1111 Franklin Street
Oakland, CA 94607-5200
Phone: (510) 987-9074
http://www.ucop.edu

November 18, 2019

The Honorable Holly J. Mitchell
Chair, Joint Legislative Budget Committee
1020 N Street, Room 553
Sacramento, California 95814

Dear Senator Mitchell:

Pursuant to Item 6440-001-0001 of the 2018 Budget Act, Provision 2.7(f)(2), enclosed is the University of California's final report to the Legislature on *2018-19 Use of One-time Funds to Support Best Practices in Equal Employment Opportunity in Faculty Employment*.

If you have any questions regarding this report, Associate Vice President David Alcocer would be pleased to speak with you. David can be reached by telephone at (510) 987-9113, or by e-mail at David.Alcocer@ucop.edu.

Yours very truly,

Janet Napolitano
President

Enclosure

cc: Senate Budget and Fiscal Review
        The Honorable Richard D. Roth, Chair
        Senate Budget and Fiscal Review Subcommittee #1
            (Attn: Ms. Anita Lee)
             (Attn: Ms. Jean-Marie McKinney)
        The Honorable Kevin McCarty, Chair
        Assembly Budget Subcommittee #2
            (Attn: Mr. Mark Martin)
            (Attn: Ms. Carolyn Nealon)
        Ms. Jennifer Troia, Joint Legislative Budget Committee
        Ms. Erika Contreras, Secretary of the Senate
        Ms. Tina McGee, Legislative Analyst's Office

Ms. Amy Leach, Office of the Chief Clerk of the Assembly
Mr. E. Dotson Wilson, Chief Clerk of the Assembly
Mr. Jeff Bell, Department of Finance
Mr. Chris Ferguson, Department of Finance
Ms. Rebecca Kirk, Department of Finance
Ms. Tina McGee, Legislative Analyst's Office
Mr. Gabriel Petek, Legislative Analyst Office
Ms. Jennifer Pacella, Legislative Analyst Office
Mr. Jason Constantouros, Legislative Analyst Office
Provost and Executive Vice President Michael Brown
Vice Provost Susan Carlson
Interim Executive Vice President and Chief Financial Officer Paul Jenny
Senior Vice President Claire Holmes
Vice Provost and Chief Outreach Officer Yvette Gullatt
Associate Vice Provost Elizabeth Halimah
Associate Vice President David Alcocer
Associate Vice President and Director Kieran Flaherty
Chief of Staff to the Chief Financial Officer Brad Werdick
Manager Jennifer Brice

Final Report on the 2018-19 Use of One-time Funds to Support Best Practices in Equal Employment Opportunity in Faculty Employment

TABLE OF CONTENTS

Report on the Use of One-time Funds to Support Best Practices in Equal Employment Opportunity in Faculty Employment

The University of California (UC) provides the following report in response to item 6440-001-0001 of the 2018 Budget Act, Provision 2.7(f)(2) (SB 840, Chapter 29, Statutes of 2018), which states:

> "Of the funds appropriated in this item, the following amounts are provided on a one-time basis: (1) $2,000,000 shall be used for the creation or expansion of equal employment opportunity programs. Funding shall be distributed to selected departments on campuses seeking to create or expand equal employment opportunity programs. (2) The University of California shall submit, no later than December 1, 2018, a report to the Legislature, in conformity with Section 9795 of the Government Code, that describes the uses of these funds and indicates the number of ladder-rank faculty at the university, disaggregated by race, ethnicity, and gender."

This final report is a follow-up to the preliminary report submitted by President Napolitano on November 7, 2018 which provided the latest systemwide data on UC's ladder-rank faculty, disaggregated by race, ethnicity, and gender. The following is the link to the preliminary report: https://www.ucop.edu/faculty-diversity/_files/reports/adv-fac-div-2018-19-prelim-leg-report.pdf.

I.   Executive Summary

The 2018 California Budget Act provided $2 million to the University of California (UC) on a one-time basis to support equal opportunity in faculty employment. This funding was UC's third consecutive one-time appropriation of $2 million from the State for this purpose. The University has used these funds to establish the Advancing Faculty Diversity (AFD) program, which supports new interventions in UC faculty recruitment processes. With this most recent appropriation, UC supported new faculty diversity "pilot" programs at four campuses, which supplemented but did not supplant existing programs. Taking a scientific, evidence-based approach, the AFD program used the new funds to identify best practices in the recruitment of a diverse faculty by concentrating funds on a few targeted interventions. These targeted interventions at four campuses led to significant increases in the diversity of finalists and hires.

In the 2018-19 fiscal year, there was a substantial increase in the percentage of underrepresented minority (URM) and female faculty as finalists and of those hired in all four pilot units. The four pilot units averaged a 38.8% increase in URM faculty hired and 30.7% increase in female faculty hired compared to the hiring over the prior two years. In contrast, the comparator units, which did not receive any additional funding, averaged a 13.3% increase in URM faculty hired and a 6.2% increase in female faculty hired compared to the hiring over the prior two years. All four pilot units hired new faculty who have made valuable contributions to diversity, which will improve the campus climate for women and URMs and promote equal

opportunity for all members of the academic community. It is clear that the infusion of funds into the pilot units made a difference in faculty diversity relative to their past performance and to the comparator units.

Instead of distributing funds across all campuses and diluting the impact of the supplemental funding, UC decided, as it did with the two prior years of funding from the State[1], to focus on four units where a substantial influx of resources could have an immediate impact through an intensified approach to hiring diverse faculty. In order to gauge the success of the interventions in the pilot units, comparator units that had not received any supplemental funding were designated and monitored alongside the pilot units throughout the year. In addition, the 2018-19 hiring results in each pilot unit were compared with the hiring results from the prior two years in the pilot unit.

In addition to the one-time funding from the State, in fiscal year 2018-19, President Napolitano allocated approximately $500,000 of UC funds to support the AFD program by funding campus proposals focused on faculty retention efforts, including programs targeted at department or school climate. Although this report will not address the specifics of the President's retention/climate program, it is important to note that this program supplements and strengthens the State-supported equal employment opportunity recruitment program.

After a competition among the campuses, UC selected four units to serve as pilots in academic year 2018-19: UC Berkeley, Life Sciences; UC Davis, eight schools and colleges; UC Merced, Schools of Natural Sciences and Engineering; and UC Riverside, Department of Mathematics. All four pilot units proposed innovative interventions to advance faculty diversity and presented evidence of the following:

- innovation, commitment, and progress in meeting faculty diversity goals;
- the importance of a diverse faculty to UC's diverse student body;
- strong support for diversity from leadership and evidence of previous efforts to build an understanding of climate and inclusion issues;
- campus-wide support for efforts to recruit and retain diverse faculty and to build a more inclusive campus climate;
- sufficient hiring for the year, such that their enhanced recruitment efforts were more likely to produce a diverse set of new faculty members;
- the use of cross-unit committees and advisory groups to assess candidates, in an effort to avoid possible bias in evaluation; and
- adaptation of successful interventions from the 2016-17 and 2017-18 equal employment opportunity funds from the State.

The pilot units utilized the one-time funds for the programs below:

UC Berkeley: Initiative to Advance Faculty Diversity, Equity and Inclusion in the Life Sciences ($500K)

---

[1] Fiscal years 2016-17 and 2017-18 are referenced as 2016-18 in this report.

With strong commitment from leadership, this unique program was a cross-divisional collaboration to advance faculty diversity in the life sciences. This program centered on four broad categories: building a critical mass; strengthening applicant pools; improving candidate evaluation processes; and institutional change. The interventions included the allocation of Full time Equivalent (FTE) faculty members (FTE) across the life sciences; a centralized cross-department review committee; a "Life Sciences Symposium on Integrating Research with Education and Outreach" to focus on successful strategies to forge a synergy between research and education, and other efforts to advance diversity, equity, and inclusion; faculty search ads; development of a database of promising candidates; rubrics for evaluating contributions to diversity statements; search committee training; valuing of contributions to diversity, equity, and inclusion alongside contributions in research, teaching, and service; Council of Life Sciences Faculty to provide ongoing program development; a diversity, equity, and inclusion retreat; and a cohort mentoring program.

UC Davis: A UC Davis Pilot Study in Centrally Co-led Open Searches to Prioritize Academic and Educational Excellence ($422,347)
This program centered on taking proven best practices for a diverse and inclusive recruitment process, and directly applying them to "open searches" by coordinating them through the central Office of Academic Affairs, in collaboration with the deans' offices of participating colleges and schools. Open searches were college- or school-wide, without specification of a particular discipline or department, provided that an applicant's area of expertise fell within a discipline embodied in the academic unit. The interventions were strategically utilized at the college level or school level. Interventions included open searches to obtain highly diverse pools of applicants by leveraging diversity hiring incentives and investment through the President's Postdoctoral Fellowship Program (PPFP)/Chancellor's Postdoctoral Fellowship Program (CPFP), the Center for the Advancement of Multicultural Perspectives on Science (CAMPOS), the Impact Recruitment Initiative (IRI), and the Mentored Clinical Research Training Program; requiring that successful candidates have demonstrated significant commitments to diversity, equity, and/or inclusion appropriate for their career stage; search committee training; broad "cluster" advertising; utilization of data-driven recommendations; targeted outreach; a new program to provide faculty with dual career support and family integration resources; a mentoring committee; enrollment in the National Center for Faculty Development and Diversity; assignment of a faculty peer mentor; the development of a website with a Frequently Asked Questions section; and graduate student support. Senior leadership and deans expressed strong support for the program.

UC Merced: Pathways to the Professoriate: Advancing Faculty Diversity in the Schools of Natural Sciences and Engineering at UC Merced ($498,052)
This program centered on: 1) additional resources for recruiting and hiring diverse faculty, including new incentives associated with the Provost's STEM Hiring Initiative, and 2) developing a network of leaders, the Leadership Council, responsible for overseeing the hiring process and advising executive administration to transform the recruitment and hiring process through consideration of the larger goals of diversity, inclusion, and equity.

The interventions leveraged PPFP and CPFP; the faculty equity advisor program; best practices in recruitment and hiring, including implicit bias training and diversity statements; the National Center for Faculty Diversity and Development Program; and mentoring programs. The pilot also enhanced mentoring and faculty success training for new hires, including teaching mentoring. Leadership took an active role in recruitment and hiring through the formation of a Leadership Council.

UC Riverside: Advancing Mathematics Faculty Diversity at the University of California, Riverside ($500K)
This program was built on successful aspects of a previous UCR Advancing Faculty Diversity program and enhanced the prior program in substantial ways. As a pilot unit in the first year of the State's funding of this equal employment opportunity program, UCR initiated a highly successful Provost's Diversity in Engineering Fellows program. The current interventions in the mathematics department were built on the first year program elements of attractive, targeted advertisements; use of the statement of contributions to diversity as an initial rather than later selection criterion; a boost to the candidate's research career through an additional year of funded research training anywhere in the country while having a tenure track position secured; and support and mentoring throughout from their UCR base. The mathematics program also collected and reviewed applications through UC Recruit rather than MathJobs (an application system sponsored by the American Mathematical Society), which enhanced the program's ability to monitor and boost development of a diverse pool of applicants; hosted a symposium early in the fall quarter to showcase both the diversity of the campus and the quality of the mathematics department to attract more applications from prospective URM faculty; and implemented specific mentoring to develop skills for teaching mathematics to first generation students. There was also a strong commitment by department leadership to support this program.

The final results of the pilot programs suggest that the following may be best practices that UC can continue to test with the additional fourth year of funding allocated by the state:
- **additional accountability** on campus as well as at the systemwide level (through the Program Advisory Group, which met monthly);
- **campus commitment of funding**, for either one-time uses or permanent full-time equivalent (FTE) faculty;
- **enhanced outreach** through personal contacts, use of databases, and targeted ads;
- associated use of **PPFP/CPFP recruitments**;
- **targeting potential faculty slightly earlier** in their careers through support for post-doctoral work;
- **strong leadership and sustained and strategic involvement** from the unit leaders, including department chairs, deans, vice provosts, and vice chancellors;
- **rubrics/criteria** to guide decision-making by faculty members;
- **search committee training** to implement consistency in evaluations and understand implicit bias;

- **standardizing job advertisement text** to emphasize the importance of diversity, equity, and inclusion, in order to increase diversity in applicant pools;
- strengthening the role of **faculty equity advisors** during the recruitment process;
- use of **"contributions to diversity statements"** in candidate evaluation; and
- **significant revisions to the involvement of hiring committees**, including centralized review committees.

II.   The University of California's Commitment to Faculty Diversity

The University of California is committed to increasing the diversity of its faculty. A diverse faculty brings a wide range of interests, life experiences, and worldviews that enhance UC's teaching, research, and public service mission. A diverse faculty reflects UC's commitment to equality of opportunity and excellence, ensuring that UC can serve the needs of our increasingly diverse society and fully utilize the intellectual resources embedded in that diversity.

Proposition 209, the 1996 voter initiative codified as Article I, Section 31 of the California Constitution, prohibits universities in California from discriminating against or "granting preferential treatment" to any individual or group on the basis of race, sex, color, ethnicity or national origin. In accordance with Proposition 209, UC may not, and does not, consider an individual's race or gender in the selection of individuals for faculty appointment. While Proposition 209 eliminated some of the tools that UC had previously employed to achieve diversity in its faculty, there are many steps that UC has taken to maintain and enhance diversity and equal opportunity in faculty employment in full compliance with current law.

UC is particularly focused on increasing the presence of underrepresented minorities (African American, Chicano (a)/Latino (a)/Hispanic, and Native American) and women in its faculty. Through its policies, UC has adopted a strategy for recruiting and retaining a diverse faculty by recognizing and rewarding faculty contributions to diversity and equal opportunity through their teaching, research, outreach, and service. An excerpt from the Academic Personnel Manual (APM) states:

> The University of California is committed to excellence and equity in every facet of its mission. Contributions in all areas of faculty achievement that promote equal opportunity and diversity should be given due recognition in the academic personnel process, and they should be evaluated and credited in the same way as other faculty achievements. These contributions to diversity and equal opportunity can take a variety of forms including efforts to advance equitable access to education, public service that addresses the needs of California's diverse population, or research in a scholar's area of expertise that highlights inequalities. Mentoring and advising of students and faculty members, particularly from underrepresented and underserved populations, should be

given due recognition in the teaching or service categories of the academic personnel process.[2]

Valuing faculty contributions to diversity improves the campus climate for all, especially women and underrepresented minorities; best serves the needs of our diverse student body; and promotes equal opportunity for all members of the academic community.

Ongoing efforts to diversify the faculty are in place at all campuses and at the UC Office of the President (UCOP); these efforts continued in parallel with the one-time funding of $2 million from the State. As referenced above, in 2018-19, President Napolitano implemented a faculty retention/climate program to supplement and strengthen the State-funded recruitment program. As another example, the President's Postdoctoral Fellowship Program (PPFP) offers postdoctoral research fellowships, faculty mentoring, and eligibility for a faculty hiring incentive to outstanding scholars in all fields whose research, teaching, and service will contribute to diversity and equal opportunity. Indeed, from academic year 2003-04 through academic year 2019-20, 226 PPFP fellows have been hired into tenure-track positions at University of California campuses.

All ten campuses commit funding and personnel to support best practices in recruiting and retaining a diverse faculty, including monitoring recruitment efforts; implicit bias and climate enhancement training; and use of a common online recruitment system (UC Recruit) that establishes systemwide recruitment processes and facilitates data collection about the diversity of candidate pools and finalist lists. Each campus has also built its own set of recruitment and retention practices to fit campus culture and needs. Such practices include use of equity advisors in departments and/or schools; requiring "contributions to diversity" statements from job candidates; designating endowed chairs to support diverse faculty; building robust mentoring programs; increasing outreach to build diverse candidate pools; establishing campus advisory councils; using exit survey data to better understand why faculty leave and the cost to the campus with respect to faculty diversity; using benchmarking data to track and report progress on faculty diversity; advertising open faculty positions in a way that highlights support of diverse communities; and establishing campus-wide and department-level strategic action plans.[3]

III.   **The University of California's Approach to the One-time Allocation of $2 Million to Support Equal Employment Opportunity in Faculty Employment**

---

[2] APM - 210-1-d: http://ucop.edu/academic-personnel-programs/_files/apm/apm-210.pdf

[3] More in-depth information can be found on UCOP's website dedicated to faculty diversity (http://ucop.edu/faculty-diversity/index.html); the website includes a description of some of the systemwide and campus diversity efforts currently underway. Additional information is also included in the September 2018 Board of Regents item on Faculty Diversity: http://regents.universityofcalifornia.edu/regmeet/sept18/a2.pdf and in the May 2019 Board of Regents item on UC Health Sciences Diversity Trends and Outcomes: https://regents.universityofcalifornia.edu/regmeet/may19/a5.pdf.

In an effort to make the best possible use of the one-time allocation of $2 million toward supporting equal opportunity in faculty employment, UC proposed that the $2 million allocation be used to support new faculty diversity efforts that supplement, but do not supplant, other efforts already underway. UC suggested a scientific, evidence-based approach to identify best practices from pilot units that can be expanded in coming years to other units, and would maximize the impact of future funding.

After consultation with stakeholders, UC launched its plan to select campus units to act as pilot sites during the course of the 2018-19 faculty recruitment cycle.[4] This has allowed UC to make targeted expenditures on pilot units that: 1) need to make progress in faculty diversity; 2) have demonstrated a commitment to improve faculty diversity; and 3) have the capacity to develop practices that can be adopted more broadly with sufficient future funding.

Selection of Pilot Units

On July 12, 2018, the UC Provost invited each campus to propose an intensified approach to hiring a more diverse faculty within a selected unit. Review criteria were established and communicated to campuses prior to submission of the proposals. The Provost also asked for particular attention to strategies that would help UC make progress in the hiring of African American, Latino (a)/Chicano (a)/Hispanic, and Native American faculty members.

Campus proposals were innovative and illustrative of how much the campuses are already engaged in this issue. The strongest proposals came from units that had demonstrated some prior success in their diversity efforts (including faculty diversity efforts) and that displayed a deep understanding of and support for increasing faculty diversity. They also specified how a sizable investment could facilitate more diverse hiring during the 2018-19 academic year.

Based on input from a review committee of faculty and academic administrators, the President's Office selected four campus units to receive the bulk of the funding as pilot units: UC Berkeley, Life Sciences; UC Davis, eight schools and colleges; UC Merced, Schools of Natural Sciences and Engineering; and UC Riverside, Department of Mathematics. The four pilot programs shared the following qualities:

- they acknowledged the importance of a diverse faculty to UC's diverse student body;
- there was strong support for diversity from campus leadership/Deans/Chairs and evidence of previous efforts to build an understanding of climate and inclusion issues;
- campus-wide support for efforts to recruit and retain diverse faculty and to build a more inclusive campus climate were evident; and

---

[4] On November 7, 2018, UC submitted to the Director of Finance and the Legislature, in conformity with Section 9795 of the Government Code, a report that included the number of ladder-rank faculty, disaggregated by race, ethnicity, and gender, and provided a description of the specific uses of these funds to support equal opportunity in faculty employment.

- each unit was planning sufficient hiring for the year, so their enhanced recruitment efforts were more likely to produce a diverse set of new faculty members.

Development of Evaluative Procedures and Input from Campus Leadership

Systemwide Program Advisory Group
The Office of the President convened a systemwide Program Advisory Group to help guide and monitor the four pilot programs during 2018-19. The advisory group met monthly and included representatives appointed by the Chancellor and Executive Vice Chancellor/Provost on each campus as well as Academic Senate representatives. The advisory group was instrumental in informing the collection and analysis of data and metrics. The group also advised on the development of reports on the pilot programs and shared in the work of designing the best ways to ensure the pilot programs could advance future efforts to diversify UC faculty.

Selection of Comparator Units
Three of the four pilot units were assigned another campus comparator unit, so that the efforts and hiring in the funded units could be compared to the efforts and hiring in the comparator units that did not receive supplemental funding. Because of the design and complexity of the program, UC Davis's pilot units' (Pilot B) comparators were their own participating campus colleges and schools (Comparator B). Of the $2 million allocation, $79,601 was distributed across three comparator units and to the UC Recruit data team located at UC Irvine to support data collection and reporting efforts. The UC Recruit team provided data support for the program and helped identify which recruitment practices correlated with more diverse hiring.

UC campus comparator units were invited to take part based on similarities in size, location, program, and ranking. See Table 1 below.

Table 1. Comparator Units

Pilot school/college	Comparator school/college/department	Rationale
UC Berkeley, Life Sciences (Pilot A)	Comparator A	Similar size, productivity, and location
UC Merced, Schools of Natural Sciences and Engineering (Pilot C)	Comparator C	Similar educational programs
UC Riverside, Department of Mathematics (Pilot D)	Comparator D	Similar educational programs

There was substantial effort required by the comparator units to provide information on their student demographic and faculty hiring data and the program funds supported appropriate

part-time staff time. In partnership with the UC Recruit team, the Office of the President put together a profile of the comparator units, including data on hiring.

Data Collection
Each pilot unit's 2018-19 recruitment and hiring data were compared with two sets of data 1) The current year's hiring results in each pilot unit were compared with the hiring results from the prior two years in the pilot unit. 2) The 2018-19 hiring results in three of the pilot units were compared to the 2018-19 hiring results in the other UC campus comparator units. Due to the design and complexity in the recruitments at the UC Davis campus-level pilot unit, UC Davis did not have another campus comparator unit. Instead, the recruitments in the participating schools were compared to other searches in the colleges and schools that were not a part of the program. Collected data were used to determine whether the interventions supported by the additional State funds had an impact on the diversity of faculty recruited in the pilot units in 2018-19.

To assess whether the infusion of funds into the pilot units makes a difference in faculty diversity relative to the comparator units (who received no additional funding for their recruitment efforts) and relative to the pilot units' prior years' efforts, the pilot units, comparator units, and the UC Recruit team collected the following data for two recruitment cycles, from July 2016 through June 2018: 1) recruitment efforts and 2) pilot-specific data.

1. **Recruitment efforts.** Using information accessible in UC Recruit[5], the Survey of Earned Doctorates (SED)[6], the American Medical Association data, the National Center for Education IPEDS Completion Survey, and the Corporate Personnel System, the UC Office of the President, in partnership with the UC Recruit team and campus units, gathered and validated the race/ethnicity and gender demographic data from the prior two years - July 1, 2016 through June 30, 2018 - and the current year, July 1, 2018 through June 30, 2019, for the following stages of recruitment:

---

[5] Many academic recruitments begin before the academic year in which the candidate is hired. However, in order to maintain consistency across all pilot and comparator units, a bright line rule was established that only jobs that were posted in UC Recruit after the beginning of the 2016-17 academic year and had a successful hire at the end of the 2017-18 academic year were counted. The same rule was applied to the 2018-19 academic year data. As a result, the URM and female new faculty hires in 2016-19 were not counted if the job was originally posted before 2016-17.

[6] The SED is sponsored by the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) and by five other federal agencies: the National Institutes of Health, U.S. Department of Education, U.S. Department of Agriculture, National Endowment for the Humanities, and National Aeronautics and Space Administration. The survey gathers data from all research doctorate graduates on their educational history, sources of support, and post-graduation plans. The completed survey responses become part of the Doctorate Records File (DRF), a virtually complete data bank on doctorate recipients from 1920 to the present and the major source of doctoral data at the national level. The profiles of doctorate recipients that emerge from these data serve policymakers at the federal, state, local, and university levels.

a. Demographics of availability pools (the population of recent PhDs in specific academic disciplines from institutions across the U.S.)[7]
b. Demographics of applicant pools
c. Demographics of finalists[8]
d. Demographics of hires.[9]

2. **Data collection specific to individual pilot units.** Each of the four pilot units also proposed data collection to allow for analysis of the effectiveness of their specific interventions during the pilot year compared to their data from prior years. The 2016-18 past performance data was then compared to data from 2018-19.

---

[7] Consistent with federal reporting obligations, the availabilities dataset used includes only U.S. citizens and permanent residents.

[8] Finalists are those who were brought to campus for full in-person interviews.

[9] Hired includes those who were candidates proposed for hire, candidates with an offer, candidates who accepted an offer, and candidates who were hired as of August 22, 2019. Any candidates who were hired after August 22, 2019 were not captured and therefore the final numbers may vary slightly.

IV. Pilot A Program: Initiative to Advance Faculty Diversity, Equity, and Inclusion in the Life Sciences - UC Berkeley

Profile of Pilot A and Comparator A

Based on fall 2018 data, there are a total of 233 Ladder-Rank Faculty and Equivalent ("faculty"[10]) in the UC Berkeley Life Sciences (Pilot A). Underrepresented minorities are 6.0% and women are 27.5% of total faculty in Pilot A. In Comparator A, there are a total of 137 faculty (11.7% URM and 31.4% female). The national availability[11] of recent doctoral recipients in life sciences and chemistry is 12.6% URM and 51.0% women.

There are a total of 1,863 students in the pilot unit (948 undergraduate students and 915 graduate students), with 15.0% undergraduate URM and 10.9% graduate URM students, as well as 64.2% undergraduate women and 47.5% graduate women. There are a total of 5,888 students in Comparator A (5,480 undergraduate and 408 graduate students), with 28.0% undergraduate URM and 14.0% graduate URM students, as well as 65.4% undergraduate women and 46.1% graduate women.

As of October 2018, the composition of total faculty in Comparator A was far more diverse than that of Pilot A, particularly with respect to URM faculty where the composition was close to the national availability. Pilot A, on the other hand, fell significantly short of the national availability. The 2016-18 recruitment data (Chart 1 below) show that Pilot A and Comparator A maintained the same hiring trend; while they had a similar percentage of qualified URM applicants,[12] Comparator A interviewed and hired a greater percentage of URM candidates than Pilot A.

---

[10] Current faculty composition is defined as Ladder-Rank Faculty and Lecturer with Security of Employment positions in the Corporate Personnel System (CPS) October 2018 snapshot file.

[11] U.S. citizen and permanent residents who received PhDs from U.S. universities from 2012 through 2016, as reported in the Survey of Earned Doctorates.

[12] Applicants who meet the minimum qualifications for the position are "qualified applicants."

Chart 1: Pilot A and Comparator A
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage,
Academic Years 2016-17 and 2017-18
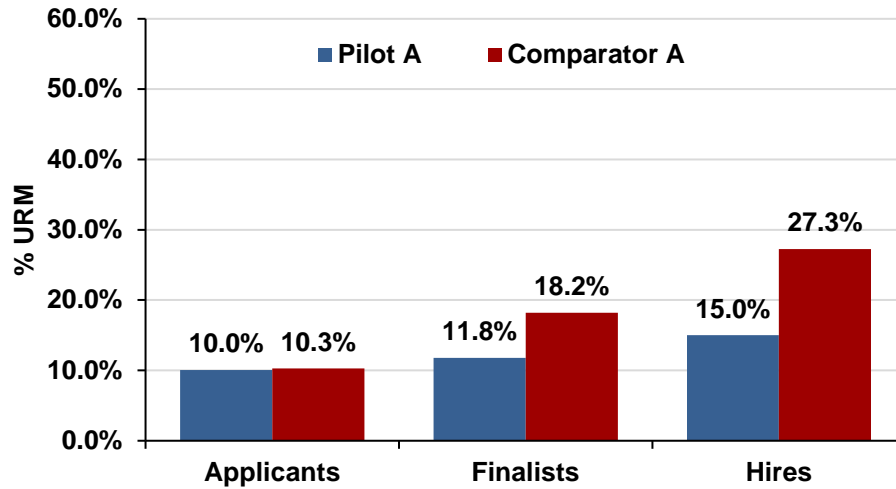
While Comparator A's total percentage of female faculty is greater than Pilot A, in 2016-18 (Chart 2 below), Pilot A hired a greater percentage of female faculty than Comparator A. However, both units hired female faculty at a lower percentage than the national availability.

Chart 2: Pilot A and Comparator A
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage,
Academic Years 2016-17 and 2017-18
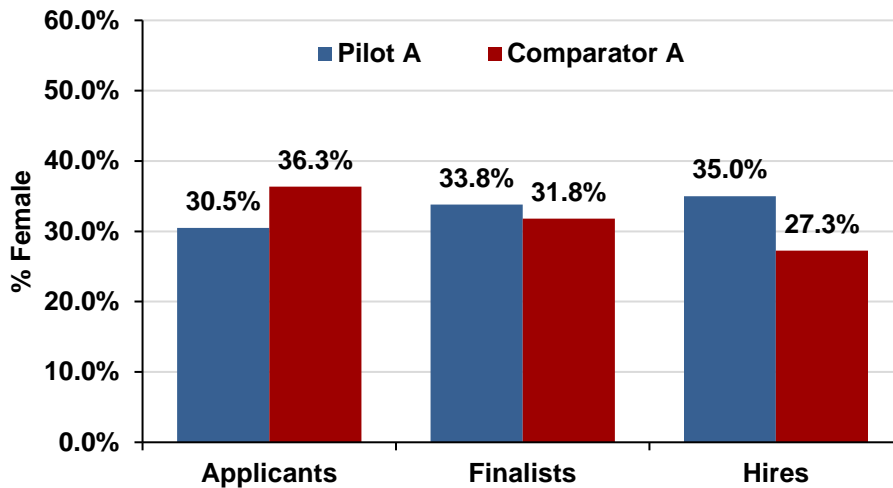
The data show that both the pilot and comparator unit lag behind the national availability of recent doctoral recipients in their total life sciences and chemistry female faculty, as well as in their recent hires of women from 2016-18.

Overview of Pilot A Program

The Pilot A program brought together faculty from several related but administratively distinct departments on the Berkeley campus. A Life Sciences Initiative (LSI) Committee was formed early in fall 2018 to implement the program and serve as the search committee for their joint open-field faculty recruitment. This committee included 22 faculty and staff members from all participating units. The LSI Committee met 19 times during the academic year to implement the interventions proposed in the program, to serve as the search committee for the cluster hire, and to organize the Life Sciences Symposium. These committee meetings resulted in lively debate and a sense of shared commitment that strengthened the life sciences community on the campus.

The 2018-19 Pilot A program included four areas of intervention: building a critical mass, strengthening applicant pools, improving candidate evaluation processes, and institutional change.

1. Building a Critical Mass, Faculty Searches

The Berkeley campus committed five FTE for a broad search in the life sciences. This open area recruitment solicited applications from outstanding early career research scientists who also demonstrated strong potential to enhance equity, inclusion, and diversity. The job ad was widely distributed to highly regarded journals and societies, and through personal outreach to PPFP, Chancellor's Fellows (and other prestigious fellowship programs), and to institutions with strong academic standing. The LSI Committee conducted a first review and evaluated candidates, with their names redacted, based on their contributions to diversity, equity and inclusion. Candidates that met a high standard in this area were advanced for further review. The remaining applications were then opened to review by the departmental ad-hoc search committees for short-list consideration. In addition, eight departmental searches were conducted using the interventions to strengthen applicant pools and improve candidate evaluation processes.

2. Strengthening Applicant Pools

Participating departments implemented interventions to increase diversity in application pools of concurrent departmental searches. Specifically, they used a standard text in faculty search ads emphasizing the importance of contributions to advancing diversity on the Berkeley campus and confirming ongoing support and improved outreach practices by contacting specific potential candidates to ask them to apply. They also actively considered current or former PPFP participants and potential candidates from similar esteemed programs.

3. **Improving Candidate Evaluation Processes**

The Office for Faculty Equity and Welfare (OFEW), in collaboration with the equity advisor from the Plant and Microbial Biology department, conducted a training for faculty search chairs titled "Diversity and Unconscious Bias in Faculty Searches." Participating departments applied the following standardized candidate evaluation processes to counter implicit bias and increase the value of candidate contributions to diversity in the evaluation process:

- Required a statement on past contributions and future plans to advance diversity, equity, and inclusion. Candidates were directed to the OFEW website for guidance in writing their statement and preparing for a campus visit if selected as a finalist;
- Search committees were given clear guidance about how to evaluate the statement in three areas: candidate knowledge and understanding, track record of contributions, and future plans if hired at Berkeley;
- At least one member of each search committee participated in annual training workshops organized by OFEW to counter implicit bias and reinforce best practices in candidate review and interviewing;
- Committees used quantitative candidate assessment tools including a rubric to evaluate contributions to diversity, equity, and inclusion;
- Finalists were asked to describe their efforts to promote equity and inclusion, as well as ideas for advancing equity and inclusion at Berkeley, as part of their job talk. They also met with the department equity advisor, and/or with a student panel during their on-campus interview; and
- Candidates who demonstrated, through their knowledge, past contributions, and/or future plans for advancing diversity, equity, and inclusion, potential to meet Berkeley standards were advanced as finalists and ultimately became proposed candidates.

4. **Institutional Change**

Staffed primarily with faculty equity advisors from the participating units, the LSI Committee served as a working group to provide governance for the program with the support of the deans and department chairs. The LSI Committee is reconvening for the 2019-20 recruitment cycle to provide ongoing program development, serve as a resource for new ideas and innovations, and provide mentorship to the cohort of new faculty hired under the program. The LSI Committee will also serve as additional mentors for new faculty, providing resources and advice on the development of equity and inclusion programs/activities. Additional funding has been allocated for the incoming faculty to support their diversity, equity, and inclusion efforts and may be used for travel, support for student or mentee events or activities, and/or for teaching buy-out to allow faculty additional time to launch a new initiative. The incoming faculty will receive support and mentorship from the LSI Committee in effective use of these funds. In addition, all new hires under the program will participate in the National Center for Faculty Development and Diversity Faculty Success Program.

The LSI Committee also organized a successful "Life Sciences Symposium on Integrating Research with Education and Outreach." The daylong event focused on successful strategies to forge a synergy between research and education, and other efforts to advance diversity, equity, and inclusion. Through a combination of presentations, panel discussions, and break-out sessions, participants learned about successful programs and practices that have increased graduation success and research opportunities, improved the science pipeline for underrepresented groups, and improved classroom climate for all students. The event was attended by roughly 100 faculty, postdocs, graduate students, and staff engaged in student programs.

Results for Pilot A

As reflected in Chart 3 below, Pilot A had a 4.3% increase in URM applicants from 2016-18 to 2018-19. Due to the interventions Pilot A introduced during the search process, there was a substantial increase in the percentage of URM finalists and those hired in 2018-19; Pilot A saw a 24.4% increase in URM finalists and a 25.0% increase in URMs hired compared to 2016-18. With 40.0% URM hired in 2018-19, Pilot A exceeded the national availability by 27.4 percentage points. Comparator A also had an increase in the hiring of URM faculty and had the same percentage of URM faculty hires (40.0%) as Pilot A. The closing of the gap in URM faculty hiring between Pilot A and Comparator A indicates that the interventions implemented by the pilot unit through the additional State funding had a substantial impact on the diversity of the faculty hired in 2018-19.

Chart 3: Pilot A and Comparator A
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
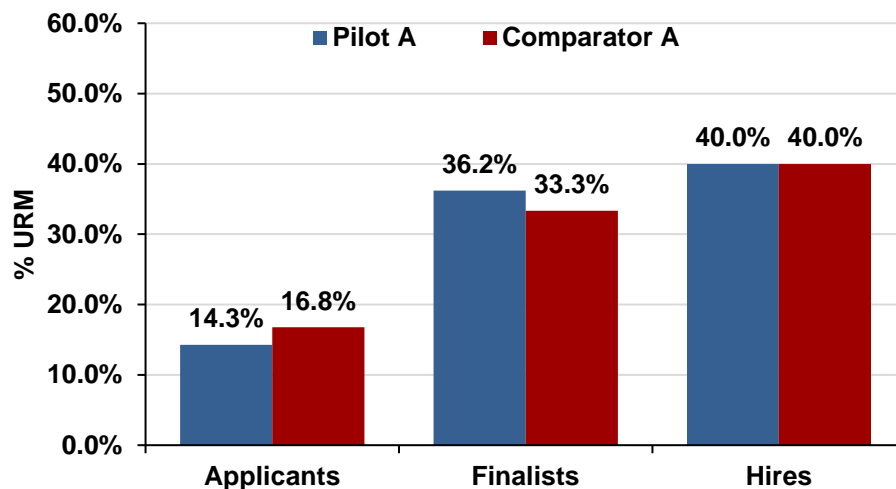
Additionally, as reflected in Chart 4 below, the percentage of female applicants and finalists increased in both the pilot and comparator unit. With the increase in percentage in both units, the proportion of increase in female applicants and finalists remained relatively similar to each other. Following the interventions introduced in 2018-19, Pilot A had an 11.7% increase in women hired compared to 2016-18, falling short of the national availability by 4.3 percentage points. The comparator unit, on the other hand, experienced a 7.3% reduction in female faculty hires, falling short of the national availability by 31.0%.

Chart 4: Pilot A and Comparator A
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
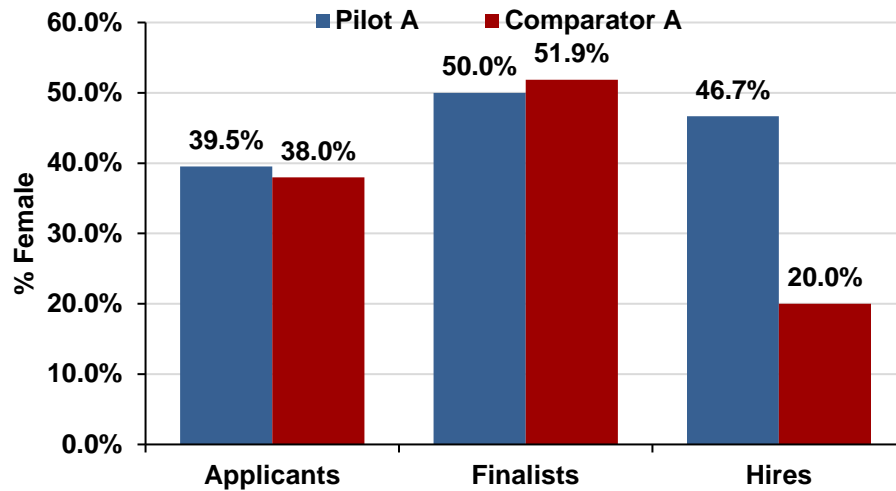
In order to measure the success of the program, Pilot A conducted a survey of the participating department chairs and deans. With a 51% response rate, the total assessment was that the changes in faculty searches were effective in advancing faculty diversity, equity, and inclusion in the participating departments. The department chairs and deans found that requiring a statement of contributions to diversity, equity, and inclusion in application materials to be the most useful intervention. Standardizing job ad texts regarding the importance of diversity, equity, and inclusion and the new rubrics for assessing candidates also ranked highly in effectiveness.

Pilot A also conducted a survey of the symposium participants. With a 58% response rate, approximately 70% of respondents strongly agreed that they were satisfied with the symposium, with approximately 27% somewhat agreeing. Participants commented that the symposium gave them many ideas for future engagement and creativity in research, scholarship, and teaching in diversity, equity, and inclusion. Participants also commented that they appreciated Pilot A bringing together graduate students, postdocs, and faculty to engage in the discussions. A graduate student participant commented:

"It was thrilling and extremely heartening to see this as a faculty led effort but one in which a huge range of people from administrators to grad students to postdocs were involved. I often feel or get the impression that faculty are so overextended its beyond them to do this work, but at the same time the symposium showed that they're such a key set of leaders and bridges between students and administration. Second, it was just so clearly stated across all speakers that diversity, equity, and inclusion are not just extra things we do – the frosting on the cake per se - but actually make research more innovative and teaching more effective."

The Deans of three separate colleges participating in the life sciences pilot program, who are the chief academic and administrative leaders for the colleges, highlighted that the program was a successful catalyst for positive change. The Dean of the Biological Sciences Division commented that the LSI Committee will have a lasting effect because it eliminated silos and set a tone for future hiring that includes diversity statements and intent to foster equity and inclusion in all hires moving forward. The Dean of the College of Chemistry said participating in the program was instrumental in the college updating their search processes in order to capture a broader and more diverse pool of applicants in future recruitments. The Dean of the College of Natural Resources said the hiring procedures employed in the search embraced a set of best practices that have been emerging for academic hires, in the context of the UC system and the California legal and political landscape.

Future Plans

Generation of a database of promising candidates with potential to contribute to diversity, equity, and inclusion who have been identified at conferences, seminars, poster sessions, or other science and research venues has commenced. It currently includes essential information such as research areas and interests. Programming on the database is underway and Pilot A expects to make it available for use in the AY 2019-20 searches.

The Life Sciences Equity and Inclusion Council will work in 2019-20 to fully develop a competitive faculty fellowship program in support of equity and inclusion initiatives led by faculty and establish funding from a combination of sources including campus grants, department contributions, and potential donors. The Biological Sciences Division created a new position, Associate Dean for Diversity, Equity, and Inclusion to provide additional leadership and help address some of the administrative challenges in the program's first year.

The participating Pilot A departments will continue to adhere to the interventions developed during the program. Several will be experimenting with additional methods to increase diversity, equity, and inclusion through their faculty searches. The LSI Committee will reconvene to advise and support these new interventions. The LSI Committee will also develop and implement the mentorship program for the incoming faculty cohort, prepare for the annual retreat or symposium on advancing diversity, equity, and inclusion, oversee completion of the recruitment database, and spearhead fundraising efforts for faculty programs.

The work of the symposium will continue in the coming year, as an annual Diversity, Equity, and Inclusion retreat to share and develop best practices with department faculty, equity advisors, and leadership. A portion of the retreat will be dedicated to developing new initiatives and programs for advancing diversity, equity, and inclusion.

V. Pilot B Program: A Pilot Study in Centrally Co-led Open Searches to Prioritize Academic and Educational Excellence – UC Davis

Profile of Pilot B and Comparator B

The Pilot B program is a novel program that does not lend itself to comparison with another campus comparator unit. Instead, eight faculty recruitments across eight schools/colleges comprise Pilot B. Unusually, the comparator unit is all of the recruitments conducted across those eight schools/colleges, with the exception of the eight centrally led recruitments ("Comparator B"). Outside of the eight centrally led recruitments, all other recruitments continued to be conducted at the departmental level.

Colleges and schools included in this program are the Colleges of Agricultural and Environmental Sciences, Biological Sciences, and Engineering, as well as the Schools of Education, Law, Management, Medicine, and Veterinary Medicine. As of fall 2018, there are a total of 1,021 faculty in the eight participating colleges and schools. Underrepresented minorities are 8.2% and women are 33.6% of total faculty. There are a total of 21,936 students (16,475 undergraduate students and 5,461 graduate students), with 23.7% undergraduate URM and 12.4% graduate URM students, as well as 59.6% undergraduate women and 52.5% graduate women.

With the exception of URM faculty in Veterinary Medicine and in Education, all of the participating colleges and schools have a percentage of URM and female faculty below that of the national availability in their discipline.

Overview of Pilot B Program

In the 2018-2019 academic year, Pilot B initiated an experiment in faculty hiring by conducting eight faculty searches, one or more in each of eight colleges or schools.

1. Search Committee – Co-Chairs and Membership

Each of the eight Faculty Recruitment (search) Committees were co-chaired by one faculty administrator (either the Vice Provost or Associate Vice Provost for Academic Affairs, the Associate Vice Chancellor for Academic Diversity, or the Associate Vice Chancellor for Academic Personnel, Human Health Sciences). These faculty positions were new (i.e., they were recruitments conducted in addition to those previously approved for the 2018-2019 year) and the participating Deans received a centrally funded investment from the Provost: $100,000 per successful hire from the search per year for five years; thus, the total campus investment

amounted to $4 million. The searches were, for the most part, open-discipline and open-rank, and Recruitment Committee members were carefully selected in consultation with the Deans, with some additional members added by the Vice Provost, based on their past leadership in diversity, equity, and inclusion initiatives.

2. Advertising and Outreach

Distribution of information about the searches was done with the assistance of JobElephant, which helped to maximize the use of the advertising budget. Some advertisements were combined and sent to organizations that were not discipline-specific, while others were sent to appropriate disciplinary groups for each academic unit. Pilot B also individually contacted all current and past President's Postdoctoral Fellows, Chancellor's Postdoctoral Fellows, unsuccessful applicants for these postdoctoral positions, and current postdoctoral fellows on an American Association for the Advancement of Science listserv. Some Recruitment Committee members also used social media (e.g., Facebook, Twitter) to disseminate information about the searches.

3. Review of Statements of Contributions to Diversity First

In a departure from the way searches are conventionally conducted, the committees were provided with anonymized statements of contributions to diversity. The Office of Academic Affairs annotated statements to indicate the applicant's current position (e.g., Ph.D. student, postdoctoral scholar, Assistant Professor, Associate Professor, Professor, researcher, etc.). Rubrics were used to score candidates, and candidates who scored highly had the remainder of their applications shared with the recruitment committees. Ultimately, all individuals invited to interview had outstanding records of research/scholarship and teaching, in addition to outstanding contributions to diversity, equity, and inclusion.

4. Confidential Faculty Advisors

Candidates who were invited to on-campus interviews were provided with access to a confidential faculty advisor – this was a tenured faculty member to whom the candidate could ask any questions they had with the assurance that these questions would never be shared with anyone else. The confidential advisors were provided with guidelines of not sharing information about conversations or questions they received from the candidates with anyone, and they were kept separate from the search processes. There was one confidential advisor assigned to the STEM disciplines, and one assigned to the non-STEM disciplines.

5. Supplementary Benefits/Services

Candidates who were hired were each provided with the benefits/services of the UC Davis Capital Resource Network, which helps candidates and their partners assimilate to the region, and, as needed, provides support to partners in identifying employment opportunities outside UC Davis; membership in the National Council for Faculty Development and Diversity; and

academic enrichment funds to support their scholarly work (e.g., supporting students, travel, etc.). In addition, the pilot established a LAUNCH Committee of faculty mentors who will continue to provide academic guidance until the new faculty member reaches the rank of Associate Professor; will assign Work-Life Advisor to provide ongoing assistance with work-life integration programs at UC Davis; and will facilitate inclusion in the Center for the Advancement of Multicultural Perspectives on Science and the Center for the Advancement of Multicultural Perspective in the Social Sciences, Arts, and Humanities communities.

6.   Warm Welcome

Almost all candidates who came for in-person interviews met with the Provost and Executive Vice Chancellor; the Vice Provost and Associate Vice Provost – Faculty Equity and Inclusion in the Office of Academic Affairs; the Associate Vice Chancellor for Academic Diversity in the Office of Diversity, Equity, and Inclusion; and a representative from the UC Davis ADVANCE program. Pilot B heard from candidates and from others who met with the candidates (search committee members and confidential advisors) that the position descriptions and advertisements that emphasized UC Davis' commitment to or strong potential for commitment to the advancement of diversity, equity, and inclusion for underrepresented minority students and groups (African American, Latino (a)/Chicano (a)/Hispanic, and Native American), and how this commitment integrates with teaching, research, and service, was very attractive to the candidates. In addition, in-person meetings scheduled with top campus leaders embodied a sense of welcome and inclusion.

Results for Pilot B

Compared to the two prior years (2016-18), Pilot B had a 23.0% increase in URM applicants, 69.2% increase in URM finalists, and 91.0% increase in URM faculty hires. While Comparator B had a similar percentage of qualified URM applicants in the pool as in the two prior years, there was a 7.2% reduction in URM finalists and a 6.7% reduction in URM hires. For the two prior years' recruitments, two out of the eight colleges/schools exceeded the national availability of URM in their disciplines.

As reflected in Chart 5 below, in the eight centrally led faculty recruitments (Pilot B) in 2018-19, 100.0% of the hires were URM. In contrast, 2.3% URM faculty were hired in Comparator B. When the Pilot B recruitments in 2018-19 were combined with the Comparator B recruitments, six out of the eight colleges/schools exceeded the national availability of URM in their disciplines, which is a significant turnaround compared to total faculty and the two prior years.

Chart 5: Pilot B and Comparator B
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
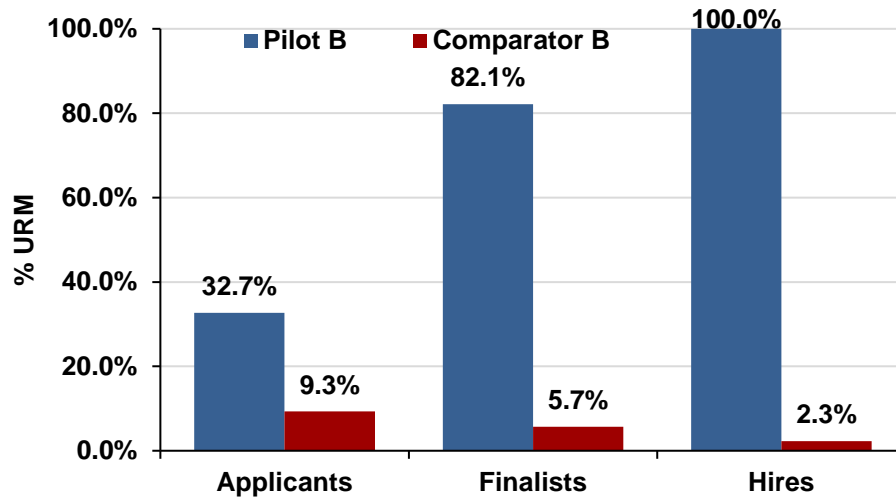
Compared to the two prior years (2016-18), Pilot B had a 16.4% increase in female applicants, 21.3% increase in female finalists, and 54.5% increase in female faculty hires. Comparator B also had an increase in female applicants (3.6%), finalists (6.7%), and hires (12.5%) compared to the two prior years but not to the degree that Pilot B did. For the two prior years' recruitments, one out of the eight colleges/schools exceeded the national availability of women in their disciplines.

As reflected in Chart 6 below, within the eight centrally led faculty recruitments (Pilot B) in 2018-19, 87.5% of the hires were women. In contrast, 45.5% female faculty were hired in Comparator B. When the Pilot B recruitments in 2018-19 were combined with the Comparator B recruitments, in their hires, six out of the eight colleges/schools exceeded the national availability of women in their disciplines, which is also a significant turnaround compared to total faculty and the two prior years.

Chart 6: Pilot B and Comparator B
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
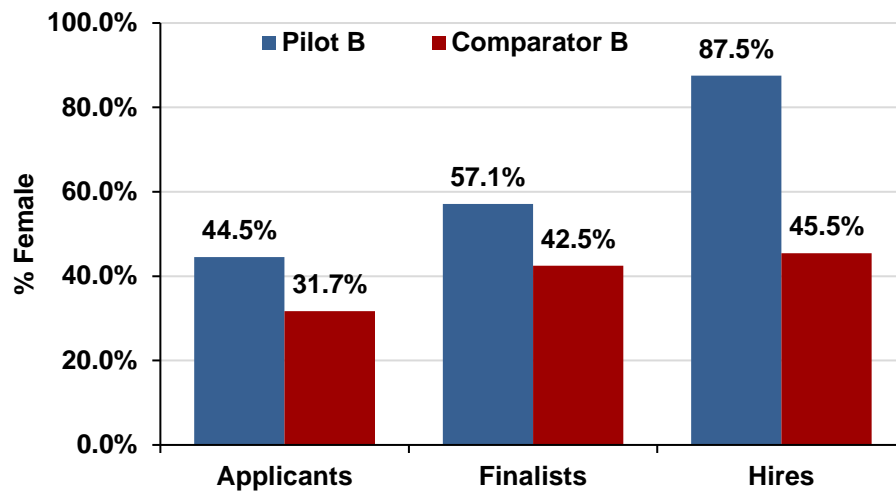
Pilot B's efforts constitute a new and innovative intervention – this includes centrally supporting and managing these searches in three undergraduate colleges (which also provide graduate academic education) and five professional schools with a suite of faculty and family benefits and incentives, and using the contributions to diversity statements as an initial barrier step. Pilot B counseled applicants through a website specifically devoted to these eight searches and thus clarifying that the contributions to diversity statements should include certain information; the website also posted the criteria for evaluation.

Future Plans

Pilot B considers the 2018-19 initiative to be "Phase 1" in what is expected to be a two-phase effort to improve campus hiring practices in the coming years. This "experiment" -- Phase 1 of the efforts to see if UC Davis could find ways to improve campus hiring practices in 2018-2019 -- underscores the imperative to do the utmost with every faculty position that is recruited each year. The program has shown that this is possible by using tools readily available on all UC campuses and through the establishment of eight recruitment committees whose members were enthusiastically committed to seeking out future faculty who would have the greatest impact on their undergraduate students' academic experience. Their challenge is now to learn the lessons from 2018-2019 and ultimately institutionalize them not just at UC Davis, but at other campuses as well, through their UC network of Vice Provosts and Vice Chancellors and Executive Vice Chancellors/Provosts.

VI.   Pilot C Program: Pathways to the Professoriate: Advancing Faculty Diversity in the Schools of Natural Sciences and Engineering – UC Merced

Profile of Pilot C and Comparator C

As of fall 2018, there are a total of 152 faculty in the Schools of Natural Sciences and Engineering at UC Merced ("Pilot C") and 266 faculty in Comparator C. Underrepresented minorities make up 13.8% of total faculty positions in Pilot C and 9.4% in Comparator C. Women make up 33.6% of total faculty positions in Pilot C and 25.6% in Comparator C. The national availability in Math, Computer Science, Life Science (excluding Health Sciences), and Physical Science is 11.4% URM and 39.0% women.

In Pilot C, there are a total of 4,271 students (4,134 undergraduate and 137 graduate students), with 53.3% undergraduate URM and 13.1% graduate URM students, as well as 40.1% undergraduate women and 27.0% graduate women. In Comparator C, there are a total of 4,626 students (3,719 undergraduate and 907 graduate students), with 23.0% undergraduate URM and 9.5% graduate URM students, as well as 36.2% undergraduate women and 31.1% graduate women.

Undergraduate URM students are 53.3% of the undergraduate population in Pilot C but there is a considerable drop off to 13.1% of the graduate population. Comparator C has a less diverse student body at both the undergraduate and graduate level. Consistent with the student demographic composition, the composition of the total ladder-rank faculty in Pilot C is more diverse than Comparator C. However, as reflected in Chart 7 below, in the prior two years, Comparator C has increased its efforts to recruit a more diverse faculty, resulting in a 10.0% increase in URM faculty hired during the prior two years compared to the total faculty composition. Notably, one of the schools in Comparator C also served as a comparator unit in year one of the funding provided by the state to support equal employment opportunities. On the other hand, Pilot C experienced a 9.6% decrease in URM faculty hired during the prior two years compared to its total faculty composition.

Chart 7: Pilot C and Comparator C
Percentage (%) of Under-Represented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage,
Academic Years 2016-17 and 2017-18
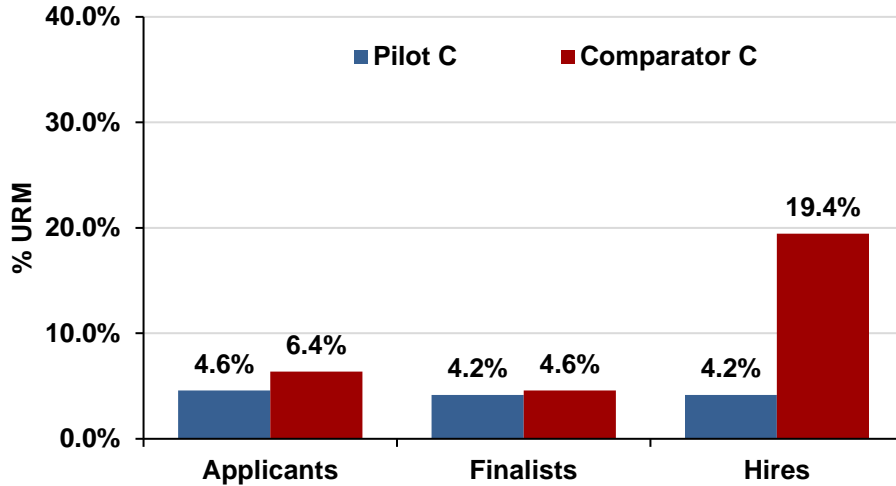
The percentage of new female faculty hired in 2016-18 in both the pilot and comparator unit was higher than the percentage of female faculty in the total faculty, with Pilot C exceeding, and Comparator C approximately equivalent to, the national availability.

Chart 8: Pilot C and Comparator C
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage,
Academic Years 2016-17 and 2017-18
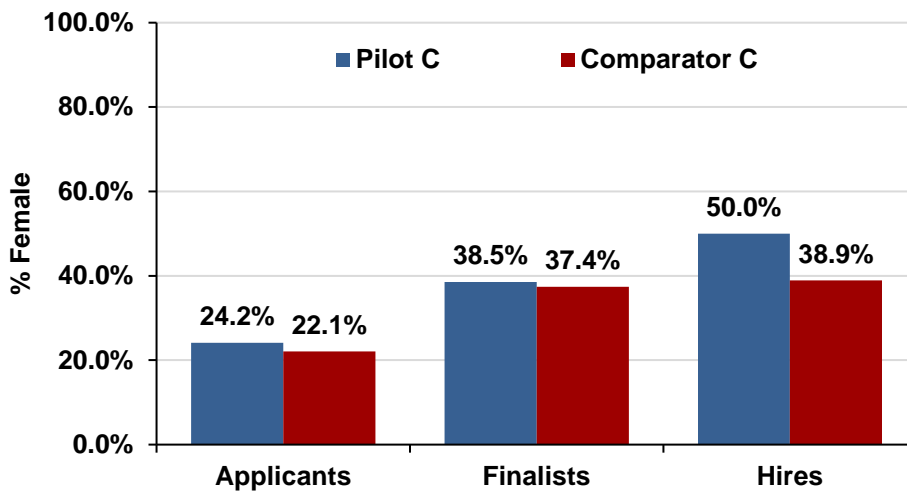
Overview of Pilot C Program

For ten authorized searches in Pilot C, best practices included a "two offers from one search" program, the use of diversity statements along with excellence in research in selecting candidates for further consideration from the applicant pool, the use of faculty equity advisors and training in implicit bias in all aspects of the searches, and a commitment made by the Provost to hire two senior and two junior faculty hires via waivers of recruitment in STEM fields. These four additional faculty FTE were committed by the Provost as additional hires beyond the ten hires previously authorized to these schools in the 2018-2019 academic year.

Leveraging the PPFP/CPFP, Pilot C made available the two waivers of recruitment for two assistant professors in STEM. To identify potential candidates, Pilot C held a very successful PPFP/Chancellor's Fellow Symposium to introduce Fellows to potential hiring units. Pilot C formed a Leadership Council comprised of faculty and administrators to oversee the recruitment of the two senior hires (Associate/Full) in STEM. Leadership Council members met with potential candidates and discussed their efforts at diversity, equity, and inclusion, and also acted as liaisons between administration and department chairs and faculty in respective units. Pilot C offered additional startup funding as a hiring incentive for the two senior and two junior candidates hired via waivers of recruitment, which included additional startup or loan repayment funds, funds to help support a postdoctoral fellow, and funds to attend a National Center for Faculty Diversity and Development workshop.

Results for Pilot C

As a result of the interventions implemented in 2018-19, Pilot C had a considerable increase in hiring of URM faculty; a 22.5% increase compared to 2016-18 and a 12.9% increase compared to Pilot C's total URM faculty composition. Pilot C far exceeded the national availability, with hiring in 2018-19 at 15.3% over the national availability. Comparator C, on the other hand, had a slight decrease in the hiring of URM faculty compared to the prior two years but continued to exceed the national availability (by 5.3%), which continued Comparator C's trend of diversifying its faculty compared to its current total composition.

Chart 9: Pilot C and Comparator C
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
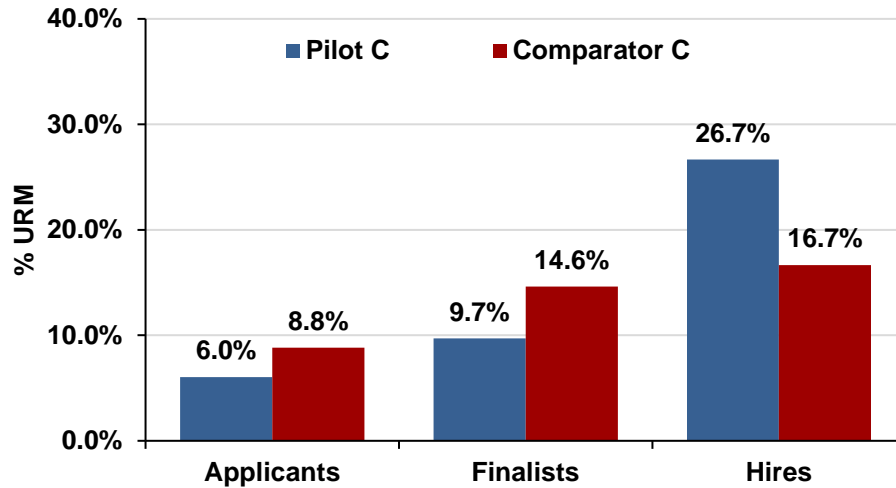
In 2018-19, Pilot C also had a considerable increase in hiring of female faculty; a 23.3% increase compared to 2016-18 and a 39.8% increase compared to Pilot C's total female faculty composition. Pilot C, again, far exceeded the national availability, at 34.3% over the national availability. Although lagging behind Pilot C, Comparator C, in keeping with its upward trajectory in diversifying its faculty, exceeded the national availability by 19.3%.

Chart 10: Pilot C and Comparator C
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
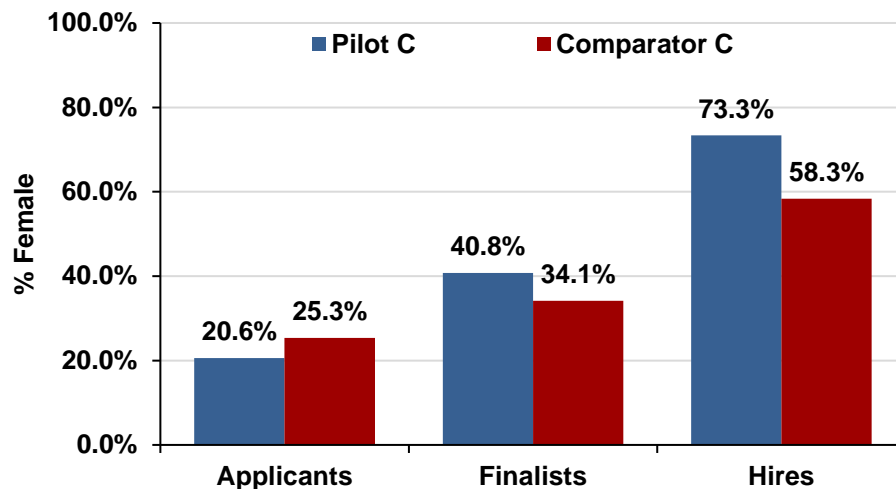
The diversity of the faculty candidates reflected in Pilot C's 2018-19 searches reflects its use of best practices, including exceptionally committed deans, a very supportive Provost and Vice Provost for the Faculty, the use of diversity statements, and a strong faculty equity advisor program with well-trained advisors. The PPFP/Chancellor's Postdoctoral Fellowship Symposium brought together early career scholars and potential hiring units, which led to aggressive recruitments.

The formation of a Leadership Council, consisting of faculty committed to recruiting senior faculty to their departments who would bring excellent research programs and contribute considerably to diversity, to oversee the recruitment of two senior hires in STEM via waivers of recruitment was especially noteworthy. Members of the Leadership Council met with each candidate, and were fully involved in every stage of the recruitment process. Although Pilot C had planned to recruit two senior candidates only, the caliber of the candidates, the excitement of the units and Leadership Council members, and the enthusiasm of the Provost, resulted in four offers, with acceptances by two of the candidates.

The Dean of Engineering stated that the success in hiring during AY 2018-19 is due in part to the additional resources provided by the AFD grant, but it is also due to the commitment of many of the chairs and faculty within the school who recognized that recruiting strong researchers who are also attentive to diversity, equity, and inclusion improves the campus community and climate. The Dean of Natural Sciences commented that this change allowed the department to place more women and URM in highly visible, influential leadership roles (e.g., Department or Graduate Group Chairs): "Also, the new faculty hires will bring new perspectives to collaborations among leaders in the school. The next step will be creating the infrastructure needed to retain them. At the level of school culture, the simple fact that the campus had a diversity hiring initiative spurred meaningful discussions about diversity, equity, and inclusion."

Future Plans

The Provost and Vice Provost are committed to continuing the PPFP Symposium and the best practices implemented in the authorized searches. The Leadership Council has volunteered to keep meeting over this new year; they are committed to continuing to recruit senior STEM faculty. They are also interested in continuing discussions regarding diversity, equity, and inclusion in STEM at UC Merced. The newly hired Chief Diversity Officer will be brought into the conversation on recruitment and retention of URM faculty.

VII.   Pilot D Program: Advancing Mathematics Faculty Diversity – UC Riverside

Profile of Pilot D and Comparator D

Details of faculty recruitment at UC provide a useful background for the Pilot D interventions. Historically, most math departments at the University of California have been less diverse than the availability pools in their discipline. Although in recent years they are hiring more URM and

female faculty, the numbers on most campuses still do not reflect the national availability. As a result, in 2019, the Office of the President required math departments to begin using the UC faculty application intake and applicant tracking system, UC Recruit, in addition to MathJobs, an automated job application system sponsored by the American Mathematical Society. This change in recruitment processes in mathematics ensures compliance with local and systemwide policies and procedures, including best practices for equal employment opportunities. As of July 1, 2019, all UC math departments are required to use UC Recruit, in addition to MathJobs.

As part of the state funding for year three of the Advancing Faculty Diversity program, UC Riverside's math department (Pilot D) submitted a proposal that also consisted of making an immediate transition to using UC Recruit, before many other UC mathematics departments. Because only two other math departments already used UC Recruit, only those two units could potentially serve as comparator units to UC Riverside's pilot. One of the two units was able to participate as a comparator unit to Pilot D, which limits the ability to make meaningful comparisons across the campus units since the number of recruitments in AY 2018-19 was minimal in Comparator D.

There are a total of 29 faculty in Pilot D and 41 faculty in Comparator D. Underrepresented minorities make up 6.9% of total faculty positions in Pilot D and 7.3% in Comparator D. Women make up 10.3% of total faculty positions in Pilot D and 12.2% in Comparator D. The national availability in math for URM is 10.3% and 32.1% women.

In Pilot D, there are a total of 797 students (723 undergraduate and 74 graduate students), with 48.7% undergraduate URM and 13.1% graduate URM students, as well as 38.9% undergraduate women and 21.6% graduate women. In Comparator D, there are a total of 1,129 students (1,023 undergraduate and 106 graduate students), with 14.0% undergraduate URM and 9.4% graduate URM students, as well as 39.3% undergraduate women and 17.0% graduate women.

As noted above, Comparator D had a greater percentage of total URM faculty than Pilot D. Chart 11 below also shows that Comparator D had a greater percentage than Pilot D of URM applicants and finalists from 2016-18. However, both Pilot D and Comparator D did not have any URM faculty hires during that time period.

Chart 11: Pilot D and Comparator D
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Years 2016-17 and 2017-18
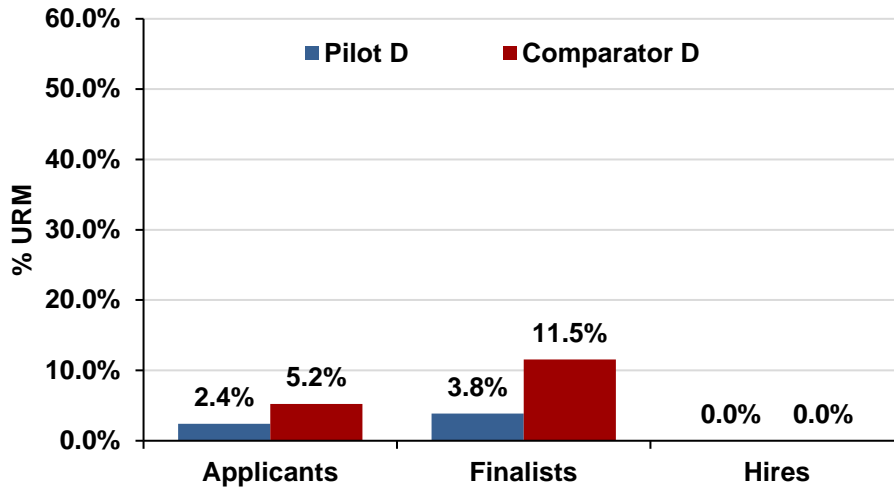
In both Pilot D and Comparator D, the total composition of female faculty, as well as the hiring in 2016-18, was below the national availability. While Comparator D has a greater percentage of total female faculty, Pilot D outpaced female faculty hiring compared to Comparator D in 2016-18.

Chart 12: Pilot D and Comparator D
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Years 2016-17 and 2017-18
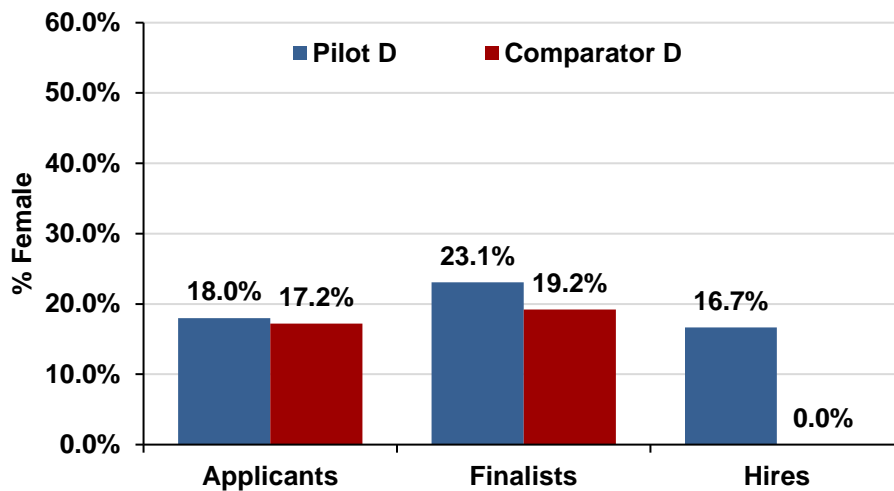
Overview of Pilot D Program

The Pilot D Program was built on and expanded successful aspects of the first year of the State funded Advancing Faculty Diversity program awarded to UCR in 2016-17. Pilot D approached diversifying the faculty from two ends: recruitment efforts and candidate evaluation methodology. Key elements of Pilot D's program were: 1) attractive, targeted advertisements; 2) use of the statement of contributions to diversity as an initial rather than later selection criterion; 3) a boost to the candidates' research careers through an additional year of funded research training anywhere in the country while having a tenure track position secured; 4) support and mentoring throughout from their UCR base; 5) use of tools afforded by applying through UC Recruit rather than MathJobs to monitor and intervene to boost development of a diverse pool of applicants; 6) a symposium early in the fall quarter at UCR to showcase both the diversity of the campus and the quality of the math department to attract more applications from prospective URM faculty; and 7) specific mentoring to develop skills for teaching math to first generation college-going students who make up 57.2% of UCR's undergraduate body.

With respect to recruitment, Pilot D supplemented their normal efforts (e.g., advertisement placed with American Math Society, American Women in Mathematics) with organizing and hosting a "Diversity and Excellence" conference in October 2018, developing a strong web presence, sending direct emails to URMs in mathematics, notifying PFPP/CPFP fellows, and providing updates from the Vice Provost's office every two weeks about the ethnic/gender makeup of the applicant pools in UC Recruit to help motivate additional efforts to diversify the pools.

With respect to evaluation methodology, an initial review of the candidates' qualifications based solely on research statements and diversity statements was conducted. After an initial list was compiled, the full UC Recruit files were opened to the entire faculty for review, with the option of removing or adding candidates to the long list.
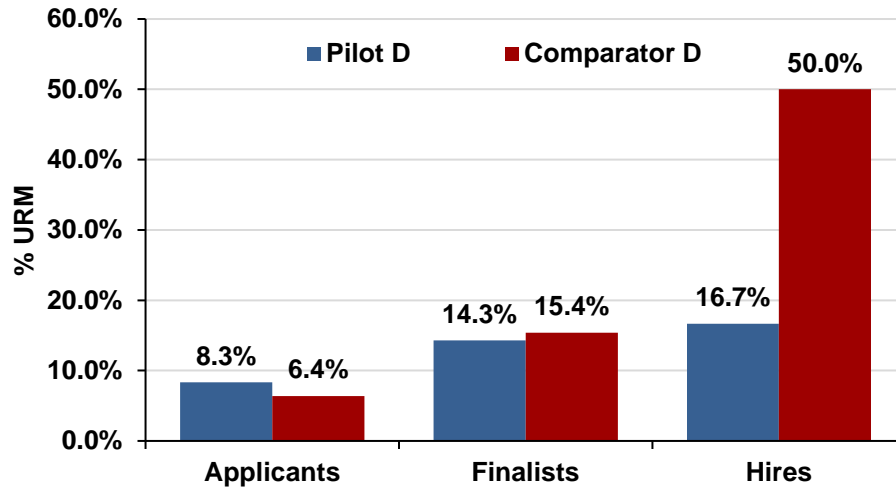
Results for Pilot D

As reflected in Chart 13 below, Comparator D remained relatively stable in the percentage of URM who were applicants and finalists compared to the two prior years. On the other hand, Pilot D, using UC Recruit for the first time coupled with other interventions, experienced a significant increase in the percentage of URM applicants (5.9%) and finalists (10.5%) compared to the two prior years. Both Pilot D and Comparator D hired a greater percentage of URM faculty in 2018-19 than their current faculty composition and compared to their hiring in 2016-18. Moreover, they both exceeded the national availability.

As this equal employment opportunity program was conducted at the department level, rather than at the campus, school, or division level like the other pilot programs, the number of total hires is smaller, and the hiring of one or two URM faculty results in a substantial change in percentage of new faculty hired. Even though Pilot D and Comparator D hired the same number of URM faculty in 2018-19, because Pilot D had substantially more hiring than Comparator D

during the 2018-19 period, the percentage of URM hired in Comparator D is substantially higher than in Pilot D.

Chart 13: Pilot D and Comparator D
Percentage (%) of Underrepresented Minority Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19

Similar to results for URM faculty, the percentage of female faculty in Pilot D and Comparator D, and the percentage of female faculty hired during the prior two years, is below the national availability. In 2018-19, Pilot D had a significantly greater percentage of female applicants (5.9%), finalists (23.3%), and hires (33.3%) than in the prior two years. Comparator D also had an increase in the percentage of applicants and finalists but did not hire any female faculty.

Chart 14: Pilot D and Comparator D
Percentage (%) of Female Ladder-Rank Faculty and Equivalent by Hiring Stage, Academic Year 2018-19
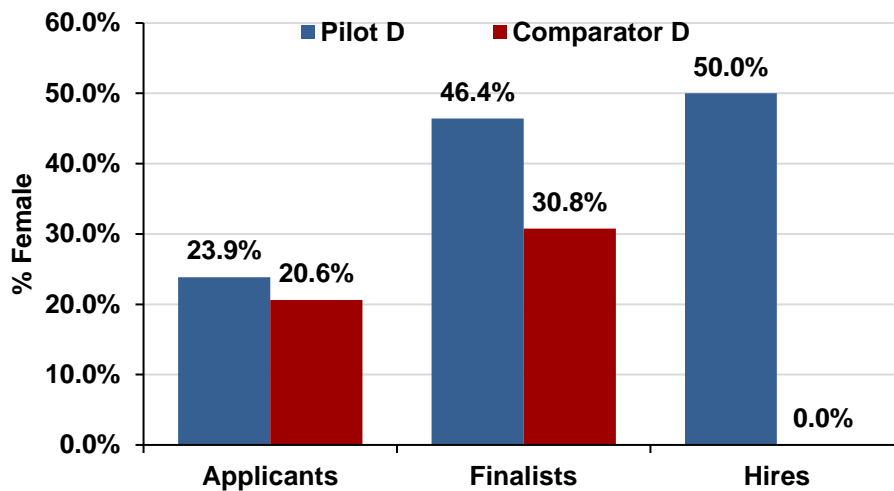
A "Riverside Mathematics Workshop for Excellence and Diversity" took place in October 2018 with 65 participants in attendance and 10 invited talks. Dr. Catherine Searle, a senior mathematician, gave a plenary talk and also provided Pilot D with a mailing list of over 215 female mathematicians for a direct emailing effort.

Future Plans

In spring 2019, Pilot D developed and offered a graduate seminar entitled "Exploring Equity in Mathematics." Pilot D will continue to offer this seminar and seeks to formalize it through the campus course approval process so that they are able to offer it annually. In this way, they hope to change the culture of the department.

To address the "pipeline" issue in mathematics in the longer term, Pilot D is developing a "4+1 Master's degree program" to bridge UCR undergraduate students into a PhD program. UCR's undergraduate body is approximately 50% from historically underrepresented groups and 50% female. Through this program, they hope to encourage more students from these groups to have careers in mathematics. They will formalize a process to collect information about URM activities in mathematics that will help them in future recruitment efforts.

The pilot unit will also organize a workshop on "reading and writing diversity statements in mathematics." This will supplement the workshops already given to search committees at UCR and will capture those faculty members who have not served on search committees. In addition, the workshop will help students learn to express their thoughts about inclusive excellence. The pilot unit will also develop a comprehensive mentoring plan for all incoming scholars. The plan will be individualized and will include all aspects of faculty evaluation in the

areas of research, teaching, and service. Such individual plans will be enveloped by departmental support or partnership activities.

VIII.   Summary of Findings for All Four Pilot Units

The additional funding allocated to UC resulted in substantial progress in increasing faculty diversity. By selecting different interventions and comparing the pilot units' results in 2016-18 to their results in the funded year (2018-19) in their own unit and against those of a comparator unit, UC sought to identify the most successful methods with the hope of adapting and replicating them to produce positive outcomes at all campuses. It is important to recognize that a limited number of comparisons were made between the four pilots and comparator programs. The total number of hires evaluated through these studies is small relative to total faculty hires and should be considered representative of the ability of thoughtful interventions and additional funding to improve the diversity of applicants considered and ultimately hired into UC faculty. These results provide evidence that a variety of practices can be implemented across disciplines to improve diversity in hiring and demonstrate that allowing flexible, locally-configured approaches shows promise. Longer term studies and comparisons are needed to demonstrate statistically valid comparisons. It is also important to recognize that there are other practices besides faculty hiring – for example, supporting graduate students and postdoctoral scholars and improving the climate for faculty success – that would strengthen the pipeline and increase the availability pool of excellent faculty, as well as support faculty retention. As mentioned above, President Napolitano implemented a faculty retention/climate program in 2018-19 to support faculty retention. A report for the retention/climate program will be posted online in fall 2019 at this web site: https://www.ucop.edu/faculty-diversity/index.html

The interventions that appear to have been the most successful in the four 2018-19 pilot units were as follows:
- **Additional accountability** on campus as well as at the systemwide level (through the Program Advisory Group, which met monthly);
- **campus commitment of funding**, for either one-time uses or permanent full-time equivalent (FTE) faculty;
- **enhanced outreach** through personal contacts, use of databases, and targeted ads;
- associated use of **PPFP/CPFP recruitments**;
- **targeting potential faculty slightly earlier** in their careers through support for post-doctoral work;
- **strong leadership and sustained and strategic involvement** from the unit leaders, including department chairs, deans, vice provosts, and vice chancellors;
- **rubrics/criteria** to guide decision-making by faculty members;
- **search committee training** to implement consistency in evaluations and understand implicit bias;
- **standardizing job advertisement text** to emphasize the importance of diversity, equity, and inclusion, in order to increase diversity in applicant pools;

- strengthening the role of **faculty equity advisors** during the recruitment process;
- use of **"contributions to diversity statements"** in candidate evaluation; and
- **significant revisions to the involvement of hiring committees**, including centralized review committees.

All four units saw a substantial increase in the percent of new URM and female faculty hired. All units also saw significant change in practice and conversation within their units. It is clear that the infusion of funds into the pilot units made a difference in faculty diversity relative to their past performance and to the comparator units. Most importantly, the pilot units began with a recognition that their past hiring practices were insufficient and then they committed themselves to transformative changes in their hiring processes.

IX.   Looking Ahead

The results of the 2018-19 Advancing Faculty Diversity program at UC, using the additional funding allocated by the State, suggest that additional funding on targeted interventions does have an impact on supporting and increasing equal employment opportunity in faculty employment. UC's many other colleges and schools also continued their work on diversifying the faculty during the 2018-19 year. UC remains committed to its work on increasing the pipeline of potential faculty, including its work to build strong support systems for graduate students, post-doctoral scholars, and early career and established faculty.

UC's budget for 2019-20 includes an additional $2.5 million allocation from the State to support best practices in equal employment opportunity in the current year. To select the pilot units for the fourth year of funding, the UC Provost invited each campus to propose an intensified approach to hiring a more diverse faculty in a selected unit with the adoption of specific interventions from the first three years. Campuses submitted strong proposals, each drawing from ongoing campus efforts and from the successful interventions from the past three years of pilot units, as well as proposing new interventions. The 2019-20 program was also expanded to include campus proposals that will focus on faculty retention efforts, including programs targeted at department or school climate. The Office of the President will provide the funding for the retention/climate programs, as well as two in-person meetings for all funded project teams that comprise the AFD program to share progress, report on successes and challenges, and build a community of practice for faculty recruitment work across campuses.

As other units adapt and implement the successful strategies from the 2016-19 funding years, UC can continue to identify the most successful recruitment methods that are also transferable across different units and campuses. Finally, continued examination of years one through three of the program provides an opportunity for UC to study the ongoing impact of the interventions on the pilot units. Annually, the Office of the President requests and receives post-program status reports from prior AFD grant pilot units to determine how the pilot unit is mentoring and supporting the new faculty hired during the pilot program and continuing the interventions supported by the AFD funding.

Contact Information:
Office of the President
University of California
1111 Franklin Street
Oakland, CA 94607
http://ucop.edu/