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 institu-tional 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
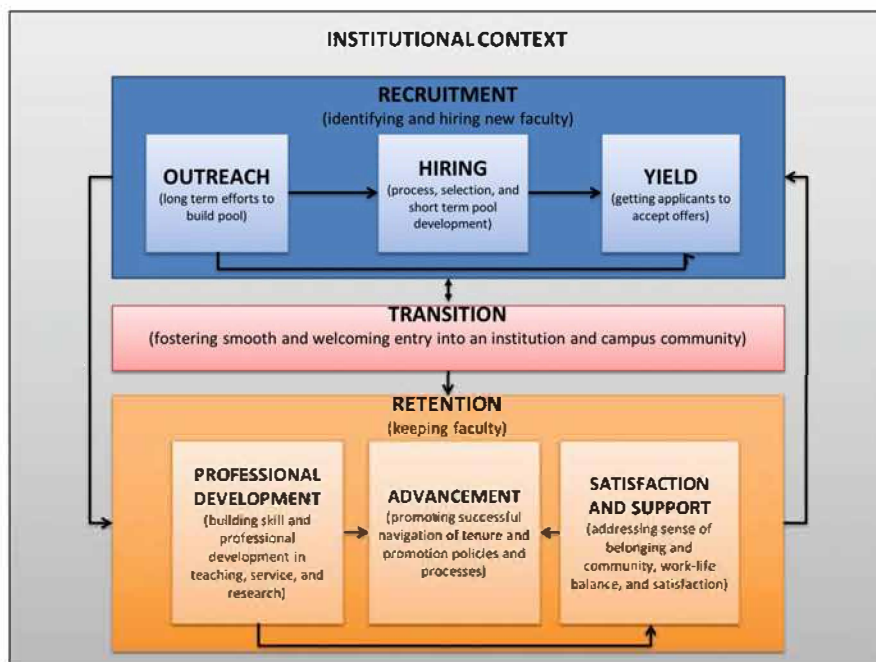
Fig. 1 The Institutional Model of Faculty Diversity

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.