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There is now consensus on good/best practices to conduct faculty searches that attract and result in hiring diverse populations. In addition, the rates of terminal degree attainment among women and racial/ethnic minorities as defined by the United States government continue to grow, increasing the pool of potential future faculty applicants. Yet these historically underserved populations within higher education continue to lack representation within science and engineering (S&E) faculty ranks. White women and Black, Indigenous, and people of color (BIPOC) are two groups in particular who supposedly benefit from long-standing, federal-level anti-discrimination laws, yet have gained little ground in representation on research-university faculty even as the student bodies at those same institutions have diversified significantly. Reasons for this gap include hiring criteria that may reduce, implicitly or explicitly, the likelihood that outstanding new academics are offered positions on Science, Technology, Engineering, or Mathematics (STEM) faculties. In fact, representational gaps may potentially increase based on these changing demographics of the United States and the world over the next few decades. The National Science Foundation-funded ADVANCE program has led to the broad dissemination of evidence-based policies and practices designed to expand the representation of historically marginalized and underrepresented groups for more than two decades. On top of these longstanding efforts, this year's searches were unique in that they occurred against a backdrop of a global pandemic and intense focus on race in our nation after George Floyd was killed by a police officer. In response to the growing Black Lives Matter movement, many institutions across the nation committed to hiring more BIPOC faculty or those whose scholarship had a focus on race.

This paper addresses findings from the first phase of a comparative case study of the processes, procedures, practices, and outcomes of the diversity, equity, and inclusion (DEI) focused faculty cluster hires conducted at two colleges of engineering and applied science during the 2020-2021 academic year. The study will illuminate similarities and differences based on the institutional contexts of the two doctoral, research-intensive predominantly white institutions (PWIs): one, a private not-for-profit institution with a STEM-focused graduate program and the other, a public, comprehensive institution. Both searches used the publicly-available University of California Berkeley diversity-based cluster hire search materials along with their own ADVANCE/Provost Office guidances implemented over the last few years as the basis for developing the processes, procedures, and practices used within their respective college-wide faculty searches. In each case, the cluster hires were novel in that they were the first of their kind in the college and the university, and they were initiated and primarily controlled by a college-level search committee for open discipline, open-rank faculty positions. Applicants were reviewed and candidates forwarded within the search process irrespective of potential department homes based on their demonstrated experience, knowledge, and skills to incorporate diversity, equity, and inclusion concepts into their primary duties of teaching and research in a STEM discipline.

The goal of this work is to identify institutional practices that can be further adapted by other institutions to continue movement towards a shared goal of broadening the profiles of the individuals who are offered tenure-track faculty positions in STEM departments nationwide. This portion of the larger study includes a document and process analysis of materials developed during the various phases of the search process. Each case will highlight the steps used to create a welcoming job advertisement,

recruit applicants via broad placement of advertising and supplemented by personal contacts, evaluate portfolios submitted via newly created rubrics, negotiate selection of candidates to be interviewed, and offering positions to those candidates who best demonstrated their ability to meet the intentions of the search. This process required various degrees of organizational buy-in at both macro-scales (Provost, Deans, Department Chairs) and micro-scales (department faculty, staff, students, and even inter-departmental work groups). This paper will highlight the discussions, negotiations, and trade-offs made to ensure that these led to outcomes that benefited the colleges as a whole. We will also discuss pitfalls that each institution faced during their respective recruitment and will suggest how others may learn from those challenges.

The findings of this study will add to the growing pool of literature about effective methods of recruiting faculty who understand how to engage today's open-ended and socially-driven challenges alongside the students who aspire to become scientists and engineers, both now and for the upcoming decades. It will also discuss the institutional changes that need to be made prior to or alongside engaging in this kind of search to welcome the broader pool of academics into systems that historically were not designed for them. We will include examples of how the two institutions worked to ensure that the faculty hired through these searches were not expected to be responsible for enacting that systemic change. We will also discuss communication best practices to ensure that the faculty hired through these searches are not stigmatized or tagged as "diversity hires," rather they are celebrated as individuals who will add breadth and depth to the core research and teaching missions of their home departments, schools or colleges, institutions, and the greater academic community.