December 20, 2016

To: Thomas W. Peterson, Provost and Executive Vice Chancellor

From: Committee on Academic Planning and Resource Allocation (CAPRA)

Re: CAPRA Proposal for SAFI Hiring Models

In just over a decade, UC Merced has become a campus worthy of the University of California title. The campus delivers quality undergraduate and graduate education, and is well on its way to achieving R1 status (as evidenced by the recent promotion to R2 status). We have created a distinctive culture of interdisciplinary collaboration built on disciplinary strength and have established ourselves as a unique contributor to the UC System.

As we reach our enrollment targets of 10,000 students (9,000 undergraduate and 1,000 graduate) maintaining this trajectory of success will require an extremely focused and judicious allocation of resources. In particular, future faculty hiring must meet a number of objectives: (1) contribute to research excellence, (2) contribute to university reputation and distinction, (3) contribute to undergraduate and graduate curricula, and (4) encourage and foster interdisciplinary scholarship on the campus. Our campus is faced with this unique challenge in the presence of scarce resources. This requires that these resources be allocated efficiently. Our proposed hiring models are targeted at efficiently meeting these objectives while striking a balance between the acute programmatic needs of various disciplines and the importance of interdisciplinary research and academic programming.

Following the joint survey administered by CAPRA and the Provost in spring 2016, the Provost opened a dialogue regarding the current hiring practices on campus and the role of the SAFI moving forward. CAPRA greatly appreciates the Provost’s willingness to engage in this open dialogue and work with the Faculty Senate to build a collaborative approach to planning and resource allocation. Before outlining the different proposed hiring models we will briefly outline the steps that we took to elicit broader faculty feedback on these questions.

As representatives of the faculty, CAPRA is acutely aware of the different interests and perspectives regarding future hiring practices. To develop a broader understanding of these interests we invited and met with all of the SAFI pillar representatives (i.e., Steering Committee and or Search Committee
Chairs/members) to hear their preferences as well as their evaluation of the process to date. Based on the feedback that these individuals have provided, as well as a review of the input provided by the faculty on the survey conducted in spring 2016, we developed three proposed hiring models that were sent to each of the school Executive Committees for feedback in early November. Each of the three school Executive Committees shared the proposal with the faculty in their school. Faculty were given an opportunity to provide feedback through their school Executive Committees or directly to CAPRA. In addition, the three proposed hiring models were presented to the faculty at the Meeting of the Division on November 28, 2016.

CAPRA’s recommendations outlined in this document are based on the information obtained from all of the efforts we have taken to ensure broad faculty consultation over the past year. Compiling the recommendations forwarded by the faculty, CAPRA has developed two recommendations (SAFI hiring models) to be forwarded to the Provost. These two models are outlined below. Both models are based on the assumption that we will be hiring a total of 140 faculty under the SAFI hiring plan as outlined by the Provost in his memo to the faculty on April 17, 2015. After we outline the two proposed models, we provide additional justification for our recommendations as well as some suggested evaluative criteria for the different types of hires on campus.

**SAFI Hiring Model 1 – (30% - 70% Model)**

The first model recommends that 30% of all faculty hires (42 in total) be conducted using a cluster hiring process and 70% (98 hires) be allocated as Foundational hires. Given that at the end of the 2016-17 AY we will have made 20 cluster hires and 17 Foundational hires, Model 1 recommends that an additional 22 hires be conducted using cluster hires and 81 hires be allocated as Foundational hires.

**Cluster Hiring Allocation (22 additional lines)**

For the cluster hires we recommend that the 22 lines be divided into 4 clusters of 4 hires (16 hires) and 2 clusters of 3 hires (6 hires). The smaller clusters can be used to develop more targeted cluster hires in narrowly defined areas of strategic excellence consistent with the SAFI objectives. All clusters will be selected using a competitive application process. The process will be initiated by faculty submitting cluster hiring proposals to the current Steering Committees guiding the SAFI process on campus. In the case that a proposal lies at the intersection of multiple pillars it will be submitted to all of the relevant SAFI Steering Committees. The SAFI Steering Committees will rank the proposals and forward them to a SAFI Selection Committee consisting of the Dean’s Council and CAPRA. The SAFI Selection Committee will then rank all of the proposals and submit their recommendations to the Provost. The final selection of the SAFI clusters will rest with the Provost. All cluster proposals must also *a priori* select between one of two options for their cluster hiring practice. These are:

**Cluster Hiring Option A**

Under Option A, the cluster hiring proposal will indicate precisely in which bylaw unit each hire will end up and all searches will be conducted at the unit-level. This option addresses the faculty concern that cluster hires should be unit-directed to reduce uncertainty and improve efficiency in the hiring process.
Cluster Hiring Option B

Under Option B the cluster hiring proposal will not dictate which unit a faculty member will be hired into, but will instead indicate a set of bylaw units in which the faculty may be hired. This option will allow faculty interested in conducting interdisciplinary hiring to continue. However, the reduced set of potential bylaw unit homes will reduce the faculty workload associated with the hiring process and (hopefully) minimize disagreements among faculty.

Foundational Hiring Allocation (81 additional lines)

CAPRA recommends that 70% of the total 140 faculty lines (98 lines) be allocated as Foundational hires. To date we have made 17 Foundational hires, so we recommend that an additional 81 FTEs be allocated to Foundational hires. The hiring process for Foundational hires will follow traditional hiring practices on campus with requests originating from the hiring units, reviewed by each school Executive Committee and then the school Dean. These requests will be forwarded to CAPRA for review and then compiled for recommendation to the Provost. The final selection of the Foundational hires will rest with the Provost. These hires will all be unit-directed.

Safi Hiring Model 2 – (30% - 10% - 60% Model)

CAPRA’s second model recommends that 30% of faculty lines be allocated to cluster hires, 10% be allocated to unit-directed SAFI hires, and 60% be allocated as Foundational hires. Given that 37 of the 140 hires will have been conducted by the end of the 2016-17 AY (20 cluster hires, 17 Foundational hires, and 0 unit-directed SAFI hires), this implies that 22 additional hires will be allocated to interdisciplinary cluster hires, 14 to unit-directed SAFI hires, and 67 to Foundational hires. Listed below are our recommended procedures for each of the hiring types.

Cluster Hiring Allocation (22 additional lines)

For the cluster hires we recommend that the 22 lines be divided into 4 clusters of 4 hires (16 hires) and 2 clusters of 3 hires (6 hires). The smaller clusters can be used to develop more targeted cluster hires in narrowly defined areas of strategic excellence consistent with the SAFI objectives. All clusters will be selected using a competitive application process. The process will be initiated by faculty submitting cluster hiring proposals to the current Steering Committees guiding the SAFI process on campus. In the case that a proposal lies at the intersection of multiple pillars it will be submitted to all of the relevant SAFI Steering Committees. The SAFI Steering Committees will rank the proposals and forward them to a SAFI Selection Committee consisting of the Dean’s Council and CAPRA. The SAFI Selection Committee will then rank all of the proposals and submit their recommendations to the Provost. The final selection of the SAFI clusters will rest with the Provost. All cluster proposals must also a priori select between one of two options for their cluster hiring practice. These are:
Cluster Hiring Option A

Under Option A, the cluster hiring proposal will indicate precisely which bylaw unit each hire will end up and all searches will be conducted at the unit-level. This option addresses the faculty concerns that cluster hires should be unit-directed to reduce uncertainty and improve efficiency in the hiring process.

Cluster Hiring Option B

Under Option B the cluster hiring proposal will not dictate which unit a faculty member will be hired into, but will instead indicate a set of bylaw units in which the faculty may be hired. This option will allow faculty interested in conducting interdisciplinary hiring to continue. However, the reduced set of potential bylaw unit homes will reduce the faculty workload associated with the hiring process and (hopefully) minimize disagreements among faculty.

Unit-Directed SAFI Hires (14 lines)

Requests for unit-directed SAFI hires will originate from the bylaw units. These requests will be forward to each school’s Executive Committee for review. Each school Executive Committee will rank the requested unit-directed hires and forward their rankings to the SAFI Selection Committee consisting of the Dean’s Council and CAPRA. This review committee will select the unit-directed hires that best fit the strategic mission of the university (i.e., SAFI pillars) and that are capable of contributing to the programmatic needs of the university’s undergraduate and graduate programs. The SAFI Selection Committee will rank the requested positions and forward their rankings to the Provost. The final selection of the unit-directed SAFI hires will rest with the Provost. Utilizing the SAFI Selection Committee for the selection of the clusters and the unit-directed hires will help to ensure that both hiring types (cluster and unit-directed SAFI hires) will meet the strategic goals of the university.

Foundational Hiring Allocation (67 additional lines)

Under the second hiring model, CAPRA recommends that 60% of the total 140 faculty lines be allocated as Foundational hires. To date we have made 17 Foundational hires, so we recommend that an additional 67 hires be allocated to Foundational hires. The hiring process for Foundational hires will follow traditional hiring practices on campus with requests originating from the hiring units, reviewed by each school Executive Committee and then the school Dean. These requests will be forwarded to CAPRA for review and then compiled for recommendation to the Provost. The final selection of the Foundational hires rests with the Provost. These hires will all be unit-directed. Given that the unit-directed SAFI hires will be allocated based on both the strategic goals of the university as well as undergraduate and graduate programming needs, a lower percentage of lines are allocated as Foundational lines under this hiring model.

Having outlined our two recommended hiring models, the following sections provide additional justification for our recommendations as well as some recommended criteria for selection.

CAPRA Recommendations for Changes to the Cluster Hiring Process

It is important that our institution select areas of focus to make our institution distinct. The SAFI pillars help provide these thematic areas of distinction and are based on the amalgam of faculty proposals
generated under the SAFI process. The retention of the existing SAFI Steering Committees as the initial reviewers of cluster hiring proposals will help to provide continuity between the prior hiring model and the currently proposed hiring models. The utilization of the SAFI Selection Committee consisting of the Dean’s Council and CAPRA will allow them to be able to develop a comprehensive picture of how cluster hiring will impact faculty hiring on campus and to ensure that these hires are efficiently utilized to meet the strategic objectives of the SAFI cluster hires. Using a single committee will also help address concerns voiced by the faculty that many units do not have a sufficient number of senior faculty members to properly represent their unit at both the Steering and Search Committee level across all of the pillars they are interested in contributing to on campus. Furthermore, if we are going to encourage interdisciplinary scholarship and pedagogy it is important that these underrepresented groups have an equal opportunity to contribute to the SAFI pillars. This can easily be achieved by allowing all interested units to participate in the generation of cluster hiring proposals that are then reviewed by the existing SAFI Steering Committees.

Criteria for Hiring

CAPRA is currently engaged in developing clear and flexible criteria for both Cluster and Foundational hiring. Given that a smaller set of clusters is being recommended than originally outlined by the Provost in his April 17, 2015 memo we recommend that the competitive selection process consider a number of important factors in the selection of the cluster hires: (1) potential to develop an area of distinction, (2) ability to foster interdisciplinary scholarship and (3) their contribution to research excellence. One area that the cluster hires are not explicitly required to address is meeting program needs on campus. This is not to say that these faculty will not contribute to curriculum demands at the undergraduate and graduate level, it implies that their ability to contribute toward areas of research excellence and distinction on campus are their primary evaluative criteria. Meeting programmatic needs is a secondary concern for the cluster hires, but is a primary concern for the Foundational hires.

Following the Provost’s selection of a hiring model for the SAFI hiring moving forward, CAPRA will work with the Provost to determine criteria for Foundational prioritization.

Justification for a Larger Share of Foundation Hires

Although CAPRA is finalizing a model of the teaching demands when our enrollments reach 10,000 students, we have developed a heuristic that demonstrates the need to allocate a substantially larger percentage of the faculty lines as Foundational hires. As a university we are committed to providing high quality undergraduate and graduate programming. Currently, there are a number of programs on campus that have exceptionally high student-to-Senate Faculty ratios that compromise the quality of the education these students receive. According to the most recent IRDS data the current student-to-Senate faculty ratios across campus range from 76.5:1 to 3:1. This broad disparity highlights the need to realign faculty hiring with program demands. CAPRA is increasingly concerned that these high ratios not only compromise the education provided, but that they put an unnecessary burden on the faculty in these programs which detracts them from their research and may generate substantial faculty retention issues moving forward.

To determine the recommended Foundational hires, CAPRA utilized the IRDS projected enrollments in all of the majors on campus. For each program we determined how many faculty members are required to ensure that the student-to-Senate Faculty ratio does not exceed 50:1. This number is nearly double the 25.7:1 ratio that will be our campus average when we have 9,000 undergraduates and approximately 350
faculty. CAPRA also surveyed all of the graduate programs on campus to determine the minimum number of faculty FTE equivalents that would be required to effectively offer their graduate program when we have 1,000 graduate students on campus. We then added both of the required program hires, undergraduate and graduate, and subtracted off the projected faculty numbers at the end of the 2016-17 AY to determine the minimum future program needs at the undergraduate and graduate level. CAPRA identified that we need to hire at least 80 additional faculty in a unit-directed manner to meet these minimum needs at the undergraduate and graduate programming level.

One important factor to note is that these numbers do not account for the high service burden that a number of programs on campus undertake. For instance, the Applied Mathematics and Chemistry programs may have a higher need when we account for this factor due to the number of non-majors they serve. In addition, it is highly likely that a number of other programs across campus will need Foundational hires to offer their programs based on alternative hiring metrics (i.e., filling voids in existing curricula) as many faculty have voiced this as a Foundational need. This should be accounted for in future Foundational hires and can be more accurately informed by the 10K in 2020 project being conducted by CAPRA when future faculty hiring plans are proposed. CAPRA is concerned that a failure to address these undergraduate and graduate programmatic needs may result in the following undesirable outcomes:

- Inability for our students get the classes they need in a timely manner to complete their degrees
- Reduced access to our high demand programs that have historically attracted students to UC Merced
- Increased use of Unit-18 lecturers for upper division undergraduate courses
- A reduction in research time for faculty in impacted majors
- A forced tradeoff between undergraduate and graduate programming
- A reduction in the morale of faculty in impacted majors
- Very large class sizes affecting the quality of instruction
- Most broadly, a reduced ability to provide “UC Quality” education to our students

One broader institutional concern we have is that the 2020 Plan requires that we reach enrollment targets. If we do not adequately resource the units across campus that are going to be teaching these students, CAPRA is concerned that we will be unable to meet these targets. This is especially urgent considering that students who will be graduating in 2020-21 AY have already submitted their applications to UC Merced. By admitting students into our programs, we are implicitly guaranteeing that there will be adequate resources to provide the students a UC-quality education in the program of their choice. First and foremost, we must serve the students.

Although some faculty and administrators have suggested the use of enrollment management to address resource shortcomings, our preliminary analysis indicates that it is a limited tool. Given the large disparities that exist between many of our academic programs, the only way enrollment management can effectively fill this void is if students in high enrolled programs shift to low enrolled programs while simultaneously not affecting the students’ desire to come to or remain at UC Merced. Students electing to enroll at UC Merced do so in a highly competitive university environment. It is highly likely that if we restrict their access to high demand programs they will elect to enroll in a competitor institution. Clearly, we risk loosing many of our top applicants and students. More importantly, this may prevent us from meeting enrollment targets and therefore compromise our ability to fund the 2020 Project. This failure would have serious long run implications for the sustainability of our institution.
Generating an enrollment management process that would successfully reallocate these students across the low enrollment programs without lowering our admissions yields in both quantity and quality is highly unlikely and would presumably take at least a decade of effort to address. This is time that we do not have when we are faced with dire resource constraints in our current programs. This is not to suggest that CAPRA is opposed to enrollment management. We are supportive of such efforts. However, we believe it should be conducted in a careful, calculated, targeted and testable manner to determine its effectiveness. This would also require approval from Undergraduate Council, and the Academic Senate more broadly, to ensure that it does not compromise the pedagogical and curriculum standards of a UC campus.

Lastly, CAPRA would like to note that our institution is unique in its commitment to interdisciplinary scholarship. We as a faculty need to celebrate this success. This has arisen from a belief to develop strong disciplinary foundations within a culture that values interdisciplinary scholarship and pedagogy. Given this, we fully expect that many of the hires conducted under the Foundational hiring model will contribute to the university’s commitment to value interdisciplinary scholarship. This is something we have been very successful at achieving to date. Therefore, much in the same way that cluster hires will each contribute to some program on campus so will Foundational hires contribute to some aspect of interdisciplinary scholarship on campus. Fundamentally, the difference between these two hires is their primary evaluative criteria and the faculty’s desire to predict and plan for the future.

cc: Division Council
    CAPRA
    Senate Office