize their bias for candidates who have degrees from institutions that are perceived as prestigious. In his study of hiring practices in the academic workforce, Jackson (2008) argued that while these criteria may appear neutral, narrow definitions of merit often miss the meaningful contributions of candidates from various racial and ethnic minority backgrounds. Sensoy and DiAngelo (2017) recommended making the ability to engage with and promote diversity a formal criterion upon which to make decisions. They also recommended that search committees intentionally assess and ask candidates to articulate how they will actualize a commitment to diversity and inclusion in and outside of the classroom. Similarly, Collins and Johnson (1988) noted that part of their success in increasing the number of professors of color on their campus was rooted in searching for candidates who had an interest in diversifying the curriculum, rather than based solely on traditional metrics of scholarly productivity.

In addition considering how work gets done and the search committee is trained, there must be careful attention to broadening strategies utilized to identify potential candidates. Smith et al. (2004) conducted an extensive study of faculty searches at three elite research universities, exploring how the incorporation of one of three strategies – a job description that engages diversity, targeted diversity hiring policy, or a diverse search committee – translated to hires of candidates of color. The majority of searches that resulted in the hire of a person of color made use of one of these strategies. Notably, 86% of Black faculty and all of the Native American faculty hired were in searches that applied one of these three strategies. Cluster hiring, which brings groups of faculty with shared interests or that are connected to a central theme to institutions as a cohort, is also increasingly popular as a hiring strategy. When implemented on campuses with clear diversity goals and commitments to hired candidates, cluster hiring can translate to more successful hires of women and men of color, as well as higher rates of retention (Muñoz et al. 2017).

Yield

While a campus can make strides in making offers to a more diverse pool of candidates, it is not guaranteed that those offers will be accepted. Little scholarly attention has been focused on what leads to a candidate accepting or declining an offer. According to Tuitt and colleagues, "presenting the candidate of choice with a competitive employment package is the institution's most direct way of signaling to a candidate that they are a valuable commodity" (2007, p. 523). Turner (2002a)

discussed the impact of offers in her guidebook on faculty hiring and explains the importance of compensation and thinking about it holistically. Compensation goes beyond salary and can include resources and support that help individuals make more successful transitions to the institution and faculty life (Tuitt et al. 2007). Light (1994) recounted that while emphasis is often placed on the financial aspects of an offer, consideration must be given to the candidate as whole person, recognizing their needs to build community on and off campus. Thus, institutions must be mindful of factors beyond salary that may be attractive to candidates.

While little research has focused on this area, some ideas have emerged. For example, additional visits may help successful candidates build community and determine where they would like to live, ample start-up budgets can facilitate a strong start on research projects, and access to information about community resources may make offers more attractive. Laursen and Austin (2014) also reminded that not all successful candidates will have insight into what they should or could be negotiating for, leading to inequitable start-up packages, salaries, and resources. They found that several institutions revised their yield strategies to be more equitable, offering negotiation templates as well as checklists of items that could be negotiated for or that candidates should anticipate discussing.

Dual-career issues can also be important to address as offers are made to potential candidates (Laursen and Austin 2014; Laursen et al. 2015; Smith 2000; Tierney and Sallee 2010). Attending to the professional needs of potential hires and their partners has increasingly been recommended as good practice in faculty recruitment (Sorcinelli 2000; Stewart et al. 2016; Wolf-Wendel et al. 2000). A study of almost 400 American Association of Colleges and Universities institutions revealed that approximately a quarter of the institutions had dual-career hiring policies, but most were informal and not in writing. Institutions with and without policies were most likely to help faculty of color, full professors and women (Wolf-Wendel et al. 2000). Smith (2000) noted that offers from institutions that are active in helping partners and spouses find academic employment are taken more seriously than those that do not, and Wolf-Wendel, Twombly, and Rice (2000) also noted that helping "trailing spouses and partners" find employment often resulted in a successful hire.

As noted above, a great deal of public discourse, scholarly work, and media attention has been focused on addressing faculty diversity through increasing the number of individuals from underrepresented backgrounds pursuing PhDs, thus increasing the size of the potential applicant pool. However, it is important to remember that increasing the number of graduates from PhD programs will not automatically translate to increased faculty diversity (Cannady et al. 2014; Kulis et al. 2002), and a holistic assessment and revision of institutional recruitment policies and practices is necessary to make progress towards faculty diversity goals. Also, while an important step, increasing the number of applicants from underrepresented backgrounds when faculty positions are posted should not be the only strategy for increasing faculty diversity. Instead, successful efforts to hire a more diverse faculty body requires a long-term, intentional commitment that incorporates personalized contact and development of connections with high potential applicants (Collins and Johnson 1988; Gasman et al. 2011; Turner 2002a), welcoming and inclusive

application review and interview processes that frame diversity as a strength (Sensoy and DiAngelo 2017; Smith 2000), and intensive efforts to encourage selected applicants to accept offers and join the faculty at that institution (Tuitt et al. 2007).

Transition

Once a successful candidate has been hired, there may be several months before the person actually begins their new faculty position. This time period is represented by the "transition phase," in the framework, and perceived as an opportunity to build connections, begin introducing the person into the campus culture and community, and initiate and assess the need for professional and skill development. While many campuses offer orientation programs for new faculty, transition appears to be a relatively underexplored area for intervention.

As noted above, early efforts to promote organizational socialization can foster long-term positive professional outcomes, such as job satisfaction, organizational commitment, and intentions to persist within the organization (Bauer et al. 2007; Tierney and Bensimon 1996). Tierney and Bensimon (1996) reminded that there are two stages to the socialization process: anticipatory socialization and organizational socialization. Anticipatory socialization takes place before an individual begins their work on a campus, when they are graduate students or employed at other institutions. Further, organizational socialization is divided into two phases: initial entry, which addresses acts immediately before and after hiring and transition to an institution; and role continuance, which takes place throughout the tenure and promotion process (Sallee 2011; Tierney and Bensimon 1996). As defined here, the transition phase focuses on anticipatory socialization and initial entry.

Bauer et al. (2007) noted "organizations (either passively or actively) create strong or weak situations under which newcomers must adjust to new environments . . . Organizations differ in terms of the goals they have for newcomers, ranging from conformity to innovation, and newcomers must learn what is expected of them through the adjustment process" (p. 709). Newcomer adjustment is fostered by two antecedents: newcomer information seeking and organizational socialization tactics (Bauer et al. 2007). Newcomer information seeking occurs at the individual level and reflects steps new incumbents take to reduce uncertainty and make sense of organizations. While this is certainly an important part of the socialization process, given this review's focus on organizational factors and forces in the retention process, the focus here is on organizational socialization tactics, or what institutions can do to disseminate information and provide support as newcomers adjust to their new roles. Institutionalized socialization tactics are important and may be the most effective way to promote better transitions and professional outcomes for faculty. Saks et al. (2007) completed a meta-analysis of research on the impact of institutionalized socialization tactics, and found that, overall, they were negatively related to role ambiguity, as well as intentions to leave.

Bauer et al. (2007) specifically recommended interventions that align with the dimensions of newcomer adjustment to foster successful organizational

socialization. Content-based interventions should focus on training and skill development, fostering self-efficacy and abilities to complete the skills associated with the required work of the job. Content-based interventions may be particularly important for individuals beginning their faculty careers immediately after completing graduate school or their postdoctoral training, given that they may have had little experience with teaching, mentoring, and other dimensions of faculty life beyond research (Austin 2007; Austin et al. 2007). Research on graduate education also suggests that women and men of color are often denied access to mentoring and career development that would adequately prepare them for faculty careers (e.g., Cianni and Romberger 1995; Curtin et al. 2016; Eddy and Gaston-Gayles 2008; Patton 2009), which may put these scholars at greater risk for struggles as they adjust to the demands of faculty work. In particular, research on the importance of mentoring for early career faculty (e.g., Curtin et al. 2016; Dancy and Brown 2011; Phillips et al. 2016; Piercy et al. 2005; Thompson 2008; Zambrana et al. 2015) suggests that the establishment of mentoring relationships that provide women and men of color with opportunities to ask questions, get feedback on syllabi and manuscripts, and develop potential collaborations in the time before they arrive on campus could be of potential value.

Interventions should also address role clarity, helping newcomers understand the stages and processes through which individuals must progress to advance and be successful (Bauer et al. 2007). In an academic setting, interventions focused on role clarity often translate to facilitating deeper understandings of the tenure and promotion process. While tenure and promotion policies may be formalized in documents, newcomers may not fully understand nuances of navigating the process or distinctions between requirements in their respective departments, colleges, and at the university level (Eddy and Gaston-Gayles 2008). For those who have been faculty at other institutions, it is important to clarify how the tenure and promotion guidelines at their new campus are similar and distinct from their previous employer. Access to early exposure to how professional reviews work, timelines for completing the various components of the process, and benchmarks to aim for that are indicators of good progress towards a successful promotion and tenure review can be helpful in promoting role clarity.

Finally, there are socially-focused organizational socialization tactics. These interventions offer support and mentorship that foster social acceptance and belonging (Bauer et al. 2007). Beginning a new faculty job often involves a move to a new region of the country, and efforts to help faculty form a sense of community on and off campus can be helpful in promoting sense of belonging and inclusion (Cole et al. 2017; Eddy and Gaston-Gayles 2008; Tierney and Bensimon 1996). Eddy and Gaston-Gayles (2008) reminded that it may be challenging for faculty of color to acclimate to predominantly white neighborhoods off campus, and these faculty may have trouble finding churches, hair salons, and friendships and romantic partnerships. Further, given the isolation and marginalization many women and men of color face in their departments and programs (e.g., Kelly and McCann 2014; Turner 2002b; Turner et al. 1999; Winkler 2000), early opportunities to build relationships with faculty across campus may make social transitions a bit easier.

While institutions can implement strategies that promote each of these dimensions individually, it may be particularly effective to develop comprehensive programs which simultaneously promote self-efficacy, role clarity, and social connections. For example, a study found that a research bootcamp offered by Sisters of the Academy (SOTA) was an important resource for Black women who were new professors (Jones and Osborne-Lampkin 2013). SOTA is an organization founded in 2001 to support Black women in the academy, creating a network of professional and psychosocial support to encourage collaborative scholarship and provide opportunities for professional development. During a focus group, junior faculty participants recounted how the SOTA bootcamp helped them more clearly articulate their research agendas, think through writing manuscripts for publication, and gain access to information about resources that would help them advance their scholarship. Further, they were able to develop relationships and connections with other Black women that provided them with social and emotional support. Similarly, participants in a new faculty mentoring program noted that their mentors, who were faculty outside of their home departments, diminished their social isolation while simultaneously increasing their efficacy by answering questions and affirming their work and ideas (Phillips et al. 2016). Thus, creative interventions that integrate opportunities to build skills and confidence, connect to communities of support, and learn the norms and policies associated with tenure and advancement may be particularly important in facilitating smooth transitions, particularly for new faculty.

Retention

While many campuses emphasize hiring, it is equally important to attend to whether professors are being retained or remain at the institution or in academia. It not uncommon for campus representatives to discuss their great fortune in hiring a very promising faculty member from an underrepresented group, but lament that the person departed 3 or 4 years later. Some describe a "revolving door" when it comes to faculty from underrepresented backgrounds, noting that new hires who are women or men of color are often are replacing a woman or man of color who just left the institution (Carter and O'Brien 1993; Jackson 2008; Kayes 2006; Tuitt et al. 2009). I encourage institutions to consider their retention programs and policies in their faculty diversity and inclusion strategies, focusing specifically on three components: professional development, advancement, and satisfaction and support.

Professional Development

Similar to the content-based organizational strategies recommended by Bauer et al. (2007), professional development focuses on providing training and guidance that supports skill development and opportunities that help faculty reach the highest levels of success in completing the components of their jobs. While important in the process of helping faculty develop skills and competencies to best support their students and advance their research agendas, professional development is rarely addressed directly by institutional administrators; it is often expected that faculty

will gain access to the support they need with little institutional or departmental intervention (Sorcinelli and Austin 2006). The extant literature does not suggest that minoritized scholars are less competent or able to do their work; however, the challenges that they encounter finding collaborators and support for their research, navigating difficult interactions with students, and managing a large number of service demands can necessitate additional support and resources.

Equitably distributed and structured opportunities designed to help faculty gain access to guidance and support in teaching, research, and service can promote faculty members' confidence in their skills and success (Laursen and Austin 2014). Some participants in Zambrana et al.' (2015) qualitative study of faculty of color in institutionally sponsored mentoring programs described their ideal and positive experiences in mentoring relationships, noting the importance of having senior scholars invite them to collaborate on research, offer "hands on" (p. 59) feedback on their writing, and guide them in building the skills necessary to be a strong scholar. Trained mentors benefitted new faculty participating in a formal mentoring program, providing opportunities to discuss strategies for navigating academic life and managing challenges in and outside of the classroom (Phillips et al. 2016). Mentoring breakfasts were offered at Virginia Tech faculty in the College of Human Sciences and Education. Each breakfast had a theme and aimed to promote faculty career development, providing new faculty with access to information and connections across the college (Piercy et al. 2005).

Professional development can also include opportunities for faculty to learn more about how to manage the multiple demands on their time and the stress associated with their workload. A review of the literature suggests that women face more teaching demands (Bellas and Toutkoushian 1999; Winslow 2010), people of color are often asked and expected to have substantial commitments to service (Baez 2000; Griffin et al. 2013b; Padilla 1994; Tierney and Bensimon 1996), and women of color report significant time and emotional energy investments in both activities (Griffin et al. 2011a; Turner 2002b; Turner et al. 2011). Tools and communities of support created and offered by the National Center for Faculty Development and Diversity (NCFDD) provide guidance regarding time management, overcoming perfectionism, aligning time commitments with priorities, and semester planning to help spark faculty productivity, particularly in the face of many demands. Laursen and Austin (2014) also found that several ADVANCE IT institutions implemented successful workshops that offered faculty guidance and support as they find a balance between research, teaching, and service.

Simply telling women and men of color to say "no" more often can be unhelpful, ignoring personal commitments and investments in these activities (Baez 2000; Griffin 2013; Martinez et al. 2017; Reddick 2011), as well as the political implications associated with denying requests, and the volume of requests they receive (Winkler 2000). While institutions should intentionally arm women and men of color with skills and tools that help them navigate and decline services requests, given that they are more often asked to engage as compared to their white and/or male colleagues (O'Meara et al. 2017), institutional leaders must also take responsibility for being more equitable in their requests for faculty time. Tools like online

dashboards that track engagement in service can help faculty and administrators monitor the extent to which faculty are committed to and invested in activities beyond research, informing them about who may have more or less time to take on new responsibilities (O'Meara et al. 2017).

Advancement

Advancement focuses on the extent to which faculty have the tools, support, and information necessary to successfully navigate the administrative structures necessary to be considered for and successful in obtaining tenure and promotion at their institutions. In their research on institutions receiving ADVANCE IT grants, Laursen and Austin (2014) noted that tenure and advancement interventions could be categorized into two groups: educational and structural. Educational interventions were more often implemented and focused on ensuring that all individuals engaged in the review process were well informed about policies, procedures, and expectations. A lack of mentorship and connection to departmental networks can leave women and men of color without important information about the formal mechanisms associated with the tenure and promotion process. Many scholars desire guidance from campus administrators and mentors who understand the system (Thomas and Hollenshead 2001), and institutions both offered training for tenure and promotion committee members and instituted structured opportunities for mentoring and feedback to enhance the consistency of the information that candidates received (Laursen and Austin 2014). Further, clear guidelines and communication about expectations for tenure and advancement to both candidates and faculty reviewers leaves less room for biased interpretations of candidate's achievements and can encourage more positive outcomes for women and men of color (Laursen and Austin 2014; Settles et al. 2006).

In addition to addressing clarity and access to information, it is important to implement structural interventions, which aim to change the process and enhance the extent to which tenure and promotion processes are experienced as fair and equitable (Laursen and Austin 2014). For example, we encourage institutions to consider whether the requirements for advancement (promotion, tenure) are in alignment with institutional rhetoric about the importance of teaching and mentoring (O'Meara 2010; Rice et al. 2000), as well as the contributions women and men of color make to the academy. For example, when Virginia Tech developed a new faculty retention program, they incorporated a research component, conducting three focus groups with untenured faculty from underrepresented backgrounds to better understand their needs and concerns. In addition to wanting tenure and promotion policies to be clearer, faculty wanted these processes to consider and incorporate teaching and service contributions in more meaningful ways (Piercy et al. 2005). Some institutions have reformed their promotion and tenure criteria, adopting broader definitions of scholarship inclusive of teaching and community engagement (O'Meara 2010). O'Meara acknowledged that policy reforms are important, but such reforms also require widespread buy-in from faculty, given that the faculty ultimately implement policy through their service on tenure and promotion committees.

Satisfaction and Support

The final component of retention focuses on satisfaction and support, addressing the importance of a professor's quality of life, ability to develop meaningful relationships, and sense of inclusion in their likelihood of persisting. Faculty satisfaction has been widely studied, as scholars have aimed to establish a relationship between it and intentions to leave the academy (August and Waltman 2004). Across multiple studies, women and men of color reported lower levels of satisfaction with a variety of dimensions of faculty life, leaving them more vulnerable to departure (Bilimoria et al. 2008; Hesli and Lee 2013). This component encourages institutions to consider how to promote satisfaction by addressing and improving hostile or unwelcoming climates, creating and supporting opportunities to build community and connection, and supporting faculty as they manage their personal and professional lives and commitments.

Steps must also be taken to address climate challenges, focusing on the behaviors and biases of white and male faculty who often have more power (both formally and informally) in organizational hierarchies. Climate assessments can be a critical tool that helps uncover where problems and challenges are rooted (Hurtado et al. 2008; Whittaker et al. 2015); however, the findings must be translated into action and be used to develop interventions that promote inclusion and sense of belonging. Virginia Tech sponsored a faculty retention workshop targeting administrative leaders across campus, arming them with information about the challenges women and men of color face in the academy and providing an opportunity to generate ideas about how to address these issues (Piercy et al. 2005). While there is little research prescribing specific interventions to transform departmental climates, structured opportunities to engage with colleagues, intergroup dialogues, and implicit bias trainings may help facilitate more inclusive environments.

Settles et al. (2006) described welcoming climates as collaborative, respectful, and collegial, and call for department chairs to take active steps towards facilitating these environments. In their study of 19 ADVANCE IT grant recipients, Laursen and Austin (2014) identified four strategies or models capturing how institutions aimed to address departmental climate issues. Two involve providing support directly to departments, allowing them to determine their own problems and potential solutions. In the first case, grants were awarded to departments to address a climate-related issue, and in the second, departments developed comprehensive change plans with the support of external facilitators. The other two models relied on external intervention, with departmental change efforts being led or informed by ADVANCE leaders. In these cases, department heads and chairs participated in ADVANCE programming, providing them with professional development that would help them foster a more inclusive climate, or made receipt of resources contingent on participation in ADVANCE activities.

Access to support, both professionally and personally, is critical to navigating and surviving environments that are often hostile and marked by racism and sexism (Patitu and Hinton 2003; Turner et al. 1999). The ability to develop community with peers and colleagues who share a minoritized identity is also key to promoting

retention. Minoritized faculty seek connections with colleagues and peers, and when able, intentionally build supportive communities that promote their own persistence (Cole et al. 2017; Fries-Britt and Kelly 2005; Martinez et al. 2017; Piercy et al. 2005). Those who were able to find communities of support, particularly with other minoritized scholars, described the importance of these relationships, noting that the relationships affirmed their identities, created valuable space for building trust, and helped maintain faculty members' motivation (Fries-Britt and Kelly 2005; Fries-Britt and Snider 2015; Garrison-Wade et al. 2012; Griffin et al. 2011b; Jones and Osborne-Lampkin 2013; Kelly and Winkle-Wagner 2017; Patitu and Hinton 2003; Patton and Catching 2009). Thus, rather than hoping these encounters happen by chance, institutions can promote satisfaction and retention by providing structured opportunities for women and men of color to connect with colleagues outside of their departments and programs through the sponsorship of affinity groups, colloquia, networking receptions, and other events.

Further, being able to form academic communities can be a motivator, providing opportunities for both social support and collaboration (Ropers-Huilman 2000). For example, a study completed by two Black women reflecting on their own working and personal relationships highlighted the creativity, motivation, and clarity generated through scholarly collaboration (Fries-Britt and Kelly 2005). A research bootcamp for Black women created valuable opportunities for networking, connection, and exploration of possible collaborations (Jones and Osborne-Lampkin 2013). Additionally, Black faculty in one study described the importance of formal connections with ethnic studies programs or race-related research centers, explaining that these affiliations provided them not only with a scholarly home for their research, but also with access to supportive environments and affirming colleagues (Griffin et al. 2011b).

While peer support and guidance can offer great value, many studies have touted the importance of mentorship as a source of socioemotional support and recommended the implementation of formal or assigned mentors to mitigate the isolation women and men of color may experience. Formal mentoring programs for new hires can be particularly attractive to women and people of color, who may see these relationships as a way to partially escape the isolation of being the only or one of a few with a marginalized identity in their departments and programs (Phillips et al. 2016; Stanley 2006; Zambrana et al. 2015). Zambrana et al. (2015) and Stanley (2006) found that scholars of color had a mix of positive and negative mentoring experiences, and relationships that recognized and validated the identity of the mentee were more positive and affirming. Piercy et al. (2005) conducted three focus groups with untenured, minoritized faculty at Virginia Tech, and found that faculty wanted access to mentorship that was culturally responsive and supported their needs to form community.

Finally, satisfaction with academic work has been linked to the ability to attend to family responsibilities and engage in caregiving (August and Waltman 2004). An analysis of institutions receiving NSF ADVANCE institutional transformation grants revealed that multiple campuses institutionalized-family friendly policies as they

aimed to support women and increase faculty diversity. Specifically, they implemented family leave policies for parents and caregivers, tenure clock extensions for individuals who need to take family leave, and workload modifications that allow for better work-life integration (Bilimoria et al. 2008). Similarly, Laursen and Austin (2014) found that 19 ADVANCE IT grant recipients implemented a variety of family-friendly accommodations, including grants to support faculty during major life transitions, family leave, programs to support pregnant and nursing women, child care support, and broad communication about family-friendly policies and resources.

While institutions are increasingly implementing family-friendly policies, they must also create conditions that allow faculty to feel comfortable making use of the policies without experiencing professional repercussions (Lester 2015; Sallee et al. 2016). Finkel et al.' (1994) analysis of surveys from almost 1400 men and women employed at one research university suggests that there is wide support for many family-friendly policies, including both paid and extended unpaid leave for infant care, policies enabling faculty to return to work part-time after having a child, and stop-the-tenure-clock procedures. However, it is important to note that 70% of survey respondents thought that taking advantage of these kinds of policies would hurt them professionally, and women were more likely than men to say that this was the case. Thirty percent of women who gave birth took less leave than what they were allotted, and 40% of new mothers took no leave at all. Similarly, while there were leave policies in place at the large research university where Gardner (2012, 2013) interviewed eleven women for her study on institutional departure, the women felt that using these policies was not viewed favorably. Thus, in addition to making these options available, all faculty must have assurance that they can participate without negative repercussions, as well as visible models and examples of those who benefitted from these policies.

Multidimensional problems require holistic interventions. The persistent lack of faculty diversity and underrepresentation of women and men of color in the academy are rooted in the racism and sexism embedded in recruitment and hiring, how work is assessed and allocated, how resources and support are distributed, and the extent to which faculty are welcomed into academic communities and included in departmental networks. As outlined above, the Model accounts for how these barriers manifest across the academic journeys of women and men of color, offering strategies and suggestions for improving the rates at which minoritized faculty are recruited and retained at 4-year institutions. It is important to highlight and acknowledge that in addition to addressing the pathway into and through the academy in comprehensive ways, the structure of the interventions must align with the challenges presented. Strategies described above vary in their foci, addressing systemic organizational barriers, the behaviors and beliefs of institutional gatekeepers (e.g., senior faculty and administrators), and/or individual faculty members' needs. Thus, in addition to considering how to create comprehensive plans that address recruitment, transition, and retention, I also encourage institutional leaders and policymakers to diversify their strategies, developing institutional action plans that integrate policies and

practices that reflect their unique challenges at the institutional, departmental, and individual levels.

The Unique Contributions of Women and Men of Color Faculty

While institutions are increasingly recognizing the need to increase faculty diversity and considering how to engage in this work, our field less often reflects on why this work is important and what higher education stands to lose if we are unsuccessful in recruiting and retaining a more diverse faculty body. Public discourse has focused on the role that women and men of color play as mentors and role models for students, providing support that recognizes students' identities and reminds them that success in the academy is possible (Cole and Griffin 2013; Crisp et al. 2017; Guiffrida 2005; Patton 2009). However, the unique contributions women and men of color make to teaching, service, and particularly research, often go unrecognized and have less often been the focus of study (antonio 2002; Umbach 2006). In this section, I describe the unique contributions women and scholars of color make to higher education, highlighting their importance in fulfilling their institutions' missions and meeting teaching, learning, and community engagement goals.

Teaching and Facilitating Learning

While all faculty are required to teach courses, data suggest that women and men of color carry heavier teaching loads and make many meaningful contributions to teaching and learning in higher education. Multiple studies tracking faculty time suggest that professors who are women and/or people of color spend more time preparing for and engaging in the act of teaching and mentoring than their white and/ or male colleagues, despite their rank or role on campus (Bellas and Toutkoushian 1999; Misra et al. 2012; O'Meara et al. 2017). Also, women and men of color are more heavily concentrated among instructors and lecturers than white men, consequently shouldering the majority of the instructional load on college and university campuses (Espinosa et al. 2019; Finkelstein et al. 2016). Thus, women and men of color are making critical contributions to institutions' ability to execute their educational missions and commitments to student learning, growth, and development.

  In addition to teaching more, it appears women and men of color teach differently, engaging students in ways distinct from their white and male colleagues. Women and men of color are more likely to implement active, student-centered pedagogies (Eagan and Garvey 2015; Milem 2001; Umbach 2006) . Umbach's (2006) analysis of the teaching practices of almost 14,000 faculty across 134 colleges suggested that women and men of color faculty uniquely contribute to undergraduate education through their pedagogy. Participants who identified as women or people of color more often reported implementing active and collaborative learning techniques and engaging in activities to bring about higher order thinking and facilitating efforts to make conceptual connections as compared to men and white faculty. Milem

(2001) similarly found that professors who identified as women, Native American, or Puerto Rican reported more significant engagement with active pedagogies in the classroom.

These pedagogical choices can translate to shifts in students' perspectives, biases, and expectations. Decades of research suggest that opportunities to engage with diversity and interact with individuals with identities different from one's own facilitates a broad range of learning outcomes, including skills and competencies critical to engaging in our increasingly diverse democracy (Hurtado et al. 2008). While scholarship on diversity and learning has largely addressed the manifestation of these benefits as a result of students engaging across difference (Engberg 2007; Gurin et al. 2002; Hurtado 2007), there may be similar benefits associated with taking classes from professors who are women or men of color given their commitments to facilitating engagement across difference and discussions about diversity, equity, and inclusion.

Turner (2002) suggests that "the more diverse college and university faculty are, the more likely it is that all students will be exposed to a wider range of scholarly perspectives and to ideas drawn from a variety of life experiences" (p. 2). This often translates into specific pedagogical practices and curricular choices that encourage student learning. Both women and people of color participating in the HERI faculty survey placed greater emphasis on supporting students' socioemotional development, highlighting the importance of students' moral, civic, and affective development as a result of their teaching than men and participants identifying as white (antonio 2002). Umbach (2006) found that women faculty and those who identify as Black, Latinx, or Native American were more likely to engage in diversity-related activities in the classroom, such as encouraging interactions across difference or developing assignments that include diverse perspectives. Milem (2001) similarly found that Black, Latinx, and Native American faculty were twice as likely to incorporate readings on race and ethnicity in their syllabi as compared to white faculty; women were twice as likely to incorporate these readings as compared to men. Chicana/o faculty that participated in Urrieta and Méndez Benavídez's (2007) qualitative study saw their teaching as an act of social justice, and described their commitment to providing students with curricular content that elevated students' critical thinking and consciousness.

Further, minoritized faculty not directly engaged in work or pedagogies intended to cultivate an appreciation for diversity or broader perspective may still have a notable impact on students' learning about diversity and inclusion. More women and men of color in the academy represent alternative viewpoints and research a wide range of topics; these factors can disrupt stereotypes and provide evidence to students that there are many ways to embody one's identity in the academy (Alger 1999; Alger and Carrasco 1997). For example, Alger (1999) noted that the presence of faculty of color in the classroom challenged white students' assumptions about the interests and abilities of people of color, irrespective of the topic of the class or if issues related to communities of color are directly engaged. Alger explained, "For example, a white student's stereotypical assumptions can be challenged effectively by exposure to an Asian-American art history professor who specializes in Western

Renaissance art, even if the class discussions do not address issues of race or ethnicity" (p. 194). Thus, exposure to faculty of color, regardless of the subject they teach, can contribute to the deconstruction of students' stereotypes and biases.

Mentoring Students

Scholars have often noted that increasing the representation of women and men of color in the professoriate is especially important given that these faculty members can serve as role models and mentors for minoritized students and pre-tenured faculty. White women, men of color, and women of color are more often called upon to mentor and support students and junior colleagues (Griffin and Reddick 2011; Johnson 2016; Joseph and Hirshfield 2011; O'Meara et al. 2017). Scholarship focusing on undergraduate and graduate women (Chesler and Chesler 2002; Ong et al. 2011) and students of color (Cole and Griffin 2013; Griffin et al. 2010; Patton 2009) conclude that mentors can provide important academic and psychosocial support as students navigate challenging campus environments, particularly where they feel unwelcome or marginalized. Mentorship can have a similarly powerful impact on minoritized early career faculty, affirming their talent and facilitating a sense of belonging and connection to the academy (Chesler and Chesler 2002; Gibson 2004; Zambrana et al. 2015).

Faculty with privileged identities can and should offer similar forms of support to minoritized students, and the labor associated with mentorship must not fall to women and men of color alone (Brown II et al. 1999; Johnson and Smith 2016). However, the research does highlight the unique contribution women and men of color make through their support of students generally, and students of color in particular. Homophily, or the tendency for individuals to be most attracted and interested in working with those who share their identities and interests (McPherson et al. 2001) can drive early perceptions of potential fit in mentoring relationships, leading mentees to feel a closer connection to and assume better relational fit with those with whom they share salient identities (Baker et al. 2014). Students and early career scholars with minoritized identities often express a preference for and reach out to faculty mentors who share their identities, assuming they will be able to uniquely understand the challenges they face, offering unique socioemotional support that recognizes how identity can impact educational and work experiences (Alger and Carrasco 1997; Baker et al. 2014; Benitez et al. 2017; Blake-Beard et al. 2011; Brown II et al. 1999; Patton 2009; Reddick 2011).

Beyond mentorship and close relationships, there is some research that suggests that minoritized students are more likely to be retained and perform better when they have more opportunities to be exposed to minoritized professors in both formal and informal ways. Bettinger and Long (2005) found that women were more likely to take additional courses in an academic field when they had taken a course from a woman professor. Hagedorn et al. (2007) found that Latinx community college students in Los Angeles had higher rates of academic success on campuses with more Latinx faculty members, which the authors connected to the increased presence

of role models to foster students' sense of belonging and social integration into the campus community. Students who have professors who share their identity or who are also minoritized in the academy are less likely to feel isolated or experience stereotype threat (Benitez et al. 2017). Black college students participating in an experiment by Marx and Goff (2005) performed better on a verbal test when questions were administered by a Black proctor than a white proctor, whereas there was no difference in performance for white students based on the proctor's race. Further, those taking the verbal test with a Black proctor reported lower levels of activation of thoughts consistent with stereotype threat (e.g., "I worry that people's evaluations of me will be affected by my race; I worry that if I perform poorly on this test, the experimenter will attribute my poor performance to my race") (Marx and Goff 2005, p. 649).

antonio (2002) argued that faculty of color appear to endorse norms and engage in behaviors that run counter to those most often celebrated in the academy, prioritizing commitments to service and community outreach. The motivations and decision-making process behind engagement in these activities are complex. It is important to recognize that these patterns of behavior are often chosen intentionally (Baez 2000), and may connect to the reasons many women and men of color pursue academic careers in the first place. Multiple studies reveal that women and men of color often enter the academy with larger commitments to "lifting as they climb" and giving back to communities that supported their success.

According to antonio's (2002) analysis of over 20,000 individuals participating in the HERI Faculty Survey, faculty identifying as women or people of color were more likely to report that they chose academia to change society. Similarly, a qualitative study of early career biomedical scientists and their career decision making revealed that women and underrepresented minority scientists interested in faculty roles voiced the value of and commitment to working in ways that diversify science and expand access for students underrepresented in the field (Gibbs Jr and Griffin 2013). Martinez et al.'s (2017) qualitative study of faculty of color underscored their commitment to service, as the professors saw it as a way to engage in and uplift their communities. Black professors participating in Griffin's (2013) and Reddick's (2011) qualitative studies described not only a generally high investment in student contact, but also a closeness and commitment to working with Black students based on their commitments to success in the larger Black community.

Research and Discovery

Perhaps least acknowledged are the contributions women and men of color who are faculty make in terms of research and discovery. Scholars have more often documented barriers and challenges resulting in women and men of color's lower and slower rates of productivity, particularly when measuring more traditional forms of scholarship (e.g., peer-reviewed journal articles, large grant-funded research projects) (antonio 2002; Bellas and Toutkoushian 1999; Eagan and Garvey 2015; Misra et al. 2012). These findings should not lead to the assumption that research is less

important to these faculty. In fact, women and professors of color continuously communicate strong commitments to research and making scholarly contributions to their respective fields. For example, antonio's (2002) analysis of data from the Higher Education Research Institute (HERI) suggests that although they are less productive in terms of peer-reviewed publications, faculty of color spend more time than their white colleagues on research and writing and are more likely to report that research was important in their choice to pursue an academic career.

While often critiqued and perceived as outside of the "mainstream," women and men of color have often been innovators, introducing research, and in some cases creating whole new fields of study, centering marginalized populations that are often overlooked and ignored. One study found that, while approximately one in five faculty does research on race and ethnicity, over 60% of Black and Latinx faculty conduct research on these topics (Milem 2001), meaning they are making the majority of contributions to our understandings of racially and ethnically minoritized communities.

Women and men of color also have introduced new theoretical frameworks and methodologies to their respective fields, changing how research is done. A qualitative study of 34 women revealed that women scholars were often subversive as they engaged in the act of research and writing, challenging traditional paradigms and innovating in terms of how their respective fields think about knowledge (Gonzales 2018). Many of the women in the study made contributions to research that extended beyond the norms of their traditional disciplines, centered and made contributions to practice, or intentionally centered and allowed their identities to guide their research process. Scholars of color are responsible for the development and application of widely used frameworks like Critical Race Theory, Community Cultural Wealth, and Funds of Knowledge. Women of color generally, and Black women in particular, have made notable contributions in this regard. For example, Black women faculty were pioneers in the development and evolution of intersectionality and Black Feminist Thought (Collins 2015). Zinn and Zambrana (2019) wrote about the often-ignored contributions Chicanas have made and continue to make to feminist and intersectional theory and research, highlighting the contributions this work has made to understandings of identity-based inequality, particularly in the labor market and in education.

Finally, given their commitments to community engagement and uplift, women and scholars of color may be more likely to prioritize knowledge translation, or efforts to promote the use of research findings to address public needs and concerns (Baines 2016). Organizations in the US and abroad note the importance of engaging in knowledge transfer, not only for the advancement of social justice and the public good, but also to serve as a "return on the investment of public funds" (Baines 2016, p. 77) in academic research. Multiple studies suggest women and people of color value and are invested in research that addresses persistent social justice issues and partners with communities to promote uplift (Gibbs Jr and Griffin 2013; Urrieta and Méndez Benavídez 2007). For example, 12 Chicana/o faculty described their commitments to community engagement and uplift through their research in Urrieta and Méndez Benavídez's (2007) qualitative study. Participants saw their research as an

extension of their larger commitment to social justice and prioritized generating knowledge that had the power to transform their communities. Similarly, faculty of color in Martinez et al.'s (2017) study explained the importance they placed on engaging in research that met pressing social needs, seeing it as a way to maintain their connections to their identities and communities beyond the academy. Ro pers-Huilman (2000) analyzed narratives from women faculty and found that women benefitted greatly from opportunities to do research that would contribute to social change and prioritized their work's impact over the number of manuscripts they were able to publish.

While there continues to be a commitment to discovery of knowledge for knowledge's sake, there is an increasing emphasis on generating research that addresses persistent problems and serves the public good. Funding agencies have increasingly required researchers to articulate how their work will support broader societal goals and the funding organization's mission. For example, grant proposals for the National Science Foundation (NSF) must outline the "broader impacts" of the work, speaking to how the proposed research will advance the public good by addressing societal problems, expanding the public's science knowledge, broadening participation in the science enterprise, or promoting opportunities to learn (March n.d.). Given that women and men of color have long expressed commitments to and engaged in this kind of work, amplifying these contributions not only promotes the larger contributions the academy makes to society, but also highlights how minoritized faculty facilitate social change beyond academe.

Conclusion

The demands of students have pushed many institutions into the national spotlight, and institutional leaders at campuses across the country have increasingly acknowledged the need to address the persistent underrepresentation of women and men of color on their faculties. While there has been much energy and attention focused on calls for increased faculty diversity since the Missouri student protests of 2015 cascaded to other campuses, Patton Davis (2015) reminds us that students' frustrations regarding a lack of faculty diversity and demands for change are not new. On the contrary, Black students in particular have been protesting the racism and marginalization they experience on college and university campuses for several decades and have been demanding increases in the number of faculty of color generally, and Black faculty specifically, since the 1960s. Given the many ways in which women and men of color add to the quality of teaching and learning, contribute invigorating new lines of research, and provide a unique form of mentoring and student support, I add my voice to the many others demanding that we reform how we, as individual institutions and more broadly as a field, think about and engage in actions that promote equity in the academy and increase the representation of women and men of color in the faculty.

The consistency in student demands is likely a reflection of a lack of change not only in the demographics of the professoriate, but also how often women and men of

color experience racism and sexism as they seek entry into and success within the academy. Despite growth in the number of women and men of color completing doctoral degrees, institutional leaders and search committees continue to argue that a lack of diversity in the pool of talented minoritized candidates limits their ability to make meaningful progress towards faculty diversity goals. Search committees too often rely on insular, white, male networks to identify candidates and "traditional" criteria that minimize the innovative contributions women and men of color make to teaching and research. There has also been consistency on how institutions have approached efforts to address the underrepresentation of women and men of color in the academy. For decades, institutions have followed diversity-centered approaches, emphasizing a lack of competitive minoritized candidates and attributing the disparities to the shortcomings of women and men of color. Campuses have inconsistently engaged in efforts to increase representation, and when they have developed plans, they often focus on trainings and programs that increase the number of women and men of color PhD candidates and hires, growing the "pipeline." However, institutions have less often taken an equity-focused perspective, developing holistic interventions and strategies that address how institutions themselves perpetuate disparities by sustaining inhospitable climates, supporting policies that reify traditional notions of merit and productivity, and minimizing the contributions women and men of color make to the academy.

There is no shortage of equity-based literature, focused on how institutions present barriers, limit access to resources, and perpetuate unequal systems that maintain the lack of representation of women and men of color, particularly at the highest ranks of the academy. Over the past four decades, scholars have generated an impressive body of research documenting the exclusion and oppression women and men of color experience as they teach, learn, and work on college and university campuses. The themes emerging from the literature are strong and consistent. In many ways, the results of research conducted in the 1990s are, again, quite similar to the findings of studies published in recent years. The data are clear: women and men of color faculty face environments marked by racism and sexism, where they are made to feel unwelcome. Students and colleagues alike are less likely to treat them with respect, and they are excluded from departmental networks. Their research, particularly if focused on marginalized and minoritized communities, is viewed as suspect and superficial, and their teaching is judged more harshly. Their workloads are different from those of their white and male colleagues; women tend to carry heavier teaching loads and people of color are more extensively engaged in service. Women, and mothers of small children in particular, continue to juggle commitments to their families with professional expectations, and are skeptical that their work will be judged fairly if they take advantage of work-life balance policies that provide access to parental leave or stop their tenure and promotion clock.

These scripts and patterns must change in comprehensive ways to see progress in the diversity of the professoriate. If they do not, the next decade will bring more protests and lists demanding change and increased institutional action. Institutions will continue to miss the valuable contributions that minoritized faculty make to teaching and research. Researchers can play a big part in facilitating this shift,

contributing to a body of literature that supports institutional action and organizational change. As the next generation of researchers aims to contribute to efforts to increase faculty diversity, there are several areas that warrant additional attention.

First, there are ways that researchers can contribute to our understanding of the problems that perpetuate a lack of faculty diversity and hinder efforts to promote inclusion. Attention has been increasingly focused on graduate students' and post-doctoral scholars' career development, documenting how they learn about various careers and the experiences that shape their professional aspirations. While there appear to be general decreases in interest in faculty careers, research suggests that women and men of color may be particularly unlikely to express interest in this career path. Scholars have started to focus on uncovering why this is the case, and more work must address how racism and sexism manifest in students' training and translate to a lack of interest in faculty careers.

A more nuanced understanding of the problem also requires research that acknowledges how different racial and ethnic subgroups experience racism and marginalization. A substantial amount of research has been done on faculty of color in the aggregate, with increasing focus on women of color and their unique experiences. Black faculty have also been the subject of many studies. However, there is less work that identifies the unique challenges of Latinx, Asian American, Multiracial, and particularly Native American scholars. There is also limited research that unpacks how racism manifests differently across these groups, translating to different experiences, degrees of inclusion and exclusion, satisfaction, and productivity in the academy. Research must address unique experiences of these populations, exploring how racism and identity-based oppression manifest differently outside of the Black-white racial binary.

Further, there has been an increase in intersectional research, with more scholars publishing studies specifically focusing on the experiences and outcomes of women of color. However, research focusing on women rarely had a sample that was racially or ethnically diverse, and more often captured the experiences of white women, without explicitly saying so. A somewhat different challenge manifests in the literature on faculty of color. While there are notable exceptions, studies focused on the experiences of racially and ethnically minoritized faculty less often interrogate gender differences or speak to distinctions in how men and women of color experience oppression and marginalization. Future research would be strengthened by more directly taking up the nuance in faculty encounters with institutional barriers based on their multiple intersecting identities and exposure to various forms of identity-based oppression. Researchers studying women must recruit more racially and ethnically diverse samples and more directly engage how sexism *and* racism shape the lives of faculty and the extent to which they can make use of family-friendly policies, how teaching loads are allocated, and the time and emotional labor they invest in service. Researchers that aim to speak generally to the barriers and marginalization experienced by racially and ethnically minoritized faculty can and should add another layer of analyses to their data, determining whether and how phenomena look different when comparing the experiences of men and women.

Using a diverse array of methodological tools to understand the experiences and outcomes of women and men of color in the academy also will propel our efforts to increase faculty diversity. Much of the recent work on women and men of color in the academy is based on qualitative research, which provides important and rich insights into their experiences and perspectives on academic work and life. This research can and should be the foundation for the development of new measures and surveys that allow researchers to test theories and better understand how workload, stress, marginalization, and satisfaction vary across institutions and departmental contexts. While there are notable exceptions, our field continues to generate and rely on conclusions about satisfaction and faculty worklife based on quantitative data collected in the mid and late 1990s, specifically the National Study of Postsecondary Faculty. While it is likely that disparities in satisfaction, salary, and workload persist, it is important to understand whether and how these dynamics have changed in the past 15 years. The last cycle of NSOPF data were collected in 2004, and it would benefit our understanding of faculty life and work greatly if national agencies and organizations would work collaboratively to sponsor another administration of the NSOPF or similar data collection strategy in the near future.

Finally, and perhaps most importantly, there needs to be more research identifying the individual and collective strategies that work most effectively to promote faculty diversity. While there is some knowledge about hiring practices, less is known about institutions that have successfully generated diverse pools of candidates or have yielded the candidates that have received offers. There is little research that clarifies the necessary conditions underlying programs that promote a faculty member's transition into an institution. Mentorship is often recommended to offer professional and social support to women and men of color in the academy, but more work must examine the conditions under which departments undergo cultural change and improve their climates, the process and impact when institutions change their tenure and promotion policies to be more inclusive, and how campuses can build communities of support that sustain minoritized scholars.

This is a critical, catalytic moment to be seized. Multiple conditions are present that can facilitate institutional transformation and meaningful changes in the diversity of the next generation of the professoriate. Students, campus presidents, and national organizations are invested. There are more women and men of color pursuing and attaining PhDs than ever before. Careful attention to research that illuminates the ways sexism and racism shape the experiences and outcomes of minoritized faculty can guide a suite of holistic interventions that aim to promote successful recruitment to, transitions to, and retention within 4-year colleges and universities. The Institutional Model for Increasing Faculty Diversity offers institutions a guide in this process, as well as meaningful direction as they assess their strengths and weaknesses and develop comprehensive plans to address them. Intentional, strategic investments of time, effort, and resources can have transformative power, and it is my hope that action now will create better contexts for working, living, and learning, where women and men of color thrive in years to come.

References

Aguirre, A. (2000). *Women and minority faculty in the academic workplace: Recruitment, retention, and academic culture* (Vol. 27). Washington, DC: Association for the Study of Higher Education.

Alger, J. (1999). When color-blind is color-bland: Ensuring faculty diversity in higher education. *Stanford Law and Policy Review, 10*(2), 191–204.

Alger, J. R., & Carrasco, G. P. (1997). *The role of faculty in achieving and retaining a diverse student population*. Washington, DC: American Association of University Professors.

Allen, H. L. (1997). Faculty workload and productivity: Ethnic and gender disparities. *The NEA 1997 Almanac of Higher Education*, 25–42.

Allen, W. R., Epps, E. G., Guillory, E. A., Suh, S. A., & Bonous-Hammarth, M. (2000). The black academic: Faculty status among African Americans in US higher education. *Journal of Negro Education, 69*(1/2), 112–127.

antonio, a.l. (2002). Faculty of color reconsidered: Reassessing contributions to scholarship. *Journal of Higher Education, 73*(5), 582–602.

August, L., & Waltman, J. (2004). Culture, climate, and contribution: Career satisfaction among female faculty. *Research in Higher Education, 45*(2), 177–192.

Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education, 73*(1), 94–122.

Austin, A. E. (2007). Creating a bridge to the future: Preparing new faculty to face changing expectations in a shifting context. *The Review of Higher Education, 26*(2), 119–144.

Austin, A. E., & Rice, R. E. (1998). Making tenure viable: Listening to early career faculty. *American Behavioral Scientist, 41*(5), 736–754.

Austin, A. E., Sorcinelli, M. D., & McDaniels, M. (2007). Understanding new faculty: Background, aspirations, challenges, and growth. In R. P. Perry & J. C. Smart (Eds.), *The scholarship of teaching and learning in higher education: An evidence-based perspective* (pp. 39–89). Cham: Springer.

Baez, B. (2000). Race-related service and faculty of color: Conceptualizing critical agency in academe. *Higher Education, 39*(3), 363–391.

Baines, D. (2016). The case for catalytic validity: Building health and safety through knowledge transfer. *Policy and Practice in Health and Safety, 5*(1), 75–89.

Baker, V. L., Pifer, M. J., & Griffin, K. A. (2014). Mentor-protégé fit. *International Journal for Researcher Development, 5*(2), 83–98.

Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology, 92*(3), 707–721.

Bauman, B. G. L., Bustillos, L. T., Bensimon, E. M., Brown, M. C., II, & Bartee, R. D. (2005). *Achieving equitable educational outcomes with all students: The Institution's roles and responsibilities*. Washington, DC: American Association of Colleges and Universities.

Bellas, M. L. (1999). Emotional labor in academia: The case of professors. *The Annals of the American Academy of Political and Social Science, 561*, 96–110.

Bellas, M. L., & Toutkoushian, R. K. (1999). Faculty time allocations and research productivity: Gender, race, and family effects. *The Review of Higher Education, 22*(4), 367–390.

Bendick, M., & Nunes, A. P. (2012). Developing the research basis for controlling bias in hiring. *Journal of Social Issues, 68*(2), 238–262.

Benitez, M., James, M., Joshua, K., Perfetti, L., & Vick, S. B. (2017). "Someone who looks like me": Promoting the success of students of color by promoting the success of faculty of color. *Liberal Education, 103*(2). Retrieved from https://www.aacu.org/liberaleducation/2017/spring/benitez.

Berberet, J. (2008). Perceptions of early career faculty: Managing the transition from graduate school to the professorial career. *TIAA-CREF Institute Research*. *Dialogue, 92*.

Berger, M. T., & Guidroz, K. (2010). *The intersectional approach: Transforming the academy through race, class, and gender.* Chapel Hill: University of North Carolina Press.

Bettinger, E. P., & Long, B. T. (2005). Do faculty serve as role models? The impact of instructor gender on female students. *American Economic Review, 95*(2), 152–157.

Bilimoria, D., & Buch, K. K. (2010). The search is on: Engendering faculty diversity through more effective search and recruitment. *Change: The Magazine of Higher Learning, 42*(4), 27–32.

Bilimoria, D., Joy, S., & Liang, X. (2008). Breaking barriers and creating inclusiveness: Lessons of organizational transformation to advance women faculty in academic science and engineering. *Human Resource Management, 47*(3), 423–441.

Blackwell, J. E. (1988). Faculty issues: The impact on minorities. *The Review of Higher Education, 11*(4), 417–434.

Blake-Beard, S., Bayne, M. L., Crosby, F. J., & Muller, C. B. (2011). Matching by race and gender in mentoring relationships: Keeping our eyes on the prize. *Journal of Social Issues, 67*(3), 622–643.

Blickenstaff, J. C. (2005). Women and science careers: Leaky pipeline or gender filter? *Gender and Education, 17*(4), 369–386.

Boice, R. (1993) New faculty involvement for women and minorities. *Research in Higher Education, 34*(3), 291–341.

Bowleg, L. (2008). When black + lesbian + woman ≠ black lesbian woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles, 59*(5–6), 312–325.

Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality-an important theoretical framework for public health. *American Journal of Public Health, 102*(7), 1267–1273.

Bradley, S. W., Garven, J. R., Law, W. W., & West, J. E. (2018). *The impact of chief diversity officers on diverse faculty hiring.* Cambridge, MA: The National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w24969.

Brown, M. C., II, Davis, G. L., & McClendon, S. A. (1999). Mentoring graduate students of color: Myths, models, and modes. *Peabody Journal of Education, 74*(2), 105–118.

Cannady, M. A., Greenwald, E., & Harris, K. N. (2014). Problematizing the STEM pipeline metaphor: Is the STEM pipeline metaphor serving our students and the STEM workforce? *Science Education, 98*(3), 443–460.

Carlone, H. B., & Johnson, A. (2007). Understanding the science experiences of successful women of color: Science identity as an analytic lens. *Journal of Research in Science Teaching, 44*(8), 1187–1218.

Carnes, M., Devine, P. G., Isaac, C., Ford, C. E., Byars-Winston, A., & Sheridan, J. T. (2012). Promoting institutional change through bias literacy. *Journal of Diversity in Higher Education, 5*(2), 63–77.

Carter, D. J., & O'Brien, E. M. (1993). *Employment and hiring patterns for faculty of color.* Washington, DC: American Council on Education.

Chesler, N. C., & Chesler, M. A. (2002). Gender-informed mentoring strategies for women engineering scholars: On establishing a caring community. *Journal of Engineering Education, 91*(1), 49–55.

Cianni, M., & Romberger, B. (1995). Perceived racial, ethnic, and gender differences in access to developmental experiences. *Group & Organization Management, 20*(4), 440–459.

Cole, D., & Griffin, K. A. (2013). Advancing the study of student-faculty interaction: A focus on diverse students and faculty. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research* (pp. 561–611). New York: Springer.

Cole, E. R., McGowan, B. L., & Zerquera, D. D. (2017). First-year faculty of color: Narratives about entering the academy. *Equity & Excellence in Education, 50*(1), 1–12.

Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review of Sociology, 41*(1), 1–20.

Collins, R. W., & Johnson, J. A. (1988). One institution's success in increasing the number of minority faculty: A provost's perspective. *Peabody Journal of Education, 66*(1), 71–76.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *The University of Chicago Legal Forum, 140*, 139–168.

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241–1299.

Cress, C. M., & Hart, J. (2009). Playing soccer on the football field: The persistence of gender inequities for women faculty. *Equity & Excellence in Education, 42*(4), 473–488.

Crisp, G., Baker, V. L., Griffin, K. A., Lunsford, L. G., & Pifer, M. J. (2017). *Mentoring undergraduate students. ASHE higher education report series Volume 43, Number 1*. Hoboken: Wiley.

Croom, N. N. (2017). Promotion beyond tenure: Unpacking racism and sexism in the experiences of Black Womyn professors. *The Review of Higher Education, 40*(4), 557–583.

Curtin, N., Malley, J., & Stewart, A. J. (2016). Mentoring the next generation of faculty: Supporting academic career aspirations among doctoral students. *Research in Higher Education, 57*(6), 714–738.

Dancy, T. E., & Brown, M. C. (2011). The mentoring and induction of educators of color: Addressing the impostor syndrome in academe. *Journal of School Leadership, 21*(4), 607–634.

Devine, P. G., Forscher, P. S., Cox, W. T. L., Kaatz, A., Sheridan, J. T., & Carnes, M. (2017). A gender bias-habit breaking intervention led to increased hiring of female faculty in STEMM departments. *Journal of Experimental Social Psychology, 73*, 211–215.

De Welde, K., & Laursen, S. (2011). The glass obstacle course: Informal and formal barriers for women Ph. D. students in STEM fields. *International Journal of Gender, Science and Technology, 3*(3), 571–595.

Eagan M. K., Jr, & Garvey, J. C. (2015). Stressing out: Connecting race, gender, and stress with faculty productivity. *The Journal of Higher Education, 86*(6), 923–954.

Eaton, A. A., Saunders, J. F., Jacobson, R. K., & West, K. (2019). How gender and race stereotypes impact the advancement of scholars in STEM: Professors' biased evaluations of physics and biology post-doctoral candidates. *Sex Roles*. https://doi.org/10.1007/s11199-019-01052-w.

Eddy, P. L., & Gaston-Gayles, J. L. (2008). New faculty on the block: Issues of stress and support. *Journal of Human Behavior in the Social Environment, 17*(1–2), 89–106.

Engberg, M. E. (2007). Educating the workforce for the 21st century: A cross-disciplinary analysis of the impact of the undergraduate experience on students' development of a pluralistic orientation. *Research in Higher Education, 48*(3), 283–317.

Espinosa, L. L., Turk, J. M., Taylor, M., & Chessman, H. M. (2019). *Race and ethnicity in higher education: A status report*. Washington, DC: American Council on Education.

Felder, P. P. (2015). Edward A. Bouchet: A model for understanding African Americans and their doctoral experience. *Journal of African American Studies, 19*(1), 3–17.

Felder, P. P., & Barker, M. J. (2013). Extending Bell's concept of interest convergence: A framework for understanding the African American doctoral student experience. *International Journal of Doctoral Studies, 8*(1), 1–20.

Felder, P. P., Stevenson, H. C., & Gasman, M. (2014). Understanding race in doctoral student socialization. *International Journal of Doctoral Studies, 9*(19), 21–42.

Finkel, S. K., & Olswang, S. G. (1996). Child rearing as a career impediment to women assistant professors. *The Review of Higher Education, 19*(2), 123–139.

Finkel, S. K., Olswang, S. G., & She, N. (1994). Childbirth, tenure, and promotion for women faculty. *The Review of Higher Education, 17*(3), 259–270.

Finkelstein, M. J., Conley, V. M., & Schuster, J. H. (2016). *Taking the measure of faculty diversity*. Washington, DC: TIAA Institute.

Ford, K. A. (2011). Race, gender, and bodily (mis)recognitions: Women of color faculty experiences with white students in the college classroom. *The Journal of Higher Education, 82*(4), 444–478.

Fox, M. F. (2010). Women and men faculty in academic science and engineering: Social-organizational indicators and implications. *American Behavioral Scientist, 53*(7), 997–1012.

Fries-Britt, S., & Kelly, B. T. (2005). Retaining each other: Narratives of two African American women in the academy. *Urban Review, 37*(3), 221–242.

Fries-Britt, S., & Snider, J. (2015). Mentoring outside the line: The importance of authenticity, transparency, and vulnerability in effective mentoring relationships. In C. Turner (Ed.) *Mentoring as transformative practice: Supporting student and faculty diversity* (New directions for higher education, pp. 3–11). Hoboken: Wiley.

Fuhrmann, C. N., Halme, D. G., O'sullivan, P. S., & Lindstaedt, B. (2011). Improving graduate education to support a branching career pipeline: Recommendations based on a survey of doctoral students in the basic biomedical sciences. *CBE – Life Sciences Education*, 10(3), 239–249.

Gardner, S. K. (2012). "I couldn't wait to leave the toxic environment": A mixed methods study of women faculty satisfaction and departure from one research institution. *NASPA Journal About Women in Higher Education, 5*(1), 71–95.

Gardner, S. K. (2013). Women faculty departures from a striving institution: Between a rock and a hard place. *The Review of Higher Education, 36*(3), 349–370.

Garrison-Wade, D. F., Diggs, G. A., Estrada, D., & Galindo, R. (2012). Lift every voice and sing: Faculty of color face the challenges of the tenure track. *Urban Review, 44*(1), 90–112.

Gasman, M., Hirschfeld, A., & Vultaggio, J. (2008). "Difficult yet rewarding": The experiences of African American graduate students in education at an Ivy League institution. *Journal of Diversity in Higher Education, 1*(2), 126–138.

Gasman, M., Kim, J., & Nguyen, T. H. (2011). Effectively recruiting faculty of color at highly selective institutions: A school of education case study. *Journal of Diversity in Higher Education, 4*(4), 212–222.

Gibbs, K. D., Jr., & Griffin, K. A. (2013). What do I want to be with my PhD? The roles of personal values and structural dynamics in shaping the career interests of recent biomedical science PhD graduates. *CBE Life Sciences Education, 12*(4), 711–723.

Gibbs, K. D., Jr., Basson, J., Xierali, I. M., & Broniatowski, D. A. (2016). Decoupling of the minority PhD talent pool and assistant professor hiring in medical school basic science departments in the US. *eLife, 5*, e21393.

Gibbs, K. D., Jr., McGready, J., Bennett, J. C., & Griffin, K. (2014). Biomedical science Ph. D. career interest patterns by race/ethnicity and gender. *PloS one, 9*(12), e114736.

Gibson, S. K. (2004). Being mentored: The experience of women faculty. *Journal of Career Development, 30*(3), 173–188.

Gildersleeve, R. E., Croom, N. N., & Vasquez, P. L. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity & Excellence in Education, 44*(1), 93–114.

Ginther, D. K., & Kahn, S. (2012). *Education and academic career outcomes for women of color in science and engineering.* Presented at the committee on women in science, Engineering and Medicine, Washington, DC.

Girod, S., Fassiotto, M., Grewal, D., Ku, M. C., Sriram, N., Nosek, B. A., & Valantine, H. (2016). Reducing implicit gender leadership bias in academic medicine with an educational intervention. *Academic Medicine, 91*(8), 1143–1150.

Glass, C., & Minnotte, K. L. (2010). Recruiting and hiring women in STEM fields. *Journal of Diversity in Higher Education, 3*(4), 218–229.

Golde, C. M., & Dore, T. M. (2001). *At cross purposes: What the experiences of today's doctoral students reveal about doctoral education*. Philadelphia: Pew Charitable Trusts.

Gonzales, L. D. (2018). Subverting and minding boundaries: The intellectual work of women. *Journal of Higher Education, 89*(5), 677–670.

Gonzales, L. D., & Ayers, D. F. (2018). The convergence of institutional logics on the community college sector and the normalization of emotional labor: A new theoretical approach for considering the community college faculty labor expectations. *The Review of Higher Education, 41*(3), 455–478.

Gonzales, L. D., & Terosky, A. L. (2016). From the faculty perspective: Defining, earning, and Maintaining Legitimacy Across Academia. *Teachers College Record, 118*(7).

Gregory, S. T. (2001). Black faculty women in the academy: History, status and future. *The Journal of Negro Education, 70*(3), 124–138.

Griffin, K. A. (2013). Voices of the "othermothers": Reconsidering Black professors' relationships with Black students as a form of social exchange. *The Journal of Negro Education, 82*(2), 169–183.

Griffin, K. A. (2017). Campus climate and diversity. In J. H. Schuh, S. R. Jones, & V. Torres (Eds.), *Student services: A handbook for the profession* (6th ed., pp. 73–88). San Francisco: Jossey-Bass.

Griffin, K. A., & Muñiz, M. (2015). Rethinking the structure of student recruitment and efforts to increase racial and ethnic diversity in doctoral education. *International Journal of Doctoral Studies, 10*, 199–216.

Griffin, K. A., & Reddick, R. J. (2011). Surveillance and sacrifice: Gender differences in mentoring patterns of Black professors at predominantly White research universities. *American Educational Research Journal, 48*(5), 1032–1057.

Griffin, K. A., Pérez II, D., Holmes, A. P. E., & Mayo, C. E. P. (2010). Investing in the future: The importance of faculty mentoring in the development of students of color in STEM. In S. R. Harper & C. B. Newman (Eds.), *Students of color in STEM: Engineering a new research agenda* (New directions for institutional research, pp. 95–103). San Francisco: Jossey-Bass.

Griffin, K. A., Bennett, J. B., & Harris, J. (2011a). Analyzing gender differences in Black faculty marginalization through a sequential mixed-methods design. In K.A. Griffin & S.D. Museus (Eds.), *Using mixed-methods to study intersectionality in higher education* (New Directions in Institutional Research, pp. 45–61). San Francisco: Jossey-Bass.

Griffin, K. A., Pifer, M. J., Humphrey, J. R., & Hazelwood, A. M. (2011b). (Re)Defining departure: Exploring Black professors' experiences with and responses to racism and racial climate. *American Journal of Education, 117*(4), 495–526.

Griffin, K. A., Bennett, J. C., & Harris, J. (2013). Marginalizing merit?: Gender differences in Black faculty D/discourses on tenure, advancement, and professional success. *The Review of Higher Education, 36*(4), 489–512.

Griffin, K. A., Gibbs, K.D., Jr., Bennett, J., Staples, C., Robinson, T. (2015) Respect me for my science: A Bourdieuian analysis of women scienctists' interactions with faculty and socialization into science. *Journal of Women and Minorities in Science and Engineering, 21*(2), 159–179.

Guiffrida, D. (2005). Othermothering as a framework for understanding African American students' definitions of student-centered faculty. *The Journal of Higher Education, 76*(6), 701–723.

Gurin, P., Dey, E., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review, 72*(3), 330–367.

Hagedorn, L. S. (2004). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. In L. S. Hagedorn (Ed.), *What contributes to job satisfaction among faculty and staff: New directions for institutional research* (pp. 5–20). San Francisco: Jossey-Bass.

Hagedorn, L. S., Chi, W., Cepeda, R. M., & McLain, M. (2007). An investigation of critical mass: The role of Latino representation in the success of urban community college students. *Research in Higher Education, 48*(1), 73–91.

Haley, K. J., Jaeger, A. J., & Levin, J. S. (2014). The influence of cultural social identity on graduate student career choice. *Journal of College Student Development, 55*(2), 101–119.

Hamrick, K. (2019). *Women, minorities, and persons with disabilities in science and engineering*. Alexandria: National Science Foundation.

Harper, S. R. (2012). Race without racism: How higher education researchers minimize racist institutional norms. *The Review of Higher Education, 36*(1), 9–29.

Harris, J. C., & Patton Davis, L. (2019). Un/doing intersectionality through higher education research. *Journal of Higher Education, 90*(3), 347–372.

Hart, J. (2011). Non-tenure track women faculty: Opening the door. *Journal of the Professoriate, 4*(1), 96–124.

Hesli, V. L., & Lee, J. M. (2013). Job satisfaction in academia: Why are some faculty members happier than others? *PS – Political Science and Politics, 46*(2), 339–354.

Hirshfield, L. E., & Joseph, T. D. (2012). "We need a woman, we need a black woman": Gender, race, and identity taxation in the academy. *Gender and Education, 24*(2), 213–227.

Hughes, A. K., Homer, P. S., & Ortiz, D. V. (2012). Being the diversity hire: Negotiating identity in an academic job search. *Journal of Social Work Education, 48*(3), 595–612.

Hurtado, S. (2007). Linking diversity with the educational and civic missions of higher education. *The Review of Higher Education, 30*(2), 185–196.

Hurtado, S., Milem, J., Clayton-Pedersen, A., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education, 21*(3), 279–302.

Hurtado, S., Griffin, K. A., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education, 1*(4), 204–221.

Husbands Fealing, K. H., & Myers, S. (2012). Pathways v. pipelines to broadening participation in the STEM workforce. *Southern Economic Association Meetings*. Washington, DC. https://doi.org/10.2139/ssrn.2020504.

Isaac, C., Lee, B., & Carnes, M. (2009). Interventions that affect gender bias in hiring: A systematic review. *Academic Medicine, 84*(10), 1440–1446.

Jackson, J. (2008). Race segregation across the academic workforce: Exploring factors that may contribute to the representation of African American men. *American Behavioral Scientist, 51*(7), 1004–1029.

Jaeger, A. J., Haley, K. J., Ampaw, F. D., & Levin, J. S. (2013). Understanding the career choice for underrepresented minority doctoral students in science and engineering. *Journal of Women and Minorities in Science and Engineering, 19*(1), 1–16.

Jayakumar, U. M., Howard, T. C., Allen, W. R., & Han, J. C. (2009). Racial privilege in the professoriate: An exploration of campus climate, retention, and satisfaction. *The Journal of Higher Education, 80*(5), 538–563.

Johnson, A. C. (2007). Unintended consequences: How science professors discourage women of color. *Science Education, 91*(5), 805–821.

Johnson, W. B. (2016). *On being a mentor: A guide for higher education faculty* (2nd ed.). New York: Routledge.

Johnson, W. B., & Smith, D. (2016). *Athena rising: How and why men should mentor women*. New York: Bibiomotion.

Johnsrud, L. K., & Des Jarlais, C. D. (1994). Barriers to tenure for women and minorities. *The Review of Higher Education, 17*(4), 335–353.

Johnsrud, L. K., & Sadao, K. C. (1998). The common experience of "otherness": Ethnic and racial minority faculty. *The Review of Higher Education, 21*(4), 315–342.

Jones, S. R., & Abes, E. S. (2013). *Identity development of college students: Advancing frameworks for multiple dimensions of identity*. San Francisco: Jossey-Bass.

Jones, T. B., & Osborne-Lampkin, L. (2013). Black female faculty success and early career professional development. *Negro Educational Review, 64*(1–4), 59–75.

Joseph, T. D., & Hirshfield, L. E. (2011). "Why don't you get somebody new to do it?" Race and cultural taxation in the academy. *Ethnic and Racial Studies, 34*(1), 121–141.

Kania, J., & Kramer, M. (2011). Collective impact. *Stanford Social Innovation Review, Winter, 2011*, 36–41.

Kayes, P. E. (2006). New paradigms for diversifying faculty and staff in higher education: Uncovering cultural biases in the search and hiring process. *Multicultural Education, 14*(2), 65–69.

Kelly, B. T., & McCann, K. I. (2014). Women faculty of color: Stories behind the statistics. *Urban Review, 46*(4), 681–702.

Kelly, B. T., & Winkle-Wagner, R. (2017). Finding a voice in predominantly white institutions: A longitudinal study of Black women faculty members' journeys toward tenure. *Teachers College Record, 119*(June), 1–36.

Kelly, B. T., Gaston-Gayles, J. L., & Williams, C. D. (2017). Recruitment without retention: A critical case of Black faculty unrest. *The Journal of Negro Education, 86*(3), 305–317.

Kezar, A. (2008). Understanding leadership strategies for addressing the politics of diversity. *The Journal of Higher Education, 79*(4), 406–441.

Knowles, M. F., & Harleston, B. W. (1997). *Achieving diversity in the professoriate: Challenges and opportunities*. Washington, DC: American Council on Education.

Kulis, S., Sicotte, D., & Collins, S. (2002). More than a pipeline problem: Labor supply constraints and gender stratification across academic science disciplines. *Research in Higher Education, 43*(6), 657–691.

Laden, B. V., & Hagedorn, L. S. (2000). Job satisfaction among faculty of color in academe: Individual survivors or institutional transformers? In L.S. Hagerdorn (Ed.), *What contributes to job satisfaction among faculty and staff* (New directions for institutional research, Vol. 105, pp. 57–66). San Francisco: Jossey-Bass.

Laursen, S. L., & Austin, A. E. (2014). StratEGIG Toolkit: Strategies for Effecting Gender Equity and Institutional Change. Retrieved from www.strategictoolkit.org

Laursen, S. L., Austin, A. E., Soto, M., & Martinez, D. (2015). ADVANCing the agenda for gender equity. *Change: The Magazine of Higher Learning, 47*(4), 16–24.

Lee, J. (2012). Does universalism hold in academia ?: Focusing on women and racial minority faculty. *Journal of the Professoriate, 6*(1), 48–56.

Lester, J. (2015) Cultures of work–life balance in higher education: A case of fragmentation. *Journal of Diversity in Higher Education, 8*(3), 139–156.

Lewis, P., & Richmond, G. (2010). Women academic chemists. *Journal of Chemical Education, 87*(4), 381–385.

Li, D., & Koedel, C. (2017). Representation and salary gaps by race-ethnicity and gender at selective public universities. *Educational Researcher, 46*(7), 343–354.

Light, P. (1994). "Not like us": Removing the barriers to recruiting minority faculty. *Journal of Policy Analysis and Management, 13*(1), 164–180.

Lumpkin, J. R. (2007). Recruiting and retaining a diverse faculty. *Journal of Diversity Management JDM, 2*(1), 37–40.

MacLachlan, A. J. (2006). *Developing graduate students of color for the professoriate in science, technology, engineering, and mathematics (STEM)*. Berkeley: University of California Berkeley Center for Studies in Higher Education.

Malcom-Piqueux, L., Robinson, J., & Bensimon, E. M. (2017). Equity in higher education. In *Encyclopedia of international higher education systems and institutions* (pp. 1–7). Amsterdam: Springer.

Maranto, C. L., & Griffin, A. E. C. (2011). The antecedents of a "chilly climate" for women faculty in higher education. *Human Relations, 64*(2), 139–159.

March, P. (n.d.). *Broader impacts review criterion*. Alexandria: National Science Foundation. Retrieved from https://www.nsf.gov/pubs/2007/nsf07046/nsf07046.jsp.

Marschke, R., Laursen, S., Nielsen, J. M., & Rankin, P. (2007). Demographic inertia revisited: An immodest proposal to achieve equitable gender representation among faculty in higher education. *The Journal of Higher Education, 78*(1), 1–26.

Martinez, M. A., Chang, A., & Welton, A. D. (2017). Assistant professors of color confront the inequitable terrain of academia: A community cultural wealth perspective. *Race Ethnicity and Education, 20*(5), 696–710.

Marx, D. M., & Goff, P. A. (2005). Clearing the air: The effect of experimenter race on target's test performance and subjective experience. *British Journal of Social Psychology, 44*(4), 645–657.

Mason, M. A., & Goulden, M. (2002). Do babies matter? The effect of family formation on the lifelong careers of academic men and women. *Academe, 88*(6), 21–27.

Mason, M. A., & Goulden, M. (2004a). Do babies matter (Part II)?: Closing the baby gap. *Academe, 90*(6), 10–15.

Mason, M. A., & Goulden, M. (2004b). Marriage and baby blues: Redefining gender equity in the academy. *Annals of the American Academy of Political and Social Science, 596*(November), 86–103.

Mason, M. A., Goulden, M., & Frasch, K. (2009). Why graduate students reject the fast track. *Academe, 95*(1), 11–16.

McKay, N. Y. (1997). A troubled peace: Black women in the halls of the White academy. In L. Benjamin (Ed.), *Black women in the academy: Promises and perils* (pp. 11–22). Miami: University Press of Florida.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology, 27*(1), 415–444.

Medina, C., & Luna, G. (2000). Narratives from Latina professors in higher education. *Anthropology & Education Quarterly, 31*(1), 47–66.

Menges, R. J., & Exum, W. H. (1983). Barriers to the progress of women and minority faculty. *The Journal of Higher Education, 54*(2), 123–144.

Milem, J. F. (2001). Increasing diversity benefits: How campus climate and teaching methods affect student outcomes. In G. Orfield (Ed.), *Diversity challenged: Evidence on the impact of affirmative action* (pp. 233–249). Cambridge, MA: Harvard Education Publishing Group.

Milem, J. F., Chang, M. J., & antonio, a.l. (2005). *Making diversity work on campus: A research-based perspective*. Washington, DC: Association of American Colleges and Universities.

Misra, J., Lundquist, J. H., & Templer, A. (2012). Gender, work time, and care responsibilities among faculty. *Sociological Forum, 27*(2), 300–323.

Moss-Racusin, C. A., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2012). Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences, 109*(41), 16474–16479.

Muñoz, S. M., Basile, V., Gonzalez, J., Birmingham, D., Aragon, A., Jennings, L., & Gloeckner, G. (2017). (Counter)narratives and complexities: Critical perspectives from a university cluster hire focused on diversity, equity, and inclusion. *Journal of Critical Thought and Praxis, 6*(2), 1–21.

Museus, S., & Griffin, K. A. (2011). Mapping the margins in higher education: On the promise of intersectionality frameworks in research and discourse. In K.A. Griffin & S.D. Museus (Eds.), *Using mixed-methods to study intersectionality in higher education* (New directions in institutional research, Vol. 151, pp. 5–13). San Francisco: Jossey-Bass.

National Center for Education Statistics. (2010). Table 24.2. Total number, total percentage distribution, and percent female of graduate (postbaccalaureate) fall enrollment in degree-granting institutions, by race/ethnicity: Selected years, 1976–2008.

National Center for Education Statistics. (2017a). Table 315.10. Number of faculty in degree-granting postsecondary institutions, by employment status, sex, control, and level of institution: Selected years, fall 1970 through fall 2016.

National Center for Education Statistics. (2017b). Table 315.20. Full-time faculty in degree-granting postsecondary institutions, by race/ethnicity, sex, and academic rank: Fall 2013, fall 2015, and fall 2016.

National Science Foundation. (2014). Table 14. Doctoral recipients by sex and broad field of study. Selected years, 1983–2013.

National Science Foundation. (2015). Table 23. U.S. citizen and permanent resident doctorate recipients, but ethnicity, race, and broad field of study: Selected years, 1994–2014.

Nyquist, J. D., & Woodford, B. J. (2000). *Re-envisioning the Ph.D.: What concerns to we have?* Washington, DC: Pew Charitable Trusts.

O'Meara, K. A. (2010). Rewarding multiple forms of scholarship: Promotion and tenure. In H. E. Fitzgerald, C. Burack, & S. D. Seifer (Eds.), *Handbook of engaged scholarship: Contemporary landscapes, future directions: Vol. 1. Institutional change* (pp. 271–294). East Lansing: Michigan State University Press.

O'Meara, K., Kuvaeva, A., Nyunt, G., Waugaman, C., & Jackson, R. (2017). Asked more often: Gender differences in faculty workload in research universities and the work interactions that shape them. *American Educational Research Journal, 54*(6), 1154–1186.

Olsen, D., Maple, S. A., & Stage, F. K. (2006). Women and minority faculty job satisfaction: Professional role interests, professional satisfactions, and institutional fit. *The Journal of Higher Education, 66*(3), 267.

Ong, M., Wright, C., Espinosa, L., & Orfield, G. (2011). Inside the double bind: A synthesis of empirical research on undergraduate and graduate women of color in science, technology, engineering, and mathematics. *Harvard Educational Review, 81*(2), 172–209.

Padilla, A. M. (1994). Ethnic minority scholars, research, and mentoring: Current and future issues. *Educational Researcher, 23*(4), 24–27.

Patitu, C. L., & Hinton, K. G. (2003). The experiences of African American women faculty and administrators in higher education: Has anything changed? In M.F. Howard-Hamilton (Ed.), *Meeting the needs of African American women* (New directions for student services, Vol. 104, pp. 79–93). San Francisco: Jossey Bass.

Patton, L. D. (2009). My sister's keeper: A qualitative examination of mentoring experiences among African American women in graduate and professional schools. *The Journal of Higher Education, 80*(5), 510–537.

Patton, L. D., & Catching, C. (2009). "Teaching while Black": Narratives of African American student affairs faculty. *International Journal of Qualitative Studies in Education, 22*(6), 713–728.

Patton Davis, L. (2015, May). Why have the demands of Black students changed so little since the 1960s? *The Conversation.* Retrieved from https://theconversation.com/why-have-the-demands-of-black-students-changed-so-little-since-the-1960s-50695

Pena, E. V., Bensimon, E. M., & Colyar, J. (2006). Contextual problem defining: Learning to think and act for the standpoint of equity. *Liberal Education, Spring*, 48–55.

Perna, L. W. (2001). Sex and race differences in faculty tenure and promotion. *Research in Higher Education, 42*(5), 541–567.

Phillips, S. L., Dennison, S. T., & Davenport, M. A. (2016). High retention of minority and international faculty through a formal mentoring program. *To Improve the Academy, 35*(1), 153–179.

Piercy, F., Giddings, V., Allen, K., Dixon, B., Meszaros, P., & Joest, K. (2005). Improving campus climate to support faculty diversity and retention: A pilot program for new faculty. *Innovative Higher Education, 30*(1), 53–66.

Pittman, C. T. (2010). Race and gender oppression in the classroom: The experiences of women faculty of color with white male students. *Teaching Sociology, 38*(3), 183–196.

Pittman, C. T. (2012). Racial microaggressions: The narratives of African American faculty at a predominantly white university. *The Journal of Negro Education, 81*(1), 82.

Plata, M. (1996). Retaining ethnic minority faculty at institutions of higher education. *Journal of Instructional Psychology, 23*(3), 221.

Ponjuan, L., Conley, V. M., & Trower, C. (2011). Career stage differences in pre-tenure track faculty perceptions of professional and personal relationships with colleagues. *The Journal of Higher Education, 82*(3), 319–346.

Price, E. G., Gozu, A., Kern, D. E., Powe, N. R., Wand, G. S., Golden, S., & Cooper, L. A. (2005). The role of cultural diversity climate in recruitment, promotion, and retention of faculty in academic medicine. *Journal of General Internal Medicine, 20*(7), 565–571.

Reddick, R. J. (2011). Intersecting identities: Mentoring contributions and challenges for black faculty mentoring black undergraduates. *Mentoring and Tutoring: Partnership in Learning, 19*(3), 319–346.

Rice, R. E., Sorcinelli, M. D., & Austin, A. E. (2000). *Heeding new voices: Academic careers for a new generation*. Washington, DC: American Association for Higher Education.

Robinson, W. H., McGee, E. O., Bentley, L. C., Houston, S. L., & Botchway, P. K. (2016). Addressing negative racial and gendered experiences that discourage academic careers in engineering. *Computing in Science & Engineering, 18*(2), 29–39.

Roos, P. A., & Gatta, M. L. (2009). Gender (in)equity in the academy: Subtle mechanisms and the production of inequality. *Research in Social Stratification and Mobility, 27*(3), 177–200.

Ropers-Huilman, B. (2000). Aren't you satisfied yet? Women faculty members' interpretations of their academic work. In L.S. Hagedorn (Ed.), *What contributes to job satisfaction among faculty and staff* (New directions for institutional research, pp. 21–32) San Francisco: Jossey Bass.

Rosser, V. J. (2004). Faculty member's intent to leave: A national study on their worklife and satisfaction. *Research in Higher Education, 45*(3), 285–309.

Ryan, J., Pollock, K., & Antonelli, F. (2007). Teacher and administrator diversity in Canada: Leaky pipelines, bottlenecks and glass ceilings. *Annual Conference of the Society for the Study of Education, 3*, 1–25.

Saks, A. M., Uggerslev, K. L., & Fassina, N. E. (2007). Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. *Journal of Vocational Behavior, 70*(3), 413–446.

Sallee, M. W. (2011). Toward a theory of gendered socialization. *NASPA Journal About Women in Higher Education, 4*(2), 170–192.

Sallee, M., Ward, K., & Wolf-Wendel, L. (2016). Can anyone have it all? Gendered views on parenting and academic careers. *Innovative Higher Education, 41*(3), 187–202.

Sandler, B. R., & Hall, R. M. (1986). *The campus climate revisited: Chilly for women faculty, administrators, and graduate students.* Washington, DC: Association of American Colleges.

Sauermann, H., & Roach, M. (2012). Science PhD career preferences: Levels, changes, and advisor encouragement. *PLoS One, 7*(5), e36307.

Schlossberg, N. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling, 48*(December), 159–162.

Segrest Purkiss, S. L., Perrewé, P. L., Gillespie, T. L., Mayes, B. T., & Ferris, G. R. (2006). Implicit sources of bias in employment interview judgments and decisions. *Organizational Behavior and Human Decision Processes, 101*(2), 152–167.

Seifert, T. A., & Umbach, P. D. (2008). The effects of faculty demographic characteristics and disciplinary context on dimensions of job satisfaction. *Research in Higher Education, 49*(4), 357–381.

Sensoy, O., & DiAngelo, R. (2017). "We are all for diversity, but... ": How faculty hiring committees reproduce whiteness and practical suggestions for how they can change. *Harvard Educational Review, 87*(4), 557–581.

Settles, I. H., Cortina, L. M., Malley, J., & Stewart, A. J. (2006). The climate for women in academic science: The good, the bad, and the changeable. *Psychology of Women Quarterly, 30*(1), 47–58.

Settles, I. H., Cortina, L. M., Stewart, A. J., & Malley, J. (2007). Voice matters: Buffering the impact of a negative climate for women in science. *Psychology of Women Quarterly, 31*(3), 270–281.

Settles, I. H., Cortina, L. M., Buchanan, N. C. T., & Miner, K. N. (2013). Derogation, discrimination, and (dis)satisfaction with jobs in science: A gendered analysis. *Psychology of Women Quarterly, 37*(2), 179–191.

Shaw, A. K., & Stanton, D. E. (2012). Leaks in the pipeline: Separating demographic inertia from ongoing gender differences in academia. *Proceedings of the Royal Society B: Biological Sciences, 279*, 3736–3741.

Shollen, S. L., Bland, C. J., Finstad, D. A., & Taylor, A. L. (2009). Organizational climate and family life: How these factors affect the status of women faculty at one medical school. *Academic Medicine, 84*(1), 87–94.

Smith, D. G. (2000). How to diversify the faculty. *Academe, 86*(5), 48–52.

Smith, D. G., Turner, C. S. V., Osei-Kofi, N., & Richards, S. (2004). Interrupting the usual: Successful strategies for hiring diverse faculty. *The Journal of Higher Education, 75*(2), 133–160.

Smith, J. L., Handley, I. M., Zale, A. V., Rushing, S., & Potvin, M. A. (2015). Now hiring! Empirically testing a three-step intervention to increase faculty gender diversity in STEM. *Bioscience, 65*(11), 1084–1087.

Sorcinelli, M. D. (2000). Principles of good practice: Supporting early-career faculty. *Effective Practices for Academic Leaders, 1*(11), 1–16.

Sorcinelli, M. D., & Austin, A. E. (2006). Developing faculty for new roles and changing expectations. *Effective Practices for Academic Leaders, 1*(11), 1–16.

Sorcinelli, M. D. (2007). Faculty development: The challenge going forward. *Peer Review, 9*(4), 4–8.

Stack, S. (2004). Gender, children and research. *Research in Higher Education, 45*(8), 891–920.

Stanley, C. A. (2006). Coloring the academic landscape: Faculty of color breaking the silence in predominantly white colleges and universities. *American Educational Research Journal, 43*(4), 701–736.

Stephan, P. E. (2012). *How economics shapes science*. Cambridge, MA: Harvard University Press.

Stewart, D.L. (2017). Colleges need a language shift, but not the one you think (essay). *Inside Higher Education.* Retrieved 27 Aug 2018, from https://www.insidehighered.com/views/2017/03/30/colleges-need-language-shift-not-one-you-think-essay

Stewart, A. J., Malley, J. E., & Herzog, K. A. (2016). Increasing the representation of women faculty in STEM departments: What makes a difference? *Journal of Women and Minorities in Science and Engineering, 22*(1), 23–47.

Thomas, G. D., & Hollenshead, C. (2001). Resisting from the margins: The coping strategies of Black women and other women of color faculty members at a research university. *The Journal of Negro Education, 70*(3), 166–175.

Thompson, C. Q. (2008). Recruitment, retention, and mentoring faculty of color: The chronicle continues. In N. Chism (Ed.), *Faculty at the margins* (New directions for higher education, Vol. 143, pp. 47–54). San Francisco: Jossey Bass.

Thompson, C. J., & Dey, E. L. (1998). Pushed to the margins: Sources of stress for African American college and university faculty. *The Journal of Higher Education, 69*(3), 324–345.

Tierney, W. G., & Bensimon, E. M. (1996). *Promotion and tenure: Community and socialization in academe*. Albany: State University of New York Press.

Tierney, W. G., & Sallee, M. W. (2010). Do organizational structures and strategies increase faculty diversity? A cultural analysis. *American Academic, 4*, 159–184.

Toutkoushian, R. K. (1999). The status of academic women in the 1990s: No longer outsiders, but not yet equals. *The Quarterly Review of Economics and Finance, 39*(5), 679–698.

Trower, C., & Chait, R. P. (2002, March–April). Faculty diversity: Too little for too long. *Harvard Magazine*, 33–37, 98.

Tuitt, F. A., Sagaria, M. A. D., & Turner, C. S. V. (2007). Signals and strategies in hiring faculty of color. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. XXII, pp. 497–535). Cham: Springer.

Tuitt, F., Hanna, M., Martinez, L. M., Salazar, C., & Griffin, R. (2009). Teaching in the line of fire: Faculty of color in the academy. *Thought and Action, 25*, 65–74.

Turner, C. S. V. (2002a). *Diversifying the faculty: A guidebook for search committees*. Washington, DC: American Association of Colleges and Universities.

Turner, C. S. V. (2002b). Women of color in academe: Living with multiple marginality. *The Journal of Higher Education, 73*(1), 74–93.

Turner, C. S. V. (2003). Incorporation and marginalization in the academy: From border toward center for faculty of color. *Journal of Black Studies, 34*(1), 112–125.

Turner, C. S. V., & Myers, S. L. (2000). *Faculty of color in academe: Bittersweet success*. Boston: Allyn and Bacon.

Turner, C. S. V., Myers, S. L., & Creswell, J. W. (1999). Exploring underrepresentation: The case of faculty of color in the midwest. *The Journal of Higher Education, 70*(1), 27–59.

Turner, C. S. V., González, J. C., & Wood, J. L. (2008). Faculty of color in academe: What 20 years of literature tells us. *Journal of Diversity in Higher Education, 1*(3), 139–168.

Turner, C. S. V., González, J. C., & Wong, K. (2011). Faculty women of color: The critical nexus of race and gender. *Journal of Diversity in Higher Education, 4*(4), 199–211.

Umbach, P. D. (2006). The contribution of faculty of color to undergraduate education. *Research in Higher Education, 47*(3), 317–345.

Urrieta, L., & Méndez Benavídez, L. R. (2007). Community commitment and activist scholarship: Chicana/o professors and the practice of consciousness. *Journal of Hispanic Higher Education, 6*(3), 222–236.

Van Anders, S. M. (2004). Why the academic pipeline leaks: Fewer men than women perceive barriers to becoming professors. *Sex Roles, 51*(9–10), 511–521.

Ward, K., & Wolf-Wendel, L. (2004). Academic motherhood: Managing complex roles in research universities. *The Review of Higher of Higher Education, 27*(2), 233–257.

Ward, K., & Wolf-Wendel, L. E. (2005). Work and family perspectives from research university faculty. In J.W. Curtis (Ed.), *The challenge of balancing faculty careers and faculty work* (New directions for higher education, Vol. 130, pp. 67–80). San Francisco: Jossey Bass.

Whittaker, J. A., Montgomery, B. L., & Martinez Acosta, V. G. (2015). Retention of underrepresented minority faculty: Strategic initiatives for institutional value proposition based on perspectives from a range of academic institutions. *Journal of Undergraduate Neuroscience Education, 13*(3), A136–A145.

Williams, S. N., Thakore, B. K., & McGee, R. (2016). Coaching to augment mentoring to achieve faculty diversity: A randomized controlled trial. *Academic medicine: Journal of the Association of American Medical Colleges, 91*(8), 1128–1135.

Winkler, J. A. (2000). Faculty reappointment, tenure, and promotion: Barriers for women. *The Professional Geographer, 52*(4), 737–750.

Winslow, S. (2010). Gender inequality and time allocations among academic faculty. *Gender and Society, 24*(6), 769–793.

Wolf-Wendel, L. E., Twombly, S. B., & Rice, S. (2000). Dual-career couples: Keeping them together. *The Journal of Higher Education, 71*(3), 291–321.

Zambrana, R. E., Ray, R., Espino, M. M., Castro, C., Douthirt Cohen, B., & Eliason, J. (2015). "Don't leave us behind": The importance of mentoring for underrepresented minority faculty. *American Educational Research Journal, 52*(1), 40–72. https://doi.org/10.3102/0002831214563063.

Zinn, M. B., & Zambrana, R. E. (2019). Chicanas/Latinas advance intersectional thought and practice. *Gender & Society.* https://doi.org/10.1177/0891243219853753.

Kimberly A. Griffin   is a faculty member at the University of Maryland and the Editor of the *Journal of Diversity in Higher Education*. Prior to becoming a professor, she served as a higher education administrator and student affairs professional, working in undergraduate and graduate admissions, promoting diverse and hospitable learning environments, and new student orientation. Professor Griffin is a recognized scholar in the area of higher education access and equity research. Throughout her career, she has contributed to multiple projects that examine the diverse experiences of Black students and faculty, the impact of campus climate, and how mentoring relationships influence student and faculty success. Much of her current work focuses on graduate training in STEM and increasing diversity and inclusion in the professoriate.