The UC Davis ADVANCE program aims to increase the participation of URM (Underrepresented minorities) women in STEM fields (science, technology, engineering and mathematics). The overall campus goal is to create an enabling environment and to “build a vibrant, welcoming and diverse STEM research community”. A second objective is to establish an institution-wide, inclusive STEM climate that values and embraces diversity. ADVANCE also plans to develop and provide programs and resources that will empower individuals for a STEM academic career and promote equitable advancement. The effectiveness of programs, practices and polices developed to meet these goals will be assessed in an ongoing basis.

The specific overarching objective of the UCD ADVANCE program as stated in the NSF grant application is to understand barriers and catalysts for Latinas in STEM fields as a route to enhancing the diversity of STEM on campus and to empower STEM fields to match the demographics of the populations that we serve. The very foundation of STEM disciplines is to create and transmit new knowledge and promote the advancement of human society by tackling critical issues via research and creative activity. The major issues facing society today are intricate and complex often requiring a multidisciplinary collaboration. Equally key to accomplishment in these research endeavors is the inclusion of culturally diverse perspectives and approaches. STEM must migrate from a culture of being open to diversity in its ranks to one that acknowledges that its very success and future impact is dependent upon that diversity in all of its forms.

The charge to Committee for the ADVANCE Policy and Practices Review Initiative is to conduct a systematic review of policies and procedures that impact recruitment, retention and career progress of faculty and, when deemed necessary, propose changes to those policies and practices in order to eradicate implicit bias, promote diversity and eliminate inconsistency in implementation. Our recommendations will be presented to the Davis Division of the Academic Senate for consideration and modification and ultimately for dissemination, review, implementation and to obtain feedback from the systemwide UC Academic Senate as appropriate. We are also charged with developing online spaces for protected faculty feedback on policies and implementation which will be done in conjunction with the Davis Division of the Academic Senate and the UC Davis Federation. We have divided our charge into four sections: recruitment, faculty advancement and the reward system, career development and retention. Four separate reports will be generated each focusing on one of these topics.

The case for change:

The barriers to creating a fully inclusive environment and attaining demographic parity are both structural and cultural. Our campus objective is to achieve demographic parity throughout the ranks of the STEM faculty. Key to success in achieving this goal is the
recruitment, advancement and retention of a diverse workforce. Much attention has been given to the pipeline that feeds academe and its leaky nature for women and URM faculty as the primary barrier to creating a diverse academy. A focus on the pipeline was launched by the AAAS presidents lecture by Sheila Widnall "Voices from the Pipeline" published in Science in 1988. This lecture served as a call to action to address on-going and chronic pipeline issues. Today evidence demonstrates fixing of many of the barriers that forced leaks in the pipeline (Ceci and Williams, 2009) and suggests instead that the very nature of science leads to self-removal of women and URM from the pipeline (Blickenstaff, 2005). Other data reinforce the continuing impact of implicit bias on the career trajectories of women and URM faculty (Valian, 1999). Comparative studies show that other previously male-dominated professional fields that continue to embrace gendered criteria of success such as medicine, veterinary medicine and law show better demographic parity than STEM in academia. Other university disciplines, social sciences and humanities, likewise display better demographic parity than STEM. It then becomes important to understand what makes STEM differ from other academic disciplines and from other career paths within a STEM discipline. We differ slightly with the view of Blickenstaff that the core of the problem in both self-determined exit from the pipeline and in implicit bias is rooted in the very nature of science. Instead we believe it is rooted in the current value system and metrics used to judge the quality of a scientist and a scientific career. These quality metrics impose a critical barrier to attainment of demographic parity. Our goal in this and our remaining three reports is to launch a campus-wide critical assessment of our value system and metrics used in order to eliminate those that engender bias and encourage highly talented and qualified segments of our scientific workforce to exit the pipeline.

**Structural barriers to demographic parity:**

Academic STEM is characterized by a very rigid career structure. The inflexibility of this structure is generally incompatible with family formation and caregiving responsibilities and indeed often equates attention to those responsibilities with a lack of dedication to one’s research and career. This perceived lack of dedication negatively impacts career development and progression even after the time demands of caregiving have lessened. A major reason talented individuals self-exit the pipeline as students and postdoctoral fellows is the realization of the enormity of the difficulty in balancing family life with success in their discipline (Mason et al, 2013). The years leading up to the tenure decision are often the most critical in family formation and our lack of acknowledgement of this in our reward structure leads to an exodus from the pipeline which is particularly acute for potential women and URM faculty. The major factor imposing rigidity on STEM careers is the pervasive use of and reliance on clocks in metrics of career assessment and the highly competitive nature of obtaining funding for the research enterprise that also runs exclusively on a fixed clock. Although we have made some progress in academia in developing and successfully implementing stop the clock policies the fact that funding agencies have not done so creates a conflict in adoption and use of those policies. No cost extensions, while helpful, ignore the fact that although the PI may be on parental leave the rest of the research team is not and funding will need to be expended to cover costs of salaries during the absence of the PI.
In addition a senior person able to oversee research during parental leave may be necessary to the continued success of the research endeavor. We cannot hope to fix the problem in STEM by focusing on institutional policies alone.

There are rigid timelines for normative progress throughout STEM academic careers beginning with graduate degree programs. Rigid timelines in degree programs are often justified by limited physical space in STEM laboratories and the need for turnover to allow new individuals the opportunities to become trained as scientists. Other disciplines that do not have such firm individual space or resource needs and limitations have been able to develop more flexible or open timelines than the STEM fields. Following graduate school postdoctoral appointments are also on a clock, generally imposed by granting agencies, with clear progress expected within a specific time frame. Although time in the postdoctoral ranks can be somewhat flexible allowing for family formation the impact on research productivity in the form of peer-reviewed publications in and of itself negatively impacts career metrics and may lead to a loss of competitiveness in obtaining research funding in the future. In addition to timeline norms and expectations for stages of an academic career as a metric of quality an accompanying metric is the level of productivity per year in each of those stages. There is no point at which starting a family and caregiver responsibilities can be accommodated without a negative impact to the career of the primary caregiver (Mason et al, 2013).

Upon appointment to the ranks of faculty the tenure clock starts and even given the prevalence of family friendly policies to stop the clock the need to remain competitive for grants re-imposes the clock and, depending upon the competitiveness of the discipline, may completely negate the value of institutional family friendly policies. Publications per year are also continually used as a metric for advancement. This is an outcome of the practice of the “60 hour work week” for faculty, which often in STEM disciplines given the nature of the work particularly if biological materials or animals are involved can be in reality 24/7. Under these circumstances polices that offer part-time employment as a means to achieve worklife balance often are not effective or applicable. It is also challenging to review files from individuals on part time status given the expected norm of open ended time investment for full time appointments. The clocked nature of the normative advancement poses not just a worklife imbalance but is in fact antagonistic to attaining a balance.

In spite of federal agency adoption of family friendly awareness programs for grant review data continue to show family status is strongly predictive of grant receipt (Mason et al, 2013. Chapter 6). Tenure track women with children are 26% less likely to have federal grant support than tenure track women without children. In addition the need to meet grant goals within a rigid timeline in order to maintain competitiveness places faculty in an untenable position with respect to the need for individuals within the lab supported by those grants to take parental leave. PIs clearly would prefer to support members of their research team in taking parental leaves but know that the research progress will suffer and competitiveness for the next grant may be in jeopardy. Postdocs and graduate students are also aware of this imbalance in institutional family friendly
policies and the realities of grant competitiveness and this conflict often leads to an exit from the pipeline (Mason, et al, 2013).

Cultural barriers to demographic parity:

In addition to these structural issues cultural issues can also pose a barrier to equitable treatment within academia. Metrics of success used in evaluation for both appointment and career advancement display inherent or implicit bias. Also known as schemas, implicit bias refers to the nonconscious expectations of individuals based on gender or ethnicity developed in childhood that in the professional world can give an advantage to one group over another. In a more colloquial sense bias is taken to mean attitudes, perspectives and prejudices of one group that confer an advantage to that group over another but that are not shared by both groups. In a similar sense implicit bias is also a set of attitudes, perspectives and prejudices that confer an advantage to one group over another but that are often shared by both groups in essence culturally driven. The breadth and depth of the negative impact of implicit bias on faculty recruitment and advancement was cogently detailed in Virginia Valian’s book “Why so slow? The advancement of women” (1999) and reinforced in the NAS report “Beyond Barriers and Bias: Fulfilling the Potential of Women in Academic Science and Engineering (2007 ). Valian clearly outlines the role of gender and racial schemas in evaluation of faculty and documents the negative impact of schemas on career advancement. An example of gender schemas in action can be found in the type of terms used to express the role of women versus men in science (Madera et al, 2009). Women are often described in terms of collaboration, consensus-building and nurturing while men are more often viewed in terms of independence and leadership. This differing vocabulary can appear in outside letters of recommendation but also may be used by the candidate in their own statement for advancement. If evidence of independence and leadership is crucial for advancement the reward system may lead to bias favoring the group for which that vocabulary is more commonly used.

A second type of example of intrinsic bias in the reward system concerns the perceptions of the appropriateness of expression of traits associated with success within our culture. One common such trait in evaluation of academic success is self-promotion. The trait of self-promotion is on a negative trajectory meaning that when carried to an extreme it is associated with the negative traits of arrogance, pride and egotism. The point at which expression of this trait crosses into the negative perception of that trait differs by cultural subgroup. Women and URM faculty often experience a negative reaction to levels of self-promotion that are acceptable for white males. But women and URM faculty are just as likely as white males to find that level of self-promotion to be negative. Over the past few decades there have been many calls for training and accepting self-promotion across all cultural sectors, but none of these have been successful. The cultural advantage of not displaying a negative trait can outweigh the career disadvantage of doing so. This is evidenced by looking at our own UCD culture. The campus is often criticized for being too humble, too nice and insufficiently self-promoting. As a consequence the campus contributions are often undervalued by peer institutions. Over the years we have launched several initiatives and adopted
practices aimed at increasing our level of self-promotion and we are well aware of the institutional advantages of doing so, yet our campus culture remains the same. In addition if individuals ascribe to the same cultural schema they may be fine with others displaying a negative trait and being equitably rewarded for it but unable to embrace that level of expression of that trait themselves as to do so would compromise their own self-identity.

It is imperative that we understand the breadth of the role played by schemas or intrinsic bias in our own reward system and develop schema abatement practices and policies in order to obtain a truly equitable review system for all faculty. Indeed this is the goal of the STEAD (Strength Through Equity And Diversity) training being developed by the ADVANCE Inclusive Campus Climate Initiative. It may also be essential to purge our reward system of weighting traits like self-promotion that may simply be incapable of equitable application across all segments of our culture. Is the ability to self-promote truly correlated with the quality and impact of the creative work being done? A reward system that values what can be perceived as a negative trait uncorrelated with the true worth of accomplishments may be a key factor in encouraging differential exit from the academic pipeline.

The path forward:

Both structural and cultural factors impose barriers to obtaining demographic parity among the ranks of the faculty. Although some of these barriers are more acute factors for STEM fields others impact all fields of academic inquiry. These barriers both disadvantage those on an academic career track as well as encourage exit from the academic career pipeline. The campus needs to collectively evaluate the impact of these factors on our reward system and advancement at all stages of an academic career and develop mechanisms to mitigate the effect of these barriers if not remove them altogether. The Policy and Practices Review Initiative Committee will issue four reports each focusing on a different critical area. Each of these reports will be presented to the campus academic community in draft form for review of the proposed recommendations and to enable the community to modify, reject or pose additional recommendations for going forward. A final report will be prepared for formal consultation after these comments and suggestions have been obtained so that these recommendations and guidelines will truly reflect the views of the campus academic community as a whole. The combination of these reports in final form will create a clear campus roadmap for going forward and attaining our goal of demographic parity within our ranks.

The first report will focus on recruitment and cover the sub topics of pool composition, pool evaluation and the creation of an attractive campus climate. This report will be issued for informal comments in the spring of 2014. The second report will concentrate on our reward system and include not just our criteria for advancement but also a broader assessment of our overall incentives for faculty use of time and will be issued at the end of fall quarter in 2014. The third report will cover the topic of faculty development programs at all stages of the career ladder and will be issued for informal
comment in the spring of 2015. The final report will address retention on campus to be issued for informal comment in the fall of 2015. We expect to have final reports for each of these within 3 to 6 months of obtaining initial comments and suggestions depending upon the magnitude of those suggestions and need to explore them in depth. Each recommendation of each report will be numbered in sequence and each will include a section proposing a draft strategy for development and implementation. The campus community will be invited to critique both the recommendation and the proposed strategy for going forward.

**Immediate steps:**

Although the reward system is the subject of our second report we wish to make two recommendations immediately to address a longstanding concern of members of the Policy and Practices Review Initiative Committee. The APM in an effort to negate the impact of additions to the tenure clock states (UCAPM 210-1, section c4, Assessment of evidence (emphasis is ours)):

“If there is evidence of sufficient achievement in a time frame that is extended due to a family accommodation as defined in APM - 760, the evidence should be treated procedurally in the same manner as evidence in personnel reviews conducted at the usual intervals. The file shall be evaluated without prejudice as if the work were done in the normal period of service and so stated in the department chair’s letter.”

The use of “if,” and implication that the work has not been completed within a usual or normal time frame greatly reduces the family friendly intent of this policy. These accommodations must be considered the norm and not an exception to be viewed without prejudice. Although it may be challenging to change this wording in the systemwide APM we recommend that the Davis Division of the Academic Senate and Chancellor make efforts to do so.

**Recommendation 1: Modify UCAMP 210-1 section c4**

We offer as a suggestion to modify UCAPM 210-1 section c4:

The University of California allows flexibility in the timing of tenure review as defined in APM-760. It is our policy that the overall record of productivity and scholarly attainment form the basis of evaluation. Time since appointment is not a consideration in review of the candidate’s record of accomplishment.

**Suggested Process for Moving Forward:** We suggest that the Committee on Academic Personnel consider proposing such a change to the APM with the new language to be modified as they see fit and to take this suggestion systemwide via UCAP.

**Recommendation 2: Make extensions to the clock for parental leave automatic**
We further recommend that extensions to the clock for parental leaves be automatic and not require notification that a faculty member has elected to take advantage of the clock extension by the Chair or Dean. The faculty member may then elect to request promotion at any time with in their allotted clock. We repeatedly hear from faculty that Chairs and Deans have advised them against using this program so as to not negatively impact future advancement and ability to be competitive for grants. Given the baby penalty that has been well documented recently (Mason et al 2013. Do Babies Matter?) this advice unfortunately is not at all inaccurate. Under current policy and practice a request for an extension to the clock is automatically approved but the process of requesting it seems to provide an opportunity for others to caution against it and getting such an extension should be an entitlement automatically generated.

Suggested Process for Moving Forward: We suggest that the Committee on Planning and Budget work with the administration in identifying a process by which such an extension can be automatic, either by eliminating the need to appeal for an extension after the fact if it was not requested immediately or by working with HR to identify faculty who have added a dependent to their health insurance so that the extension of the tenure clock can be made absent any action on the part of the individual.

References:


Both cultural and structural factors pose barriers for diversification of the professoriate and can have career-long impacts as described in the Policy and Practices Initiative Overview report. The committee will present a set of recommendations for addressing these issues at each stage of the career ladder. These recommendations are draft recommendations as are the suggested paths forward should we elect to embrace the recommendation as a campus. We invite comment from the campus community on these draft recommendations, including suggestions for modification, additional recommendations or deletion and replacement of specific recommendations. The entities, Senate Committee or administrative unit are asked to review and comment upon their proposed roles in going forward and we also welcome suggestions for modification of the proposed plans for development and implementation of the suggested recommendations. Once the comment period has ended we will prepare a finalized formal report to be sent back to the appropriate committees and the campus community for further review, to be followed by delineating the processes of implementation for each of our final campus recommendations.

This report will focus on the issue of recruitment and what is and can be done to enhance the diversity of faculty appointments. We have divided recruitment into three specific aspects: pool composition, pool evaluation and creating and sustaining an attractive working environment.

**POOL COMPOSITION**

Achieving a diverse faculty requires achieving a diverse pool of applicants. Recent analyses of potential pool composition (PhD degrees awarded) suggests that many of the early barriers that forced leaks in the pipeline have been addressed but there still remains a greater attrition of women and URM from the pipeline towards a tenure-track position. However there is a greater diversity in pipeline pools than at any time in our history. It is important therefore to capture that pipeline diversity within our applicant pools. Our goal is to have the demographic parity of the applicant pool match that of the pipeline for a given STEM discipline. There are several approaches that have been taken by other institutions that have enhanced the diversity of their faculty and we make the following recommendations to attain enhanced diversity of our own applicant pools. Most common among these other institutions is the establishment of detailed review of position request assuring that they meet key institutional goals. Although extensive over-sight and micromanagement can be effective in some circumstances we favor instead establishment of practices that are able to be easily followed by all hiring units avoiding a lengthy review process, but review of both position requests and search plans needs to be addressed.

*Recommendation 3: Develop a core set of best practices for optimizing demographic parity and inclusiveness in application pools for each college and school*
Pool composition is impacted by a variety of practices. Given the scarcity of URM applicants in the pipeline, narrowly written or constricted job descriptions may lead to small applicant pools and potentially send the message that the position was written with specific applicants in mind. Other institutions have found that unconstricted searches lead to a more diverse pool and a more diverse faculty. “Unconstricted” in this case means job descriptions that span a discipline or even span multiple disciplines. On the other hand if an unconstricted search leads to several hundred applicants practices employed to narrow down the number of applicants to a manageable level for review, such as requiring a high number of first author publications or publications as first author in top tier outlets, can severely reduce diversity even below that of a more constricted search. The UC Recruit application software has the potential of enabling a comparison of pool composition and level of constriction of the job description. When possible, searches should be as unconstricted as possible to optimize pool diversity. However, often faculty positions must be targeted to specific gaps or needs in disciplinary expertise within the department. Balancing disciplinary expertise within a department can be vital to the continued success of the unit and enable a higher quality undergraduate and graduate education experience. This is particularly acute in STEM where successful candidates require a significant investment in laboratory space, equipment and start-up packages in order to establish successful research programs. Thus departmental resources might not in fact be flexible if academic programs and stature are to be maintained.

Current campus practice is that an Interim Recruitment Report (IRR) is required for all ladder rank faculty searches that must be approved by the Dean of the College or School. In 2013 the Vice Provost for Academic Affairs (VPAA) began requiring deans to provide the IRR to her office for evaluation, comment, and (where indicated) a recommendation to the Dean to either approve or disapprove the IRR (see: https://academicaffairs.ucdavis.edu/local_resources/docs/VP_advisories/AA2013-08 Advisory to Deans - New Process for Approval of Interim Recruitment Reports 091313.pdf). Evaluation of diversity (gender, ethnicity) is part of this process. The office of the VPAA will compare the diversity of the applicant pool, the “strongly considered” pool, and the “short list” pool against workforce-specific diversity information available through RECRUIT. According to Everett Wilson, who is the Data Coordinator in Academic Affairs, the workforce-specific diversity information comes from:

“...The figures are based on an annual survey of PhD's performed by the National Organization Research Center (NORC: http://www.norc.org/Research/Projects/Pages/survey-of-earned-doctorates-%28sed%29.aspx) on behalf of six federal agencies (National Science Foundation, National Institute of Health, Department of Education, National Endowment for the Humanities, United States Department of Agriculture, and NASA). The latest year's results can be viewed on the NORC web site, a good overview can be found on the NSF web site at: http://www.nsf.gov/statistics/srvydoctorates/#sd. The survey includes gender/ethnicity and the field of service most closely associated with a given PhD's study.

The office of the VPAA also examines the hiring goals for the department and college/school. If the diversity of the pool (and especially the short list pool) is below that
expected by the workforce-specific figures provided, or will not potentially contribute to the hiring goals, then the VPAA can recommend that the Dean not approve the IRR and either fail the search or keep the search underway until the diversity of the pools increases. However it is important to make sure that Departments are aware of the best practices for obtaining a diverse pool and that we as a campus understand the factors at play when the pool does not attain demographic parity. We recommend that the campus use the data on assessments of pool demographics for all fields not just those associated with STEM to create knowledge base of best practices for attaining an applicant pool that matches the demographics of the pipeline pool. An annual report comparing the effectiveness of specific practices with the attained demographics of the pipeline pool should be generated. In those cases where the demographics are not in sync an in-depth post mortem analysis should be done to determine the point at which pool demographics changed significantly. We acknowledge that such an effort would be more effective if done systemwide which would enhance our ability to both experiment with and assess differences in practices across the ten campus system and more quickly arrive at a consensus of most effective practices for each academic field.

**Suggested Process for Moving Forward:**

We suggest that Office of the Vice Provost for Academic Affairs (VPAA) prepare an annual report based on recruit categorizing searches by the levels of demographic parity in the applicant, the strongly considered and short list pools of the searches conducted in that year that have been completed. This report should be given to the Committee on Affirmative Action and Diversity (AA&D) for review. The AA&D committee can then compare cases of successful attainment and persistence of demographic diversity to the actual processes followed in the search in order to identify those practices that generally lead to demographic parity. Practices detracting from demographic parity can also be identified. Their findings should be reported on a regular basis to the campus community so that the adoption of best practices will become widespread. We further suggest that the annual reporting to the academic community described above be done at the systemwide level to take full advantage of the efforts in obtaining greater demographic parity that are currently being conducted on all ten campuses and AA&D may wish to take this idea forward to the systemwide Affirmative Action and Diversity Committee.

**Recommendation 4: Evaluate and enhance college/school level review of position descriptions and search plans**

Aligned with recommendation 3 is the recommendation to then apply the best practices information obtained to searches within a unit and across units. This recommendation has two components. The first component is the assessment of current college and school practices for review of both position requests and search plans employed by Dean’s offices. The point of generation of the IRR may be too late in the process to make the meaningful changes that will have an impact on pool demographics. We assume all review practices are in compliance with the APM, but perhaps that is not the
case. If practices are not in compliance with the APM they should be altered to become compliant.

The second component of this recommendation is to develop a faculty position (an individual to be appointed by the local Faculty Executive Committee) to advise both the Dean and departments on best practices for conducting searches and who will review position descriptions and search plans for best practices. We do not suggest creating cumbersome time-consuming practices that would delay replacement of vital faculty. The process developed should enable assessment of the appropriateness of the level of constriction of the search and to make sure best practices in advertising and pool evaluation are being followed. These plans should also include a detailed statement of how the position will be advertised that is also reviewed. Each college should also develop a plan for conducting cross-departmental searches to fill positions when appropriate to broadening a search. These processes should partner with, engage and respect the important role of departments in these searches particularly in an environment of limited local resources.

*Suggested Process for Moving Forward:*

We suggest each unit (college or school) appoint a joint senate-administration committee to document current practices in position and search plan review for their unit. The charge to these joint senate administration committees should also include development of plans for cross-departmental searches, and cross college/school searches. These plans would be submitted to the Senate committees on Affirmative Action and Diversity, Committee on Academic Personnel, Faculty Personnel Committees of the unit and to the Committee on Planning and Budget and to the Vice Provost for Academic Affairs for review. We also suggest the Committee on Affirmative Action and Diversity develop guidelines for the appointment and role of the unit Search Best Practices Advisor to be appointed by the unit Committee on Committees with the responsibility of reviewing search plans for and advising departments on best practices for achieving diversity within the ranks of the applicant pool.

To facilitate development of a practice for searches that will span colleges and support our efforts to create an inclusive campus faculty, we suggest that each local committee send one member to a campuswide planning committee that would develop a campus plan for cross college and school searches. One such possibility might be using CAMPOS (Center for the Advancement of Multicultural Perspectives in Science) to define faculty positions that will have a fractional responsibility for participation in CAMPOS initiatives and other campus initiatives devoted to mentorship and creating an inclusive environment.

*Recommendation 5: Create a UC-wide website for the advertisement of faculty positions*

Pool diversity improves when positions are advertised broadly. Departments are given some leeway in selection of outlets for position advertising at UCD and there are
budgetary constraints that may force less than optimal outreach for recruitment of applicants. Departments also use targeted emails to colleagues and departments that produce talented postdoctoral fellows and graduate students in our areas of interest. Other departments advertise more strongly at national conferences and candidates interested in positions often attend these recruitment sessions at those conferences. Thus it would be difficult to develop one core set of best practices for advertisement of all positions as disciplines vary in terms of optimal outlets for reaching candidates. We propose bringing the candidates to us by creating a high-profile single easy to search and navigate site for all UC positions. The existence of the site then could be broadly advertised and would quickly be a direct source of information for potential applicants. Drawing applicants to us across disciplines in a coordinated fashion would reduce the need for individualized advertising plans requiring oversight and review. This site could also be linked to regional dual career hiring networks and enable UC to take a lead in recruiting other academic institutions and corporations to these dual career networks. This portal could be easily linked to positions within Recruit and the Recruit application process should include a query of how the candidate first heard of the position. How candidates hear of the position could then be used to formulate best practices for attaining a diverse applicant pool.

**Suggested Process for Moving Forward:**

We suggest that the Committee on Planning and Budget in conjunction with the Vice Provost for Academic Affairs take the proposal for a systemwide website for position advertisement forward to the systemwide Committee on Planning and Budget and the Office of the President, respectively to both make the case and obtain endorsement for the creation of the position advertising website.

**Recommendation 6: Generate an institutional statement on commitment to diversity and inclusiveness to be included on all position announcements**

Many campuses are creating positions that require evidence of a commitment to diversity on the part of the successful candidate as a means to both addressing remaining issues in the pipeline, providing diverse role models, and achieving demographic parity. We recommend that language be developed that will clearly state UCD’s commitment to and valuation of diversity. Currently the minimalist statement required at UCD for all applications (APM UCD500 exhibit D) is: “The University of California is an affirmative action/equal opportunity employer.” This statement is inconsistent with the UC-wide minimum statement “The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age or protected veteran status.” This statement falls far short of stating a firm commitment to inclusiveness.

We therefore suggest UCD develop a clear institutional statement documenting our commitment to inclusion and that this statement be required on all position
announcements. We offer as a suggestion the following or similar language be included in all position announcements, not just those limited to STEM:

“UCD is committed to mentorship of students, staff and faculty including those from underrepresented and underserved populations and creating a vibrant and inclusive educational environment. We especially seek applications from candidates who share this vision.”

**Suggested Process for Moving Forward:**

We suggest that the Committee on Affirmative Action and Diversity develop suitable language for an institutional statement of commitment to inclusiveness or alternatively suggest a much more expanded statement such as that of Cornell University (http://diversity.cornell.edu/commitment-to-inclusion) to propose to the campus for implementation.

**Recommendation 7: Create a new targeted program “Faculty Targets of Transformation” that could serve to recruit faculty at all ranks with the potential to strongly enhance efforts to build an inclusive campus environment.**

Currently the only targeted faculty programs on campus eligible for a search waiver are the Targets of Excellence and Partner Opportunity Program supporting dual career hires. Targets of Excellence are generally limited to senior faculty with strong records of research accomplishment, faculty who are already “stars” within their discipline. A Targets of Transformation program would allow Departments to identify and propose targeted hiring of faculty with solid research programs but that also have even stronger records in teaching and mentoring that would equally enhance the campus climate of excellence in areas other than research. An alternative approach would be to broaden the current operational definition of the TOE program. We do not favor this latter approach because of the review process that might be required. Clearly the experts within a discipline are best able to identify stars within that discipline and know what strategic hires would best enhance that discipline on campus. The TOT hires would carry non-disciplinary expertise in teaching, mentoring and advising and therefore might be best reviewed by a committee containing representation from Affirmative Action and Diversity and Undergraduate and Graduate Councils in addition to review by CAP and the Committee on Planning and Budget.

**Suggested Process for Moving Forward:**

We suggest that the Committee on Affirmative Action and Diversity consider best mechanisms for attracting “stars” in teaching and mentorship to our campus, individuals that will be truly transformative and carry strong records in commitment to diversity and inclusion.

**Recommendation 8: Enable commitment to diversity statements to be included in the application process**
If recommendation #6 is adopted, a clear campus commitment to diversity will be stated in each position announcement. As a companion to this recommendation we also propose the inclusion of a diversity statement similar to the one used in advancement actions of faculty in the application process via Recruit. We will need to provide examples of the types of commitments that are currently being made by existing faculty as guidance for the type of commitment we are seeking in applicants and provide guidance to departments and review committees on how to interpret such statements. UCSD has just started such a program and uses these statements as part of the evaluation of candidates.

**Suggested Process for Moving Forward:**

We suggest that the VPAA make the changes necessary to the Recruit site to enable inclusion of diversity statements as part of the application process. We also suggest that the Committee on Affirmative Action and Diversity develop along with the VPAA examples of current faculty diversity efforts which will both serve as a tribute to the work those faculty are engaged in as well as provide a guideline on the types of service that we enable on campus that applicants may join once they arrive on campus. AA&D should also develop a guide on how to interpret diversity statements and use them in conjunction with other metrics used in identification of the final successful candidate.

**Recommendation 9: Evaluate current pipeline programs**

Potential faculty elect to leave the pipeline often because of concerns regarding the incompatibility of a career in science and family formation and caregiver responsibilities as well as conflicts between cultural schemas and equitable advancement practices. The availability of flexibly timed positions in the pipeline can be beneficial to potential faculty who wish to postpone starting a tenure track position until primary caregiver responsibilities have lessened. This can be critical for dual career couples. Campus policies that place a hard five year maximal time limit on postdoctoral positions may reinforce the structural problems associated with STEM careers and worklife balance. Policy for postdoctoral fellow employment also stipulates a review of any request for a reduction from 100% time. Although this is supposedly automatically granted for caregiver responsibilities the fact that it must be applied for and approved can be viewed by postdoctoral fellows as family unfriendly. In addition we also recommend exploring development of a reentry postdoc program similar to that in existence at UCB to enable return to the pipeline for reestablishment of a record of productivity needed for successful attainment of a faculty position.

**Suggested Process for Moving Forward:**

We suggest that Graduate Council and the Committee on Affirmative Action and Diversity conduct a review of our current practices for postdoctoral appointments with a goal of addressing the structural issues impacting pipeline demographics and make recommendations for change if needed.
**POOL EVALUATION**

Equally important as advertising broadly and addressing pool composition issues is the development of best practices for evaluation and review of that pool. Schemas or implicit bias have been repeatedly shown to negatively impact equitable review of women and URM faculty. From a policy perspective, our policies do not reinforce implicit bias but nor can they correct for its existence. We view two components to bias that can negatively impact career advancement: the existence of implicit bias or schematic thinking and bias introduced by career trajectory or pedigree.

*Schema Abatement*

**Recommendation 10: Require STEAD training of all search committee and department chairs and ultimately of all faculty engaged in faculty review and evaluation.**

The formation of schemas or expectations of behavior of an individual based on their identification as a member of a group are implicit and therefore difficult to ignore. Other institutions have addressed this problem through the targeted training of search and review committees. Indeed a component of this ADVANCE grant is to develop similar training for UCD and the ADVANCE Committee for an Inclusive Campus Climate has developed a training program called STEAD (Strength Through Equity And Diversity) that will be invaluable in the training of search committees in understanding implicit bias in its multiple forms and how it impacts review of applicants.

*Suggested Process for Moving Forward:*

We support the plan to require all search committee members undergo STEAD training in order to recognize the many forms that implicit bias might take in record review. However we think implicit bias is pervasive throughout the academy and all of its disciplines. Therefore we recommend that we develop mechanisms for the training of all faculty, senate and non-senate, in implicit bias so that we may all serve as agents of change to external bodies to increase more globally awareness of the cultural aspects of disadvantage in our respective disciplines.

**Recommendation 11: Eliminate valuation of gendered traits in pool evaluation**

The concept of the ideal STEM scholar is often imbued with gendered traits such as excelling at self-promotion, aggressively competitive, stingy with both time and credit given to others, a tough negotiator and dedicated to career as evidenced by a lack of worklife balance. Often these personality traits when expressed by those groups not normally considered to possess them can be viewed as negative. Similarly if those traits are not expressed by a member of the group thought to possess them that individual can be equally disadvantaged. Evaluation committee training should include recognition
of these traits as gendered and not correlated with true impact of scientific discoveries as outlined in the 2007 NAS report “Beyond Bias and Barriers”.

Over the past three decades there have been numerous attempts to encourage all scientists to develop these gendered traits in order to be successful along with the companion efforts to convince review committees to apply valuation of these traits equitably and without gender or ethnic bias. The fact we still have the problem in spite of these decades of effort suggests that a different approach might be needed. Also it is not clear if there is in fact a correlation between possession and expression of these gendered traits and the innovation and impact of creative activity and research programs and the “inherent nature of science”.

_Suggested Process for Moving Forward:_

We suggest that the Committee on Affirmative Action and Diversity develop a report on the impact of gendered traits and implicit bias on both candidate pool evaluation and advancement through the faculty ranks that can serve to inform our evaluation process and be used in the training of Department Chairs and faculty review committees. More recommendations on this particular topic will be included in our report on our reward system.

*Pedigree Bias*

_Recommendation 12: Include awareness of pedigree bias in training of chairs and faculty._

A second form of bias that can become a factor in both evaluation of candidates and in reduction of pool size is the placement of a high value on a specific scientific pedigree during the review process. URM faculty in particular often have non-traditional career paths such as starting at a community college rather than a research 1 institution or having gotten advanced degrees at universities not considered to be top tier even when their record of accomplishment matches that of traditional path candidates. For some positions particularly in narrowly defined sub-specialties the pool may be narrowed by a focus on targeted recruitment from a small set of Departments considered to be top in the field. Both of these practices can narrow pool composition unnecessarily.

_Suggested Process for Moving Forward:_

We suggest that the Committee on Affirmative Action and Diversity in their report on the impact of gendered traits and implicit bias generated suggested in recommendation 11 include an assessment of the bias in hiring imposed by seeking faculty with a specific pedigree or that follow a more traditional path to the PhD degree. This report can also serve to inform our evaluation processes and be used in the training of Department Chairs and faculty review committees.
Recommendation 13: Review campus policies and practices with respect to search waivers for faculty positions

Current policy is to allow departmental initiated requests for search waivers only in cases of TOE appointments (https://academicaffairs.ucdavis.edu/programs/target-excel/index.html). However, UCD APM 500 exhibit b lists the conditions under which academic appointments may be exempted from search requirements (http://manuals.ucdavis.edu/apm/500b.pdf). This includes discussion of acting or temporary faculty appointments, POP’s, emergency appointments needed to meet critical teaching or clinical needs and a vague statement on exceptions for recruiting faculty with unique experiences and accomplishments that matches the language used for selection of the President’s Postdoctoral Fellows. 500b also includes information on search waivers for grant funded programs when it is clear that individual hired is so uniquely qualified that they would have been hired anyway should a search have been conducted. Search waivers are to be approached with extreme caution as the absence of a pool of candidates may negatively impact efforts at attaining demographic diversity. The origin and intent of some of these exceptions to policy in hiring should be reviewed and their effectiveness assessed. In cases of emergency fast-tracking a pool-based search may be more advantageous than pre-selection of a qualified individual.

Suggested Process for Moving Forward:

We recommend that the Committee on Affirmative Action and Diversity review 500b and its application on campus in conjunction with CAP and the Committee on Planning and Budget and determine how search waivers are and have been used on campus and for what purposes and report their findings as well as any recommendations for change to the senate and campus administration.

CREATING AND SUSTAINING AN ATTRACTIVE WORKING ENVIRONMENT

The final task in development of a diverse faculty workforce is the creation of an enabling work environment that will be attractive to faculty candidates and create the inclusive, vibrant community that we seek. Two other ADVANCE committees, the Committee for an Inclusive Campus Climate and the Committee for Mentorship and Networking are along with the CAMPOS initiative are developing programs that will be critical to the creation of a highly attractive work environment for URM STEM faculty. We suggest that those programs being created and reports generated by those initiative committees undergo full Senate review. From the policy and practices perspective we offer the following recommendations.

Recommendation 14: Reward mentorship activity in advancement

APM210 includes language specifying the importance of mentorship “mentoring and advising of students or new faculty are to be encouraged and given recognition in the teaching or service categories of academic personnel actions” and “opinions of
graduates who have achieved notable professional success since leaving the university” is given as an example of appropriate documentation of mentorship ability. However often such letters are considered as not “arm’s length” by reviewing bodies and are discounted in the review process. We recommend that inclusion of such letters as well as other evidence of high impact mentorship in faculty review. The recent COACHE survey revealed a high valuation of mentoring by the campus academic community as well as indicating that all demographic subgroups think mentoring is undervalued and could greatly be improved. The ADVANCE Mentoring and Networking Initiative is developing mentorship programs and guidelines to address these and other concerns regarding the quality of and rewards for excellence in mentoring on this campus.

Suggested Process for Moving Forward:

We suggest that the Committees on Faculty Welfare and Affirmative Action and Diversity, along with CAP, review these proposed mentorship programs and develop clearer metrics for the evaluation of mentorship in our review process and that we publicize our efforts so that our commitment to mentorship is clear to prospective faculty. We will have further recommendations in this area in the report on our reward structure.

Recommendation 15: Institute standards for equitable resource availability

Obtaining the resources needed for establishment of a research program in STEM often relies exclusively on the negotiating talents of the candidate. As described above negotiation talent is often viewed as a gendered trait and thus reliance on this trait as an assessment of candidate quality can disadvantage women and URM faculty. Women and URM faculty report colleagues viewing them as greedy when the attempt to negotiate start up packages that match or exceed those of white male colleagues whereas white male colleagues are considered to be simply placing the correct evaluation on their needs. To address the cultural or schema impacts of expression of the negotiation trait we recommend a more formulaic approach to start-up package funding, one that strives for equitable treatment of all faculty and that is not reliant on variable personality traits. While efforts to train women and URM faculty in the art of negotiation are laudable, expecting someone to embody a personality trait that may be perceived as negative is counterproductive. A side benefit of developing such a program might be to stem the rapidly increasing magnitude of start-up packages by divorcing the magnitude of the package from the implied quality of the candidate.

Suggested Process for Moving Forward:

We suggest that the same college and school committees created under recommendation #3 be also charged with assessment of typical start up packages and the creation of standardized by discipline start up packages that reduce the reliance on negotiating skill in obtaining the funds needed to launch a successful career. The campus can develop competitive equitable methods for application for extra funds when well justified by the candidate’s needs that would be put forward by the department
Chair and not the candidate with full explanation. These recommended start up packages once developed by each unit should be reviewed by the Committee on Planning and Budget and the VPAA for review prior to implementation at the unit level.

**Recommendation 16: Establish clear policies on expectations of early career workload balance**

In concert with recommendation #15 in some cases reduced junior faculty workloads are part of the negotiation process and there is a tendency for these workloads to not be equitable across junior faculty. Workload reductions often take the form of reduced service and teaching loads for an initial period of time to allow the faculty member the time needed to develop their area of scholarship. The time demands of establishing a research laboratory and securing funding can indeed be severe. We recommend a uniform policy of workload reduction be developed by the campus and equitably applied to all new junior faculty. We realize it may be easier in some departments to offer reduced workloads without impacting the workload of other faculty and this also needs to be taken into account in the development and implementation of these policies.

**Suggested Process for Moving Forward:**

As in Recommendation #15, clear unit policies for junior faculty workloads should be developed by each local committee created under recommendation #3 and be reviewed by college/unit senate faculty personnel and executive committees. Policies should then go forward to the Committee on Planning and Budget and the VPAA for review prior to implementation at the unit level.

**Recommendation 17: Align University and federal family friendly policies via lobbying of federal granting agencies to institute automatic cost-extensions for parental leave**

The inflexibility of timelines of federal grants can negate institutional family friendly policies in those STEM fields where obtention of such grants is critical to establishment of a record of accomplishment. Providing no-cost extensions in cases of parental leave ignores the fact that at UCD the majority of the funding is being used to support the research team not the faculty member and a hiatus in funding will have a negative impact on the individuals with salaries or stipends covered on the grant. It is simply not possible to shut down the entire research enterprise during a parental leave.

**Suggested Process for Moving Forward:**

We urge the UC administration to work with federal granting agencies to address this issue and develop policies for the fully-funded automatic extension of the grant for the period of the leave. Although family leave policies are largely mandated by state law the federal government should partner in compliance with these polices for federally funded research. Rather than an extension of individual grants which may pose a nightmare of documentation and excessive paperwork, an alternative would be to develop a
mechanism by which the funding of this program could be included in overhead requests with the funds going to a specific pool to be used to augment grants for parental and other approved leaves mutually agreed to by both the University and the granting agency. We suggest the Committee on Planning and Budget along with the VPAA develop a strategy for aligning federal and local leave policy and bring the request forward to the systemwide Committee on Planning and Budget and to the Office of the President respectively for endorsement and review, then for systemwide review as this would need to be a systemwide policy applicable to all individuals funded from research grants.

Recommendation 18: Review of department climates

The Committee for an Inclusive Campus Climate is developing tools for assessment of departmental climates and to provide assistance in creating and maintain an inclusive climate. Under current practices issues within a department or unit climate are only identified via a “whistleblower” mechanism, the lodging of a complaint against individuals within a department. Non-inclusive climates may be a cultural phenomenon of the entire department and not map on a specific individual or subset of individuals that could be named in a complaint. We therefore suggest that we develop a mechanism of climate assessment based on the report to come from the Inclusive Climate Initiative Committee that enables review of local climates and recommendations for change to those climates as needed.

Suggested Process for Moving Forward:

We recommend that the Campus Climate Initiative Committee prepare a report on best types of climates as well as best practices for creation of an inclusive climate and for correction of one that does not appear to be achieving inclusiveness and that this report receive Senate review. We further recommend that the Academic Senate institutionalize climate assessment by including it as a factor in review of undergraduate programs. We suggest that Undergraduate Council consider and propose mechanisms by which an assessment of departmental climate can occur during the regular review of undergraduate programs. However we note that the COACHE survey data for the campus suggests that campus climates are thought of more positively than at comparison institutions but since this is a comparison and not an absolute scale we should develop processes to assure all units enjoy positive and inclusive climates.

Recommendation 19: Enhance childcare and caregiver support programs

One factor often raised by faculty with young children as needing attention and improvement is the availability on campus of quality childcare at affordable costs. In fact investment in child care is associated with a positive campus climate and commitment to equitable faculty advancement (Trower, 2013 Success on the Tenure Track: Five Keys to Faculty Job Satisfaction, Chapter 4). While we do have some programs in this area we recommend a review of their effectiveness and availability for faculty in light of Trower’s recommendations in this area. She cites the importance of
child care facilities locally located (within the school or college) that would be amenable to work schedules of faculty, meaning the potential for extended hours to capture faculty that may need on occasion to leave early to make a meeting off-campus or who may need to arrive late in order to participate in key networking opportunities such as dinners for invited speakers.

**Suggested Process for Moving Forward:**

We suggest that the Committee on Faculty Welfare review the recommendations in Trower’s book and make recommendations specific to our campus based on their findings and the specifics of our local culture for the provision of child care on campus.

**Recommendation 20: Convert our POP program to a dual career program:**

Our current Partner Opportunity Program is important in the recruitment of dual career couples or individuals of a dual career couple and the importance of such programs was highlighted in Trower’s Success on the Tenure Track: Five Keys to Faculty Job Satisfaction (2013). However by its very name the POP program reinforces that one spouse is the “leading spouse” career-wise and the other the “trailing spouse”. In contrast campuses with dual career programs do not make valuations of the relative importance of the two careers.

**Suggested Process for Moving Forward:**

We recommend that the Committee on Faculty Welfare and Committee on Planning and Budget review our current POP program and consider suggesting changes in the program, at least at a minimum to rename the program, to a dual career program and review the information on successful dual career programs as described by Trower.

**Recommendation 21: Create a Program of Faculty Career Peer Advisors**

Mentoring is a critical component of both career success and career satisfaction and is highly valued by faculty on the UCD campus as evidenced in our COACHE survey results. Matching faculty with good mentors is a goal of the Mentoring and Networking Initiative but faculty may have questions and issues that they would feel more comfortable bringing up with a knowledgeable individual not part of their normal networks or departments. The creation of Faculty Career Advisors that would function similarly to the current Privilege and Academic Personnel Advisors is suggested. Alternately the charge to the Privilege and Academic Personnel Advisors could be expanded from their current role to include being familiar with mentoring programs available on campuses and other resources needed by faculty.

The committee shall include members both with experience in the privilege and tenure process and in the academic personnel process, and every member shall be experienced in at least one of the processes. Current members of the Committee on Academic Personnel, Faculty Personnel
Committees, or the Committee on Privilege and Tenure are ineligible to serve on this committee. Appointments are for one year and may be renewed.

Suggested Process for Moving Forward:

Executive Council should consider the formation of Faculty Career Advisors or expanding the role of the Privilege and Academic Personnel Advisors. In addition the existence of the Privilege and Academic Personnel Advisors should be advertised better and be better known to the faculty that this expertise is available.

Recommendation 22: Create an online comprehensive faculty handbook

As noted in Do Babies Matter (2013) surveys indicate that a majority of faculty are unaware of institutional family friendly policies and the availability of these programs. Trower also cites in Success on the Tenure Track: Five Keys to Faculty Job Satisfaction (2013) the importance of having a one-stop clearly presented web site with easily searchable and findable policies and practices for every aspect of faculty life. We recommend that resources be provided to the academic senate to create such an on-line faculty handbook that would be easy to navigate present information clearly, and be comprehensive. We suggest this handbook could be loosely patterned after the one at Stanford (http://facultyhandbook.stanford.edu/) that includes both policy statements akin to our APM but also information on programs available to faculty.

Suggested Process for Moving Forward:

We suggest the Senate in conjunction with the Emeriti Committee identify a group of Emeriti wiling to devote time to creation of a comprehensive on-line faculty handbook. This would benefit current faculty as well as those considering applying to a position at our institution but acknowledges that our current practice of scattering such information across administrative web sites requires a depth of knowledge of “who does what” not common among new applicants or even among current faculty.