COMMITTEE ON RESEARCH (COR) Wednesday, April 8, 2015 3:00 – 4:30 pm KL 362

UCMCROPS/COR1415/Resources

A. Updates from March 19 Division Council meeting

II.Consent CalendarPg. 1-5Action requested:Approval of March 11 meeting minutes.

III. Campus Review Items

A. Public Health CCGA Proposal Pg. 6
Public Health submitted its PhD program proposal and Senate standing committees were asked to opine.
Proposal available at UCMCROPS/COR1415/Resources/Review Items - Campus

The COR lead reviewer has submitted his review.

Action requested: COR to vote on approving the proposal. Comments will be sent to the Senate chair by April 9.

 B. Management of Innovation, Sustainability, and Technology (MIST) Pg. 7 CCGA Proposal
MIST submitted its PhD program proposal and Senate standing committees were asked to opine.
Proposal available at UCMCROPS/COR1415/Resources/Review Items - Campus

The COR lead reviewer has submitted his review.

Action requested: COR to vote on approving the proposal. Comments will be sent to the Senate chair by April 10.

C. Revised Economics CCGA Proposal Pg. 8-39
Economics has submitted a list of revisions in response to Senate standing committees' comments on the original proposal in fall 2014.
Revised proposal available at UCMCROPS/COR1415/Resources/Review Items - Campus

CAPRA and COR are asked to review the revisions.

Action requested: COR to review the revisions and vote on approving the proposal. Comments will be sent to the Senate chair by April 22.

IV. Systemwide Review Items

A. Guidelines on Accepting and Managing Equity in Return for Access to **Pg. 40-75** University Facilities and/or Services.

The guidelines establish a pilot program whereby the UC would be able to accept equity from companies in return for access to facilities and services associated with incubators and accelerators across the UC system.

Action requested: COR to opine and send any comments to the Senate chair by May 1.

B. Proposed Revision to Senate Bylaw 182 Pg. 76-79

This bylaw revision would expand the charge of the University Committee on International Education: in addition to overseeing the Education Abroad Program the committee would formalize its role with regard to international research collaborations, the welfare of international students and scholars, and international engagement initiatives.

Action requested: COR to opine and send any comments to the Senate chair by May 5.

C. Copyright and Fair Use Policy **Pg. 80-89** This is the final review of proposed revisions to the UC Policy on Copyright and Fair Use. Final review is intended to advise the results of the systemwide review and how language has been refined. This stage of consultation is intended to resolve prior discussions and to answer remaining questions.

V. Senate Faculty Grants

Pg. 90-97

The call for proposals was submitted to all faculty members on March 6 with a deadline of April 15. School executive committees will submit their top proposals to COR by April 29. At the May 6 COR meeting, members will identify the awardees.

Discussion: prioritizing evaluation criteria.

VI. Other Business

Committee on Research (COR) Minutes of Meeting March 11, 2015

Pursuant to call, the Committee on Research met at 3:00 pm on March 11, 2015 in Room 362 of the Kolligian Library, Chair David C. Noelle presiding.

I. Indirect Cost Return Update

Attending today's COR meeting were Vice Chancellor for Business and Administrative Services Michael Reese; Assistant Vice Chancellor for Finance Donna Jones, and Director of Accounting Services Kimberly Groesbeck.

Chair Noelle provided background for COR's request on indirect cost return updates. Last year, the Provost/EVC mentioned the need to restrict the extension of start up packages, as there is a perception at UCOP that the campuses have a surplus of unused funds. However, faculty members were deeply concerned about a need to exhaust their start up funds, as Merced does not have departmental or other bridge funding available for emergency expenditures, such as equipment failure. Faculty members, instead, have to ask VC ORED Traina for additional funds, or attempt to win a small Senate faculty grant. Last year, COR heard that the administration was working on a new indirect cost return model that would allow faculty members to receive a portion of extramural grant indirect costs as discretionary funds. COR met with the relevant administrators twice in AY 13-14.

Vice Chancellor Reese announced that an indirect cost return proposal has been presented to the Chancellor for her approval. The proposed model would stipulate 5% of indirect costs to be returned to faculty member PIs and Co-PIs, but only on grants that pay full indirect costs. This return would occur in arrears, and the funds would be allocated by the Office of Research and Economic Development. Another 5% would be allocated to the school deans. COR members inquired if the deans' portion would be discretionary, and VC Reese replied that he will confirm. COR members suggested that language be added in the proposal clarifying that the funds allocated to the deans are to be set aside for faculty research purposes. Another suggestion was made to have the proposal specify that the 5% for deans should be used to benefit the research group of the PIs and Co-PIs, in preference to other faculty members in the school. COR members also suggested even greater decentralization of control of the funds, distributing them to the graduate group and bylaw 55 unit chairs rather than to the. Lastly, committee members inquired whether any of the funds will be allocated to ORUs. VC Reese stated that he will speak with Provost/EVC Peterson about COR's input.

AVC Jones announced that the approximate dollar amount of indirect cost return is \$150,000 divided among the three school deans. COR members expressed their concern that this low amount would be insufficient to cover faculty emergency funding needs, and a brief discussion was held on the political problem of some UC campuses holding an excessive amount of money in reserves, resulting in penalties at other campuses, including Merced.

AVC Jones stated that the new policy, if approved by the Chancellor, will be implemented by July 1, 2015, with the first payments being issued in the same month.

II. Chair's Report

Chair Noelle updated the COR members on the March 9 UCORP meeting:

- The "Committee of Two", Governor Brown and UC President Napolitano, continue to negotiate over the budget. The state may have more than \$1 billion in surplus. Members of the Governor's staff are visiting UC campuses; they were at Merced last week but Senate faculty were not notified and therefore did not have the opportunity to meet with them.
- In regards to open access, UCLA has tested a harvesting system that finds publications and recommends to authors that they place the

publications into eScholarship. UCLA reported an impressive 25% response rate from their faculty. It was also mentioned that the UC maintains some rights to publications even when faculty sign copyright transfer agreements with publishers.

- Representatives from the UC Natural Reserve System presented their new strategic plan, intended, in part, to address their deteriorating resources. The strategic plan included a proposal to work with development experts to obtain funding.
- Further evidence was presented demonstrating that 3-year undergraduate degree programs lacked viability.
- The Legislature has complained about the \$3 million used to recruit out of state undergraduate students, however, \$26 million was spent recruiting in state undergraduates.
- Assemblyman Mike Gatto has proposed legislation (AB 1483) that would explore the possibility of the establishment of a new UC campus to specialize in science, technology, engineering, the arts, and mathematics (STEAM). According to reports, the proposal does not yet have the backing of the Regents.
- The systemwide Provost announced that she is drafting a job description for the replacement for former Vice President for Research and Graduate Studies Steven Beckwith.
- MRUs such as UC Mexus are undergoing their 15 year sunset reviews. The 15 year review is unique in that the MRU must make the case that it is able to continue forward rather than simply being evaluated on past achievements.
- UCORP heard a presentation from UCOP's integrated communication office that discussed the efforts to distribute news of faculty research achievements via media and print outlets.

Chair Noelle also brought to committee members' attention that the call for nominations for the annual Senate awards was submitted on March 4. COR is responsible for reviewing nominations for the Distinction in Research (tenured) Award and the Distinguished Early Career (untenured) Research Award. **ACTION:** Two COR members volunteered to review each award. Both sets of review teams will present their rankings to the committee as a whole.

III. Vice Chair's Report

Vice Chair Wiebe updated the COR members on the February 17 meeting of the Periodic Review Oversight Committee (PROC):

- A main item of discussion was PROC's response to the VC ORED's draft ORU review policy, which is intended to expand on the comprehensive set of policies drafted by COR and submitted to the administration in AY 13-14. PROC emphasized the need to evaluate the long term financial stability of ORUs, to clarify the makeup of the review committees, to provide a clarified review timeline, and a process involving greater integration of review reports. PROC also advocated for a standardized review process across campus and an integration of the VC ORED's policy into other campus reviews.
- IV. Consent Calendar

ACTION: The February 25 meeting minutes were approved as presented.

V. Campus Review Items

Prior to this meeting, COR members received the Public Health CCGA proposal, the Global Arts Studies Program (GASP) major proposal, and the revised grade appeals policy.

A COR member volunteered to take the lead on reviewing the Public Health CCGA proposal and will submit his review in time for the April 8 COR meeting, where the committee will vote on the contents of a proposed response memo.

ACTION: The Senate chair will be informed that COR has no comments on the GASP major proposal or the revised grade appeals policy.

VI. Systemwide Review Items

Prior to this meeting, COR members received the proposed revisions to the Presidential Policy on Sexual Harassment and Sexual Violence and the proposed revisions to Senate Bylaw 128.D.2 pertaining to systemwide committee vice chairs.

ACTION: The Senate chair will be informed that COR has no comments on the revisions to the Presidential Policy and endorses the proposed revisions to Senate Bylaw 128.D.2.

VII. Senate Faculty Research Grants

The call for proposals was submitted on March 6. This item was tabled for the April 8 COR meeting where the committee will discuss prioritizing evaluation criteria.

There being no further business, the meeting adjourned at 4:30 pm.

Attest: David C. Noelle, COR Chair

Minutes prepared by: Simrin Takhar, Senate Analyst

DRAFT COR review for Public Health graduate program

The establishment of the public health graduate program at UC Merced has long been supported by the Strategic Vision of 2009 and Strategic Academic Focusing for 2020. The public health graduate program will particularly focus on prevention sciences in chronic and infectious diseases in underserved, disadvantaged, and ethnically diverse rural areas. UC Merced is uniquely located in the SJV, which can serve as a natural laboratory for the graduate research in public health. Participating faculty and existing graduate programs will form unique transdisciplinary approaches to addressing public health problems in ethnically diverse rural settings.

Public health graduate program will meet the academic focusing for UC Merced, has distinctiveness, and has demand from local communities and students. As a small and newest UC campus, it is critical to expand our graduate programs to build a solid foundation as a research institute and to meet the UC standard. COR primarily evaluates the proposal based on the feasibility to successfully execute research with proposed resources. COR unanimously supports the proposal, but below are several concerns that need to be addressed.

1. Resources

i) The program utilizes currently available resources and faculty to establish and run the program. Graduate students will be supported by TA ship or extramural grants. With their estimated graduate student enrollment and projected TA ship availability, all public health graduate students may be financially covered by TA ship. However, to assess future success and potential growth of the program, it would be helpful to know the current funding situation of participating faculty and trajectory to support graduate students by GSR in near future.

ii) The term "transdisciplinary approaches" is used frequently throughout the proposal. However, since no concrete description or example is shown, it is difficult to imagine how transdisciplinary approaches will be taken and incorporated into the program and efficiently delivered to graduate students. This helps to evaluate whether any additional resources are required to help grow the program.

iii) Support letters from the Dean to secure future FTE may be essential.

iv) Library resources – \$40,000 to \$45,000 per year is requested. Itemized annual cost may be included (JAMA, NEJM, etc)?

2. Program demand

5 UC campuses offer graduate program in public health, and MPH has high student demand. What is the student demand for MSPH and Ph.D. in Public Health?

3. Curriculum

No concern

Comment [MK1]: Definition http://www.obesitycancer.wustl.edu/en/About/What-Is-Transdisciplinary-Research

DRAFT COR review for MIST graduate program CCGA

MIST graduate program offers in-depth training and research opportunities to develop managers and leaders in the field of engineering and science, social science, and business and markets, combined with solid foundation of management skills. Thus, establishment of MIST graduate program is highly interdisciplinary and supported by all three schools at UC Merced. Utilizing existing resources and graduate programs on campus, MIST will build the graduate program focusing on the following 4 strategic areas of research: 1) Analytics, 2) Networks for valued creation, 3) Technology management, and 4) Resource management.

Resources

1. MIST requested approximately 2 FTEs per year until 2022, which gives the growth of the number of faculty from 6 (2016) to 16 (2022) (Table 1). Although all faculty may not primarily be appointed to MIST, addition of 10 FTEs are quite big. It is not clear whether these FTEs will be specifically allocated to SSM, or they are counting FTEs from other disciplines but also fits with their needs.

2. Student demand and potential job opportunity for students who graduate from this program are not clear. 7 of 10 UC campuses already have similar graduate programs. Do all of these programs have high student demand and success in careers?

3. Graduate student support – initial student body is not large, but it would be helpful to see the number of available TAship and GSR fund from current core or affiliated faculty.

Curriculum

No concern

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ACADEMIC SENATE, MERCED DIVISION COMMITTEE ON RESEARCH DAVID C. NOELLE, CHAIR dnoelle@ucmerced.edu UNIVERSITY OF CALIFORNIA, MERCED 5200 NORTH LAKE ROAD MERCED, CA 95344 (209) 228-4369; fax (209) 228-7955

October 3, 2014

To: Jian-Qiao Sun, Chair, Division Council

From: David C. Noelle, Chair, Committee on Research (COR)

Re: COR Comments on Economics Graduate Program Proposal

The primary motivation for establishing the proposed Economics graduate program is that UC Merced is the only UC campus that does not offer a graduate program in Economics, and the number of existing faculty with unique research emphases will now allow UC Merced to offer a unique Economics graduate program that can complement other existing programs. Four major fields of economics will be focused upon: (1) Economic Geography and Trade, (2) Environmental and Resource Economics, (3) Health Economics, and (4) International Development. Some of these fields are offered at few other UC campuses. For example, Health Economics is not offered on any UC campus, and Economic Geography is only offered at UC Irvine. By focusing on these underexplored fields and developing interdisciplinary research efforts within these fields and with other existing programs, such as Biology, Cognitive and Information Sciences, Environmental Systems, and Public Health, the proposed program potentially offers a unique interdisciplinary graduate education in economics.

COR primarily evaluates graduate program proposals based on the impact that such programs are likely to have on the full range of research activities conducted on our campus, but we also consider the feasibility of successfully executing the proposed programs with available resources.

COR unanimously supports the Economics proposal, but the committee has several concerns that should be addressed:

1. Resources

i) Currently, 7 faculty members are fully engaged in Economics, plus an eighth member joining in January, 2015. The distribution of research emphasis areas across the faculty is as follows: 4 in Economic Geography and Trade, 2 in Environmental and Resource Economics, 3 in Health Economics, and 3 in International Development. (Some faculty members conduct research in several of these emphasis areas.) By the time of the anticipated start date in Fall 2016, the program is expected to have 11 fully dedicated faculty members. The program is anticipated to recruit 10 graduate students during its first year (faculty/student ratio 1:0.9). The number of faculty and graduate students are expected to increase to 16 and 26, respectively, by 2020 (ratio 1:1.6). The members of COR are concerned that this growth rate is not realistic, given current hiring trends, and they would like to see further evidence that the SSHA Dean would support this growth rate given limited resources.

ii) Along with the concern above, the members of COR would like to see greater alignment between the letter of support from the SSHA Dean and the program proposal document with regard to the number of faculty needed to successfully deliver the program. The letter from the Dean states that 8 FTE are sufficient to run the program, but the proposal indicates that the minimum number of faculty needed to deliver the program is 11 FTE. If 8 faculty members are sufficient, please revise the curriculum and course delivery plan accordingly.

iii) Support letters from other graduate programs or units may be necessary to demonstrate that the proposed interdisciplinary research and coursework for graduate students can be provided.

iv) Library resources – The members of COR would like to see a justification for why the proposal does not include a consideration of the kind of large databases that are needed in the library by many economics programs.

v) The members of COR suggest eliding Appendix F (Bylaw55 in Economics) as being potentially distracting and confusing to CCGA, which is solely interested in graduate program design.

2. Program Demand

i) Four major research emphasis fields in economics are proposed, and interdisciplinary research involving the combination of these fields makes the proposed program distinct from other existing programs on UC campuses. The members of COR would like to see evidence that these specific emphasis fields have increasing demand and might successfully sustain the program by recruiting graduate students and attracting extramural funding. Evidence can involve job opportunities in related areas or increasing funding opportunities in these areas. In particular, the members of COR would like to confirm that there is enough demand for Health Economics, which is not offered on any other UC campus.

3. Curriculum

i) Close interaction with faculty and the development of critical thinking skills are described as unique features of this proposed program. However, details concerning how these features will be successfully delivered to students are not provided in the proposal. A larger faculty-student ratio is just one of the components of a successful program, and it does not necessarily mean that there will be a close interaction between students and faculty.

ii) The proposed program encourages students to take courses in other existing programs, such as Biology, Engineering, Cognitive Science, and Public Health. (Considering the fact that the proposed program includes a Health Economics emphasis, the members of COR suggest highlighting potential collaborations with the Health Psychology program on campus, as well.) Such diverse coursework can certainly lead to unique interdisciplinary research in economics, but any details or realistic plans (clear explanations) concerning how the program will facilitate/encourage students to take these courses are missing from the proposal. Also, graduate courses in the natural sciences and engineering may be tough for students who have a limited background in these fields. Finally, the sample program (section 2.11) does not seem to reflect this proposed plan.

iii) The members of COR noted that the early years of the proposed graduate program involve both extensive coursework and substantial research expectations. The proposal would be strengthened by providing some evidence of the ability of students to meet these demands. Such evidence might be found through a comparison to economics graduate programs at other institutions.

cc: COR Members DivCo Members Senate Office

Graduate Council Comments

Comment 1: The executive summary is missing and should be written for a general academic audience, i.e. a faculty reviewer who does not necessarily have expertise in the specific field.

Response: We have added an Executive Summary.

Comment 2: Reviewers a unanimous in their assessment that projections for faculty growth in the short-term are unreasonable, since these projections are based on unusual recent faculty growth in ECON to stabilize the program and fail to acknowledge the current embargo on faculty hiring for AY 2014-15. In addition, the proposal narrative overstates the level of FTE support indicated by the SSHA Dean, and also contradicts the Dean's contention that the graduate program can be initiated with only the eight current faculty lines. Thus, the discussion of both the projections and the minimum number of faculty for launch must be revised.

Response: Our target of having 11 faculty by 2016-17 stems directly from the letter provided by Dean Aldenderfer. In this document he stated that it was reasonable to expect that we would be at 11 faculty by the Fall of 2016 and 16 faculty by 2020. If we consider the projected growth for the institution and assume a uniform distribution in growth across disciplines we would be at 14 by 2020. We completely understand GC's concern regarding our projections but it is not possible for the Dean to commit lines to our program. Therefore, we are left to determine what is an acceptable level of growth given that we currently have a freeze on hiring. For the purposes of the proposal, and to be conservative regarding our projected growth, we have elected to reduce the projected growth to only one new faculty line a year. This seems exceptionally reasonable given the projected growth in the campus at large and still places us one faculty member less than what would be expected if the growth is uniformly distributed across all disciplines at UCM. Furthermore, this delays our projected growth to 16 faculty to the 2023-24 academic year (see revised Table 1). We have also pointed out in the proposal that we are adding two additional LPSOE lines this year (approved by the Provost) to facilitate the execution of our undergraduate program. This further strengthens our ability to execute the graduate program with existing faculty.

Comment 3: The proposal makes no reference to the Social Science IIGP and how ECON fit within this group. While we understand that this is likely because there are no current students and no new students will be accepted, this is important history on graduate ECON at UC Merced that bears both explanation (including, perhaps, why it was or was not a success, how the new program compares) and is necessary background/context for some allusions in the text. Inclusion of this information is also critical to expedited WASC approval of the proposed program (see, in particular, comments from ALO Martin).

Response: We have added this information to our graduate proposal (see section 1.3) and pointed out the weaknesses of the Social Science IGP and the reasons why we were not able to effectively utilize this program for our graduate students.

Comment 4: The proposal is inconsistent with respect to programmatic and faculty support for non-academic careers (e.g., this is specifically called out as a goal early on in the proposal, but subsequent sections either ignore this altogether or are presented in

such a way that such commitment on the part of the program appears very weak). Since this may be considered an important distinction of the program within the system (given the focus on "new" economics and relevance to policy), such mixed messages must be resolved.

Response: The training for students who wish to pursue non-academic careers is not different from those who wish to pursue an academic appointment. Therefore, the programmatic and faculty support required to train students for either appointments does not need to be differentiated. Our focus on "new economics" is referencing our desire to train students who wish to do applied research in areas that will inform policy. This may seem to imply that we are focusing on training students for non-academic careers, but that is not true. The fields we have selected to focus on are all applied fields in high demand (see job market demand section of proposal). We have added some additional language to the proposal to point out the academic and non-academic expectations for our students and to better highlight our programmatic focus.

Comment 5: Related to #2, the obvious reliance on lecturers to staff core undergraduate courses in ECON—thereby freeing up ECON faculty to teach in the graduate program — is troubling. This suggests that the program is not self-sufficient and sacrifices the undergraduate program to initiate the graduate program. The teaching rotation should clearly distinguish ladder-rank faculty (core and affiliate), LPSOE/LSOE, and Unit 18 lecturers so reviewers can accurately assess the ability of the ECON faculty to deliver both programs and the potential impact on both graduate and undergraduate programs in ECON. As part of these revisions, it is recommended that the rotation be revised so that core courses are taught every year so students receive the necessary foundation for the first-year exam and that elective courses are offered at least every other year rather than every 2-3 years so students can progress through the program in a timely manner.

Response: Historically the ECON program has relied on lecturers to provide the undergraduate program. This is because we have had very few faculty in economics at UC Merced. The number was as low as 2 faculty in the Fall of 2013. We currently have 8 research faculty and 1 LPSOE and are adding two additional LPSOEs this academic year. This will be bring us up to 8 research faculty and 3 LPSOEs by next year. This is a sufficient level of permanent staffing to meet the needs of our undergraduate program. Although we will still be using a few lecturers to provide a few of our courses, our reliance on these resources is substantially lower the before. Furthermore, in the near future additional hires will be made in MGMT (3 faculty in the near term) that will allow us to further reduce our reliance on lecturers as a majority of our lecturers moving forward are required to facilitate the MGMT undergraduate program. However, to date very few resources have been allocated to this program (3 research faculty who are not part of the Economics Graduate Group). The rotation has been altered so that we offer the core courses every year in the fourth year of the graduate program and so that field courses are offered every 1 to 2 years at this point in time. For the first four years the core will only be offered every other year and in the other years the field courses will be offered. The main reason why have elected to start the program this way is to ensure that we get the highest quality graduate students possible and to not overburden our existing faculty as our faculty grows over the coming years.

Comment 6: Many reviewers expressed concern about the numerous course and special requirements such as the 2nd and 3rd year papers since there is no clear indication regarding how and when some this work will be accomplished. In discussion,

some GC members thought this might be addressed in part through comparison with (or letters of support from) other ECON graduate programs in the UC system to demonstrate that such requirements are the norm for the discipline (if that is indeed the case), although more detail is necessary about the 2nd and 3rd year papers in particular, including faculty advising or mentorship of students for such tasks. Clarification on what is meant by active engagement is needed as it implies internships or some other real-world experience.

Response: We decided to remove the 2nd year paper requirement in the proposal and focus on the 3rd year paper requirement. The 3rd year paper is a common requirement in many economics graduate programs and it was our intention to try and get them involved in research a bit earlier. However, by having the students complete their field course work in their second year this will actually accelerate the process as well. In addition, we have added some clarifying language in the document to better describe the nature of the student and faculty interaction expectations. We did not send the proposal out to other graduate programs in the UC at this time, but we will be doing so after it has gone through internal review.

Comment 7: Similarly, several reviewers expressed concern about the teaching requirement (see GC and Dean Zatz comments) for multiple reasons. First, the relevance of this requirement to students anticipating non-academic careers is unclear. Second, this requirement may preclude students from pursuing external sources of funding such as NSF graduate fellowships. Third, the notation that graduate students will be encouraged to teach their own upper division courses is contrary to UC systemwide policies for graduate Teaching Fellows, which allow such teaching only by special permission. Such teaching may also have implications for graduate student funding, since Teaching Fellows are covered under collective bargaining agreements. Finally, GC is concerned that the teaching requirement is being used to compensate for the shift in emphasis to graduate teaching by ladder-rank faculty, and this raises a further red flag with respect to necessary FTE to initiate and sustain the program.

Response: We have removed the requirement that our students have to teach, but we have retained the requirement that they serve as a TA for at least two semesters before graduating. This will be very easy for them to achieve because the dominant form of funding for Ph.D. programs in economics is TAships (we surveyed the other graduate programs in the UC System). As far as encouraging our graduate students to teach this is a direct response to economics market and not an effort to compensate for the shift in emphasis to graduate teaching by ladder-rank faculty. Currently, the market for economists rewards those who have done two things: (1) publish a paper before graduating, and (2) have teaching experience – sole instruction. The later is precisely why we want to be able to encourage students to teach. If they are discouraged from doing so this will only hinder their job prospects. This said, we were not aware of how difficult it is for our students to acquire this experience. Therefore, we have changed the language in the proposal to better reflect what we are able to have our students take on as graduate students. With regard to those students who are going to be seeking a nonacademic position we still feel that is necessary for them to serve as TA before earning their Ph.D.. Being a TA develops a student's ability to articulate economic concepts to a broader audience, which will also serve them well in a non-academic position. As far as applying for graduate fellowships, this is not the norm in economics and very few students apply for funding. The standard model in economics within the United States is that students receive TAships or RAships that are funded by the department or the university. In our survey of other graduate programs greater than 90% of the students are funded using internal (university-level) funds.

Comment 8: While reviewers were pleased to see acknowledgement of potential interdisciplinarity, many expressed concerns about the feasibility of students taking courses outside the ECON program to enhance an interdisciplinary perspective (e.g., see COR comments). ECON is encouraged to consider this issue in greater detail in the proposal (e.g., prerequisites for non-program courses, frequency of non-program course offerings, ability to take non-program courses given the high program course load) so that this option is realistically assessed and presented.

Response: Our discussion regarding the interdisciplinary nature of the program was supposed to reflect the fact that the creation of our program complements the existing and upcoming graduate programs at UC Merced. We have changed the language in the proposal to point this out. It was not our intention to require students to conduct interdisciplinary research, but to create some flexibility in the program so that if a student wanted to take a course in another discipline and they met the course requirements to enroll they could take the course. The suitability of the course is to be determined by the Graduate Director in consultation with the graduate student. Therefore, we do not see the need to more precisely outline the feasibility of our students enrolling in courses outside of economics because the completion of their degree does not rest on them being able to take courses outside of economics. We have highlighted that this is an option and by no means a requirement in the program within the document. All we wished to do was introduce some flexibility in the program to allow for interdisciplinary study if the graduate student wishes to do so. This said, many of the topics that economists research today are directly related to other disciplines (i.e., anthropology, biology, engineering, political science, public health, sociology, etc..) so we believe it is necessary for a graduate programming training economists today to have the flexibility for students to enroll in these courses when appropriate.

Comment 9: Reference to the undergraduate program in ECON and, especially, the undergraduate program in Management should be removed from the proposal. Undergraduate teaching (not number of majors in ECON or in programs that ECON supports through undergraduate courses) need only be referenced when (a) demonstrating that affiliated faculty can fulfill their teaching duties at both the graduate and undergraduate levels (i.e., Section 1.4), and (b) projecting how many TA will be needed and how this relates to graduate student funding, With respect to the latter, several reviewers expressed concerns about how TA needs were determined (see particularly Dean Zatz and CAPRA comments).

Response: We have removed the inappropriate references to our undergraduate programs in ECON and MGMT and retained them in the document where appropriate. With regard to the TAship needs and the issues raised, we have elected to use the same TAship calculations used in the other social science proposals (i.e., Political Science) for the reasons that are highlighted in our response to Dean Zatz and CAPRA. It is not possible for us to look at our historical need for TAs because our program has been operating with very few resources (as low as 2 faculty in the Fall of 2013!) and it is only now that we are able to start to think about our needs for TA needs. In fact, we are currently conducting a wholesale evaluation of our undergraduate program and revisions to nearly all of our undergraduate CRFs because we now have sufficient resources (8 research faculty; 1 LPSOE and hiring 2 LPSOEs this year). We are hoping that the

changes to our undergraduate program will companion the launch of our graduate program.

Comment 10: The Student Demand section would benefit from a UC-specific analysis (e.g., applications vs. admitted, etc.) as well as evidence that the four concentrations are in demand (see Dean Zatz and COR comments). As per Point #6 above, mention of the undergraduate programs in ECON and Management also should be removed from this section.

Response: We conducted a survey of the other graduate programs to learn more about the demand for graduate studies in economics and also conducted some research on the importance of our selected fields. This information is contained in the revised proposal. We have also removed the inappropriate references to undergraduate programs.

Comment 11: Several reviewers (e.g., CAPRA, Dean Zatz, Provost/EVC) expressed concern about the proposed admissions strategy for the early years of the program (i.e., every other year admissions), the plan to recruit students, and the low faculty to student ratio). The ECON faculty are encouraged to reassess the admissions and student growth plan carefully in light of these comments and develop more realistic projections for faculty growth (see Point #2).

Response: We have altered our projections for faculty growth substantially and have chosen a more conservative path than that outlined in our letter of support from Dean Aldenderfer. Our faculty growth projections are lower than if all future hires where uniformly distributed across the university. Therefore, we believe that our estimates are highly conservative. We have also increased our anticipated enrollment by 20% and we now have a projected faculty to student ratio that is more in line with the ratios observed at the other UC campuses when our program approaches a steady-state.

Comment 12: GC and Dean Zatz both expressed significant concerns about the advising burden placed on the Graduate Group Chair during the first two years of residency by students under the current plan. Both recommend distribution of advising more fully among the faculty to ease this burden and also provide a structure that will allow the Graduate Group chair to more effectively deal with potential student grievances and conflicts with their advisor (i.e., having the Graduate Group Chair as advisor sets up a conflict of interest).

Response: We have changed the document so that the Graduate Group Chair serves as the faculty advisor for all students in only the first year of the program. After this time period regular faculty advisor assignments are implemented. Given that all graduate students will take the exact same courses in the first year and they have the same metric for performance (i.e., course grades, Comprehensive Exam) this should not be an exorbitant burden for the Graduate Group Chair. This should also preserve the Graduate Group Chairs ability to more effectively deal with potential student grievances and conflicts with their advisor.

Comment 13: Appendix F (Bylaw 55 unit proposal) should be removed from the document (e.g., see GC and CRE comments)

Response: We have removed Appendix F (Bylaw 55 unit proposal) from the document.

Specific Review Comments (Pre-Review – CCGA Proposal Format Requirements)

Comment: There is no executive summary in the proposal.

Response: We have added an Executive Summary to the proposal.

Comment: Active engagement comment (pg. 1): This implies internships or some other real-world experience. Is this an accurate interpretation? Please clarify what is meant by "active engagement."

Response: This statement was not used to invoke an internship. It was used to point out that the students will be conducting applied and policy relevant research. This has been clarified in the document.

Comment: Recruitment of three faculty members in the coming academic year is a little bit over optimistic with the current embargo on faculty hiring. Should probably include mention of IIGP SS ECON track here. The dean's letter says nothing about "priority" hiring in ECON (i.e., over other disciplines), only his "continued support" for hiring in ECON.

Table 1: Eleven faculty for 2016-17 is not reasonable given no hiring in AY 14-15 (unless there is a holdover FTE from last year, which should then be identified).

p.3 Concerns about: Graduate recruitment every other year; the program cannot develop appropriate momentum. Faculty:grad ratio is and is intended to be substantially below mean target for university. In contrast, the program at UCR achieves 1:3 (UCM's target). This shortfall may be offset if students in the program graduate on average faster.

p.5 (Section 1.5) Relationship to (distinction from) other UC Economics programs is perhaps weak. Emphasize novel role within strategic vision? Info on undergraduate programs in ECON and (especially) Management needs to be removed – should highlight relationship to other grad programs

Response: The IGP discussion has been added to section 1.3. Our target of having 11 research faculty by 2016-17 stems directly from the letter provided by Dean Aldenderfer. In this document he stated that it was reasonable to expect that we would be at 11 research faculty by the Fall of 2016 and 16 research faculty by 2020. If we consider the projected growth for the institution and assume a uniform distribution in growth across disciplines we would be at 14 by 2020. We completely understand GC's concern regarding our projections but it is not possible for the Dean to commit lines to our program. Therefore, we are left to determine what is an acceptable level of growth given that we currently have a freeze on hiring. For the purposes of the proposal, and to be conservative regarding our projected growth, we have elected to reduce the projected growth to only one new faculty line a year. This seems exceptionally reasonable given the projected growth in the campus at large and still places us one faculty member less than what would be expected if the growth is uniformly distributed across all disciplines at UCM. Furthermore, this delays our projected growth to 16 research faculty to the 2023-24 academic year (see revised Table 1). As far as the targeted faculty/grad ratio, we have increased the projected number of graduate students upward by 20%. This combined with the adjustments made to the faculty growth generate a ratio of 1:3.1, which is on par with the University of California, Riverside and the University of California, Irvine. There may be more room for larger growth in the program later down the road but we weigh quality over quantity in the short-term. Lastly, we have removed the discussion of the undergraduate majors in section 1.4 and have added some additional details regarding the programs role in the recent strategic focusing efforts as our program clearly falls under the "Entrepreneurship and Management" pillar (authors of the current graduate proposal were also authors on the School of Innovation, Management and Economics proposal).

Comment: No indication that feedback sought from other UC ECON programs yet. authors should be preparing to send proposal out to other UC Econ Programs.

Response: We were not aware that this is a requirement. We have contacted the Graduate Council and determined that the best time to circulate the proposal for comments from the other graduate programs (or letters of support) is after it has gone through internal review here at UC Merced. Therefore, we will send the proposal out to other UCs for comment at that time.

Comment: p.6 Replace Kello with Zatz.

Response: Oops...fixed.

Comment: p.7 Rather than "by Angela Krueger, the UC Merced ..." use "by the UC Merced ... (currently Angela Krueger)" or drop name completely to remove possibility of document going out of date during consideration. If names are important, add an appendix matching current positions with people?

Response: This has been changed in the proposal.

Comment: p.9 (table) Is 100% pass-rate (at whatever level) over simplistic? Aim also for %age with A (or similar higher level of achievement)? Consult with ALO on use of direct and indirect (especially surveys of current students, as such surveys may be intimidating) evidence, annual assessment. Need to review for clear support of non-academic careers. The "lines of evidence" tables are odd in that none of the assessments are tied to courses – they are all exams, papers, etc. not linked to a course (if I'm understanding the curricular map correctly). How is the success of the curriculum actually assessed? Finally, there seems to be some confusion (at a few points) between assessing the STUDENT and assessing the PROGRAM – this needs to be addressed, as it is the PROGRAM that is of interest here. This latter confusion may also be reflected in the range of mastery based on expected "higher levels of achievement...for more advanced students" listed in the curricular map (i.e., the COURSE content is either as the I, D, or M level, not the STUDENT mastery of that content). The curricular map should not include non-curricular (i.e., non-course) items.

Response: We have consulted with ALO about the suggested changes and made a number of changes to the PLOs and assessment plans.

Comment: What does "expected to generate additional research" mean? Help faculty with their research? In what context will this "expectation be either supported or made clear? What will happen if this expectation is not met?

Response: We have removed this statement from the document and have also changed the language so that is states "anticipate" versus "expect."

Comment: p.16 Six core courses to be offered in first year, i.e. 1/4 of current faculty

teaching load. Plus another six courses recommended or elective, i.e. another 1/4 of current faculty teaching load. Is there sufficient capacity remaining for the undergraduate program? The teaching requirement – especially designing and delivering one's own course – seems unreasonable and may discourage or disqualify students who have NSF or other fellowship funding. This also is clearly a bias toward students who intend to pursue and academic career, which contradicts the Intro section. Flexibility to define alternatives" is problematic and could be taken as evidence that the faculty are not committed to the four fields or could be spread too thin. How would such alternatives be supported by curriculum? In addition, such "flexibility" might result in problems re: transcript tracking of non-standard majors/minor fields. Courses taken toward a graduate degree at another institution cannot be transferred for credit toward a Ph.D. at UCM. However, a course requirement may be waived if a similar course was taken at another institution. ECON 209- This class is not included in the teaching rotation table. Who is going to teach it? At what stage in their program do students select their major/minor fields?

Response: We are currently hiring two additional LPSOEs this year, which will bring our total LPSOE count to three. The combined efforts of the LPSOEs and our existing research faculty are sufficient to meet our undergraduate demands. We have retained the TA requirement in the program as very few students enrolled in Economics Ph.D. programs are funded under grants. We surveyed the other Economics programs in the UC System and external funding for graduate students is very rare (<10%). The dominant model for funding students is TA positions. Furthermore, this requirement does not in any way discourage students from seeking NSF funding as nearly all graduate students in Economics serve as TAs for at least the first year or two of the program. This is because it takes students a couple of years to develop their research interests. This is sufficient time for them to meet the TAship requirements and still seek graduate funding at a later date if they wish. We have also removed ECON 209 from the requirements. We will revisit whether or not this course should be added to program at a later date.

Comment: It is not clear what kind of format the comprehensive exam will have.

Response: We have added the word "written" to clarify that it is a written exam.

Comment: p.18 "fourth" not "forth" & "each student's" not "each students" Comprehensive Exam- This time commitment (i.e., two exam committees) may ultimately prove burdensome to faculty, so the proposers may want to rethink this.

Response: Fixed in the text.

Comment: Not sure about the policy "The graduate group chair will serve as the student's faculty advisor until the beginning of the third year. At the beginning of the third year, in consultant with the faculty, the graduate group chair will assign each student a faculty advisor". Seems overwhelming, unless this is the minimal level of advising re. course load etc. Doesn't speak to mentorship. Does the student get any say on who is there advisor? Such choice is likely critical to the success of the student. Additional 2nd year paper requirement: In what context is this paper prepared (e.g., Directed Research, Directed Reading, on their own)? If on one's own (i.e., outside of class), how do faculty expect a student to prepare such a paper while carrying a full three-course load?

Response: We have changed the time period when the shift occurs from the Graduate Group Chair to the faculty advisor to occur at the beginning of the second year. This is a sensible time to transition as the course work is constant for everyone in the first year and there is no real research advising occurring until the second year. We have also added language to point out that the Faculty Advisors will be appointed following consultation with the faculty and the graduate students. As far as the 2nd year paper requirement we have removed this requirement from the program. We have retained the 3rd year paper (moved the timing up slightly) and acknowledged that the development of the paper will be executed under the guidance of the student's Faculty Advisor.

Comment: p. 27 And any special preparation for students outside of teaching? Please be advised advanced graduate students may only teach lower division courses by UCOP rules for Teaching Fellows. Such students can only teach upper division courses with special approval from the Dean. Teaching requirement maybe be difficult/impossible with some external fellowships; unnecessary for students not seeking academic career?

Response: The fundamental requirement is that a student serves as a TA for at least two semesters. Given that the standard funding model in economics is that students receive TAships (see earlier comment) we do not feel that this requirement is overly burdensome. In fact, we anticipate that most of our students will meet this requirement within their first year. Therefore, this is not going to impact their progress or ability to seek external fellowships – which are also very rare in economics as well. Furthermore, we have surveyed the other graduate directors in the UC system and found that this level of TAship requirement is very minimal and is in line with the other graduate programs.

Comment: In-state, out-of state, etc. not provided; reference to undergraduate programs in Econ and Management should be removed; should note IIGP Econ program. Are there sufficient jobs, especially if focused on the academic track? Is there UCM-specific demand?

Response: Our pool of graduate students will predominately come from out-of-state, which is consistent with the other Economics Ph.D. programs. The primary factor attracting students to a Ph.D. program is the quality of the program not whether or not it is offered in their state of residence. We have added this to the discussion. We have also removed the discussion of the undergraduate program for motivation. We surveyed the other graduate programs in the UC system to get a picture of their applicant pool and have added that information to the text. This includes the placement at academic and non-academic institutions. It is impossible to estimate UCM demand as the graduate program does not exist and we have not had sufficient faculty to effectively utilize the IGP program. This said, despite our lack of advertising for our program we do receive a number of applications to the IGP program each year, which we have not been able to admit due to a lack of faculty.

Comment: Provide examples of non-academic careers. What are the placement records in the recent years in other UCs? There no mention of international graduate students and their employment. Pg. 29: Need to explain how Health Econ, etc., relate to "Labor & Demographic Economics" since this is the first time this terminology has been used

Response: We have added some information regarding placements at other UCs to our

proposal and the most common types of placements for students who have received a Ph.D. in Economics. We have also added some additional language that points out that "Labor and Demographic Economics" broadly encompasses a number of our fields of specialization.

Comment: Elective courses are offered every 2-3 years. 3 years is long gap. If a student missed one elective course in 2nd year, he or she can only take it in 5th year, if the elective is the student's field course.

Response: We anticipate our field courses being offered only every other year for the first four years of the program. After this we expect the field courses to be offered every 1-2 years depending on student demand. We have altered the document to reflect the appropriate timing of the courses.

Comment: Pg. 41 The table does not demonstrate that ECON faculty can/will be able to "maintain undergraduate course offerings" since approximately half of the undergrad courses are identified as taught by lecturers. This issue needs to be directly addressed, since funds for lecturers are generally year-to-year (unless LPSOE or LSOE positions are sought, and if so, this will bear significant discussion). It would be more convenient to see this by semester or faculty member rather than by course.

Response: Our use of lecturers has been a requirement of our program for many years due to a lack of faculty (as low as 2 in the Fall of 2013). However, we have recently grown to 8 research faculty and one LPSOE. Furthermore, we are currently hiring two additional LPSOEs this year (2014-15). These resources will ensure that we are able to maintain our undergraduate course offerings when the graduate program is launched. Furthermore, two of the ECON courses are cross listed as MGMT courses (ECON 005, ECON 028) and are currently being taught using lectures to ensure that the MGMT demands are met with the limited number of MGMT faculty we have at UC Merced (3 at the current point in time – 1 in the SSM Bylaw until and 2 in the ENG Bylaw unit). There are still a few undergraduate courses that will be taught by lecturers but our program's demands are not exorbitant and many of these duties can be absorbed by the incoming faculty and LPSOEs if needed.

Comment: Where is ECON 209?

Response: We have elected to drop ECON 209 from the course requirements.

Comment: Pg. 42 The lecturers (and faculty affiliated with other programs such as MGMT) should be identified as such for all relevant courses in this table (i.e., since lecturers are year-to-year, it may be more appropriate to have title rather than name). The proposers need to be up-front about how the undergrad program will be delivered if/when the grad program begins.

Response: We have revised the faculty rotation to differentiate the demands generated by the MGMT and ECON program separately. We have also added the new LPSOE hire that started this year and the two that we are hiring right now to the rotation. As far as lecturers, there are 2 lectures that we require to facilitate the MGMT program and 2 for the ECON program. Although this may seem like a fair number of lecturers it is important to note that these are two different undergraduate programs.

Comment: Overly optimistic for the faculty FTE in the coming academic year. Suggest avoiding the "need" to have three new faculty to "establish" the program (especially in light of the Dean's letter), as it is extremely unlikely that those positions will be forthcoming on the schedule outlined in the proposal. AY 14-15 hiring is already out of date, since no new hires this year (unless FTE already allocated from previous search?)

Response: Our projected faculty growth was based on the predicted growth in faculty indicated in the Dean's support letter. In that letter Dean Aldenderfer has indicated that he expects our research faculty to grow to 11 by 2016 and 16 by 2020. Given that there is a hiring freeze and the lines being allocated under the university's strategic focusing initiated has yet to be determined we have elected to use a much more conservative projection in the proposal. In fact our projected growth is below the level that would be expected if the future hires within the university are uniformly distributed. Therefore, we believe our revised projections are highly conservation.

Comment: Pg. 45 The Dean's letter implies this will be handled through startup, not flexible funding.

Response: The Dean's letter does not imply that graduate computing costs will be covered through startup. Startup funds will be used to cover faculty computing costs not graduate computing costs. Faculty startup packages in economics are exceptionally modest relative to the sciences and they do not cover graduate computing costs. The Dean's letter indicates that the laboratory space may be shared with other social sciences.

Comment: Pg. 43 What is the "additional graduate workspace"?

Response: This is graduate office space.

Comment: If the latter, how will reallocation affect support in existing programs? Describe any campus fund-raising initiatives that will contribute to support of graduate students in the proposed program.

Response: We surveyed the other Economics Ph.D. programs to determine what percentage of the graduate students are supported on Teaching Assistantships. Very few, if any, graduate students are funding on external grants. The dominate form of funding is TAships. We are currently not aware of any campus funding-raising initiatives that will contribute to the support of graduate students and we have been told that we are not supposed to independently pursue these resources.

Comment: Provide an estimate of the average per student support (from all sources) and compare the estimate to systemwide norms or other comparators.

Response: We anticipate providing the same level of TAship funding as all other graduate programs at UC Merced.

Comment: Please remove Appendix F. The Bylaw 55 unit does not exist; please revise mention of such Bylaw 55 Unit in the CCGA Proposal.

Response: We have removed Appendix F as well as the references to it within the proposal.

Comment: Please remove CPEC information as it is no longer required.

Response: The CPEC information has been removed from the document.

CAPRA Review Comments

Comment: regarding Table 1, perhaps a better estimate of TA needs can be obtained by looking at how many TAs are currently required to serve the existing student population in these majors and then simply scaling the numbers.

Response: Although we agree in principle that this would be a great way to determine TA needs, it is really not possible for us to do that because our program has been understaffed for many years (we had only 2 faculty in the Fall of 2013!). We now have enough faculty to teach the courses we need and are able to begin to evaluate our TA needs for the program. We are currently undergoing a number of revisions to our undergraduate program and are re-evaluating our TAship needs to better execute our undergraduate program. This will necessitate increasing our offerings of courses that currently have TAs as some of these courses are bottlenecks in our undergraduate major and the creation of new courses to expand our GE course offerings as we currently have few GE offerings.

Comment: page 4 lists current graduate programs but omits several including Physics and Chemistry & Chemical Biology. The proposal should either list all of the existing programs or else name only those with which it expects to have particular synergy.

Response: Thank you for pointing out that we have did not include either Physics or Chemistry and Chemical Biology. We have added this to the document.

Comment: The projections for growth to 16 by 2020 appear vastly optimistic given known faculty allocation plans. There is no recruitment during the current AY for new Economics faculty to start AY 2015/16. It appears that a viable program can be achieved with fewer additional faculty, and the proposal might be strengthened by pointing this out.

Response: The projections outlined in the proposal were based on the SSHA Dean's letter, which indicated we would be at 11 research faculty by 2016 and 16 by 2020. Given the lack of hiring this year and to be conservative regarding our estimated growth in the future we have altered our projections to be one line a year with no hiring in the 2014-15 academic year. Furthermore, we have added in to the document the one LPSOE we hired last year as well as the two LPSOEs that we are hiring this year.

Comment: basing faculty line allocations on past processes does not seem feasible given the Strategic Academic Focusing process to be implemented for the rest of the decade.

Response: Our response above indicates that we are not basing our expected allocations on past processes and have elected to use a more conservative estimate of growth. However, we should point out that the authors of the graduate program were also authors on the School of Innovation, Management and Economics proposal that has recently been highlighted as part of the Entrepreneurship and Management pillar by the Provost. We expect this decision to favorably affect our projected growth.

Comment: Will the size and quality of the applicant pool be adequate to admit ten new Ph.D. students per year in the first and third years of the program? What is the minimum practical cohort size if the program cannot achieve 10 PhD students?

Response: There is absolutely no way for us to know with certainty whether or not we will have an adequate pool of applicants until we actually begin recruiting. However, we surveyed other Economics Ph.D. program in the UC System and they all have sizeable applicant pools varying from around 150 to nearly 800 applicants. From these applications class sizes between 12 and 25 are being generated. Based on the demand within the UC System we anticipate having a sufficient applicant pool. We have added this information to proposal. As far as minimal practical cohort size, this would depend on the minimum number of students required to offer a course at UC Merced. That is the minimum size needed. Even though a stand alone Economics Ph.D. program does not exist we continue to receive strong applications every year from the Social Sciences program.

Comment: given that the proposal projects a growth in international students, the reliance on non-resident tuition (NRT) support needs further elaboration. Although currently NRT is paid for all Ph.D. students supported by internal funds, it is not clear that this will continue to be the case if there is rapid growth of the international graduate student population.

Response: We have not received any indication that our program would not be able to benefit from the current use of internal funds to cover NRT. This is the predominate funding mechanism used to fund non-resident tuition at UC Merced and we see no reason why we should not be able to equally benefit from the use of NRTs.

COR Review Response

Comment: Resources - Currently, 7 faculty members are fully engaged in Economics, plus an eighth member joining in January, 2015. The distribution of research emphasis areas across the faculty is as follows: 4 in Economic Geography and Trade, 2 in Environmental and Resource Economics, 3 in Health Economics, and 3 in International Development. (Some faculty members conduct research in several of these emphasis areas.) By the time of the anticipated start date in Fall 2016, the program is expected to have 11 fully dedicated faculty members. The program is anticipated to recruit 10 graduate students during its first year (faculty/student ratio 1:0.9). The number of faculty and graduate students are expected to increase to 16 and 26, respectively, by 2020 (ratio 1:1.6). The members of COR are concerned that this growth rate is not realistic, given current hiring trends, and they would like to see further evidence that the SSHA Dean would support this growth rate given limited resources.

Response: Given that it is not possible to concretely obtain commitments regarding faculty growth beyond those articulated in the Dean's letter, we have altered our projected growth within the proposal to be substantially lower than earlier projected. We now have no new lines for 2014-15 and one additional line each year. This level of projected growth is lower than if future lines are allocated uniformly. Furthermore, one of the pillars identified by the Provost, Entrepreneurship and Management (builds on the School of Innovation, Management and Economics proposal our faculty submitted as part of the strategic focusing efforts), clearly will rely on growth in the Economics group for its successful execution.

Comment: Along with the concern above, the members of COR would like to see greater alignment between the letter of support from the SSHA Dean and the program proposal document with regard to the number of faculty needed to successfully deliver the program. The letter from the Dean states that 8 FTE are sufficient to run the program, but the proposal indicates that the minimum number of faculty needed to deliver the program is 11 FTE. If 8 faculty members are sufficient, please revise the curriculum and course delivery plan accordingly.

Response: We have changed the document to indicate that we can start our program with the existing 8 research faculty (as indicated in the Dean's letter) as well as altered our projected faculty growth. We have also altered the document to include the one LPSOE we hired last year and the two we are hiring this year.

Comment: Support letters from other graduate programs or units may be necessary to demonstrate that the proposed interdisciplinary research and coursework for graduate students can be provided.

Response: We have added language to point out that interdisciplinary course work is not required in the program. This is because we do not in any way want the ability of other programs to offer courses to impact students making due process in our graduate program. Given that this is true we do not think it is necessary to obtain letters from the other disciplines to illustrate their ability to meet our course demands. This is an optional component of our graduate program and we have added language to reflect this in the document.

Comment: Library resources – The members of COR would like to see a justification for why the proposal does not include a consideration of the kind of large databases that are needed in the library by many economics programs.

Response: Many of the large datasets used by economists are publicly available (i.e., Census) or are confidential data sets that require the researcher to enter into a data use agreement with the data provider. Publicly available datasets are traditionally downloaded from agency websites so they do not require additional infrastructure. Private data sets are retained solely on the researchers office computer. Additional datasets frequently used by economists such as Compustat are already subscribed to by the Library to support the management program.

Comment: The members of COR suggest eliding Appendix F (Bylaw55 in Economics) as being potentially distracting and confusing to CCGA, which is solely interested in graduate program design.

Response: This has been removed from the document.

Comment: Four major research emphasis fields in economics are proposed, and interdisciplinary research involving the combination of these fields makes the proposed program distinct from other existing programs on UC campuses. The members of COR would like to see evidence that these specific emphasis fields have increasing demand and might successfully sustain the program by recruiting graduate students and attracting extramural funding. Evidence can involve job opportunities in related areas or increasing funding opportunities in these areas. In particular, the members of COR would like to confirm that there is enough demand for Health Economics, which is not offered on any other UC campus.

Response: We currently reference the importance of these fields in the economics job market. We also surveyed the other UC Campuses to get a picture of the anticipated demand for our PhD program and the results from this are contained in the proposal. Given that health economics is a growing field in economics it is very difficult to obtain tangible evidence that there is enough demand for health economics. However, if we let the job market indicate the current demand we can see that the demand is large. The American Economic Association maintains the Jobs for Economists website where many institutions post their jobs. Of all the jobs listed approximately 10% of them are individuals trained in health economics or related fields of economics (defined as Health, Education and Welfare on the AEAs job website: https://www.aeaweb.org/joe/).

Comment: Close interaction with faculty and the development of critical thinking skills are described as unique features of this proposed program. However, details concerning how these features will be successfully delivered to students are not provided in the proposal. A larger faculty-student ratio is just one of the components of a successful program, and it does not necessarily mean that there will be a close interaction between students and faculty.

Response: We have added some additional language to clarify this objective in the proposal.

Comment: The proposed program encourages students to take courses in other existing programs, such as Biology, Engineering, Cognitive Science, and Public Health.

(Considering the fact that the proposed program includes a Health Economics emphasis, the members of COR suggest highlighting potential collaborations with the Health Psychology program on campus, as well.) Such diverse coursework can certainly lead to unique interdisciplinary research in economics, but any details or realistic plans (clear explanations) concerning how the program will facilitate/encourage students to take these courses are missing from the proposal. Also, graduate courses in the natural sciences and engineering may be tough for students who have a limited background in these fields. Finally, the sample program (section 2.11) does not seem to reflect this proposed plan.

Response: The way the proposal was previously written was a bit misleading regarding this topic. It was our objective to point out that our program will complement the existing programs at UC Merced and that our graduate program is flexible enough to allow students to take courses in other disciplines if it will contribute to their research. We are not going to encourage all students to do this and they do not need to take any courses outside of economics to meet our programmatic requirements. We merely wanted to offer the students the flexibility to take these courses. We have added some additional language that we believe better clarifies this fact and that points out they do not need to take course requirements for these courses before enrolling. This is why we have elected to not include this in the sample program.

Comment: The members of COR noted that the early years of the proposed graduate program involve both extensive coursework and substantial research expectations. The proposal would be strengthened by providing some evidence on the ability of students to meet these demands. Such evidence might be found through a comparison to economics graduate programs at other institutions.

Response: We have made some changes to the program so that the first year is focused on the core curriculum, the second on taking the field courses and the remaining years on the development of their research. This is a nearly uniform standard for how Economics Ph.D. programs are delivered within the UC and at other peer institutions. We have removed the 2nd year paper as it may have been a difficult task to conduct your course work and write the paper at the same time. Assigning research papers later in the program is consistent with other economics graduate programs.

CRE Review Response

Comment: CRE's primary comment was our inclusion of the revised Bylaw 55 unit in the proposal.

Response: Appendix F has been removed from the document.

Institutional Assessment Review Response

Comment: As noted above, the Economics Ph.D. and M.A. degrees are eligible for expedited review (i.e., Fast Track) by WASC. In order to comply with the stipulations of that approval, it will be necessary to include language stating that the Economics emphasis has been incubated as part of the IGP, with a very brief synopsis of its history up until this point. This information could be included at the beginning of Section 1.3.

Response: We have added this information to Section 1.3.

Comment: WASC requires separate proposals for the M.A. and Ph.D. degree. With this in mind, Table 1 (p.7) will need to project enrollments for both M.A. and Ph.D. students. Alternately, a separate table dedicated to M.A. students may be included. Example spreadsheets, including the specific projections WASC requires, are attached as Appendix A. We are happy to help the program complete this table, if that would be helpful.

To determine the fraction of Ph.D. students who will choose to receive the M.A. en route to the Ph.D., previous programs have found it helpful to contact other UC programs. Political Science estimated that approximately 80% of their Ph.D. students would earn an M.A. This percentage might be a similar for Economics, but it would be important to confirm. Political Science's projections are provided in the attached sample spreadsheet.

Response: We conducted a survey of the other graduate programs in Economics within the UC and found that an estimate of 80% is appropriate for the percentage of students who are enrolled in the Ph.D. program that receive a M.A. in route to the Ph.D. or that leave the program with a M.A. instead of a Ph.D.. We have added an appendix to the proposal that captures this information and the data is referenced in the proposal.

Comment: The program has clearly crafted its PLOs to distinguish the learning expected of M.A. and Ph.D. degree recipients. To more precisely express these differences, the program might remove the terms "Ph.D. level" and "Master's level" understanding from the PLOs and, instead, add some prefatory language that describes the expectations for each degree more generally. For example, drawing on statements in the proposal, introductory language for the Ph.D. PLOs might read, "Recipients of the Ph.D. degree will demonstrate a thorough knowledge of a broad field of learning, and provide evidence of distinguished accomplishment and critical ability through an original contribution to the knowledge of their chosen field. Consistent with this goal, Ph.D. recipients will...[list Ph.D. outcomes]". An example of introductory language for the master's degree might be, "Recipients of the M.A. degree will demonstrate a thorough understanding of a broad field of knowledge and provide evidence of accomplishment in that field. In keeping with this goal, M.S. recipients will..."

Response: Thank you for this suggestion. We have changed the language in the document to your suggested language.

In order to make the PLOs more measureable, and to help clearly define program expectations for student learning, we encourage in the following:

a) Making the PLOs more specific. For instance, PLO 1 might be revised to emphasize the context in which students will apply their knowledge and level of performance: "Ph.D.

recipients demonstrate knowledge and proficiency in economic theory and econometrics at the level required to make a novel contribution to the discipline." Similarly, PLO 2 could be reworded to emphasize how students will use the theories and methodologies: "Ph.D. recipients apply their knowledge of the relevant theories and methodologies used in the student's major field of study to critically evaluate the literature and identify productive research questions." The Graduate Guidelines for Program Learning Outcomes (PLOs) may be of help crafting this language. The guidelines are available here:http://senate.ucmerced.edu/files/public/Graduate%20CLO%20_%20PLO%20Guide lines%20Final%20May%202012.pdf

Response: Thank you for your suggestion we have elected to use your suggested language and rewritten the PLOs of the Ph.D. program.

b) Along similar lines, Ph.D. PLO 4 and M.A. PLO 2 describe communication learning outcomes in rather broad and general terms. It may be helpful to include additional language that explains how students will demonstrate their communication abilities and to which types of audiences (as developed through program curriculum). For instance, "Graduates are able to communicate verbally and orally in a clear and concise manner to expert and non-expert audiences." Or, "Graduates will communicate clearly and concisely using oral, visual, and/or written means while addressing a broad range of audiences."

Response: Thank you for your suggestion we have elected to use your suggested language and rewritten the PLOs of the Ph.D. and M.A. programs.

c) Finally, given that M.A. students will take the same courses as Ph.D. students, the M.A. PLOs might also include knowledge of relevant theories and methodologies (similar to Ph.D. PLO 2), which could be assessed via the rubric for the Second Year Paper.

Response: Thank you for the suggestion we have made some changes to the M.A. PLOs.

Comment: Historically, WASC has paid particular attention to our assessment plans. In anticipation of this, we recommend the following:

a) Revise the program's assessment timeline by assigning each PLO to a separate year for review, for instance, PLO 1 in 2015-2016, PLO 2 in 2016-2017, PLO 3 in 2017-2018, PLO 4 in 2018-2019, etc. This is consistent with campus expectations that programs engage in assessment annually, assessing at least one PLO per year. If, however, the proposed structure of enrolling students in alternating years makes assessing more than one PLO at a time more useful to the program, it would be helpful to state that reasoning in the assessment plan.

Response: We have altered the timing for evaluating the PLOs so that at least one PLO is being evaluated each year of the graduate program. A number of the PLOs are evaluated in more than just one year as well to correspond with anticipated timing of the performance metric.

b) With respect to Ph.D. PLOs 2 and 3, grade-based assessment of "field course performance" should be included under indirect evidence rather than direct evidence as currently designated. The same applies to participation in Economics conferences (PLO

6). Useful sources of direct evidence for these outcomes include forms of student work like dissertation proposals, dissertation manuscripts, and defenses.

Response: We have altered the assessment of the PLOs are required.

c) It will be important to provide performance targets for TA evaluations as this will help make program expectations of student achievement of PLOs 4, 5, and 6 more transparent to faculty and to students.

Response: We have added a performance criteria for our TA evaluations for the PLOs 4, 5 and 6.

d) Section 1.7 mentions that the program intends to use institutional surveys of graduate students in its program assessment. These lines of evidence will need to be included in the assessment plan, under indirect evidence, even though information will not be available until the first students graduate.

Response: We have added the responses to the Graduate Alumni Survey to the program assessment goals.

Comment: WASC reviewers have also tended to scrutinize curriculum maps. Towards this end, it will be important to make the following revisions:

a) WASC expects that curriculum maps include all courses and activities required to earn the degree. Toward this end, ECON 200 will need to be integrated into the Ph.D. and M.A. curriculum maps, and the qualifying exam and dissertation defense to the Ph.D. map. If any other activities are required to earn either degree (e.g. annual committee meetings), these too should be added to the relevant map.

Response: ECON 200 has been removed from the required courses. However, we have added the Qualifying Exam, Dissertation Proposal Defense, 3rd Year Paper and Dissertation Defense to the Ph.D. map as they are required elements of the Ph.D. program.

b) In both the Ph.D. and the M.A. curriculum maps, indicate which courses and degree activities are required for the respective degree. Past programs have done this by putting an asterisk next to the required elements, or by putting the required elements in bold face.

Response: We have added asterisks to the curriculum maps to indicate required courses and activities in both the Ph.D. and M.A. program.

c) Section 2.4a states that there will be four fields of specialization. If specific courses are required for each specialization, these will need to be distinguished in the curriculum map. This might be accomplished by adding to the curriculum map headings for each specialization with the required courses listed beneath, or by including a footnote that indicates to which specialization the required course relates.

Response: We have added letters to the curriculum map to indicate the courses that are required for each of our four fields.

d) Both curriculum maps list a first year "preliminary exam" as a requirement, but the term does not seem to appear elsewhere in the proposal. It will be important to reconcile the map with the proposal narrative. Toward this end, we wonder if the preliminary exam is the same as the comprehensive exam?

Response: Sorry about this, we meant "Comprehensive Exam" and have made the required changes.

e) Ratings of Introductory, Developed, and Mastery are usually assigned with reference to the level of performance expected of students at the time of graduation. Consistent with this, the dissertation and dissertation defense are usually identified as expecting a mastery level of performance. In light of this, we wondered about the expectation that students achieve of a mastery level of knowledge on the preliminary exam. If students are expected to demonstrate mastery of core Economics concepts through the preliminary exam before they specialize and master the application of those concepts in their major field (as the American Economics Association indicates is the typical path of Economics graduate education), then it would be helpful to include a footnote explaining this distinction.

Response: We have added this information to the curriculum map.

f) On p. 16 of the proposal, Math for Economists is listed as ECON 209 while elsewhere in the proposal it is listed as ECON 200 (see Sample Program in Section 2 and course listings in Section 5). It will be important to ensure consistency in course listings in the body of the proposal, as well as in the curriculum maps, and in Section 5.

Response: This course has been removed from the graduate proposal.

g) Section 2.5.4, Advancement to Candidacy, lists the completion of ECON 205 as a requirement. It will be important to add this course to the required core course sequence referenced on pp. 15 and 16, and to indicate it in the curriculum map.

Response: This course has been removed from the graduate proposal.

Comment: WASC has specific expectations for syllabi, which they carefully review. Toward this end, a few adjustments are needed to the proposal's example syllabi, particularly for ECON 201A and ECON 230. These include,

a) Ensuring that the syllabus communicates the number of units earned for the course, together with descriptions of how those units are earned in and out of the classroom. The latter can be met through a description of the class format, e.g. lecture, discussion sections, labs, and expectations for work outside of class.

Response: We have indicated on the syllabus that each course is 4 units and added a section that describes the course format.

b) Descriptions of the relationship between the course and program learning outcomes (PLOs). It will be important to include the ECON PLOs specifically.

Response: We have added a section to the sample syllabi that indicate their relationship with the PLOs for our Economics Ph.D. and M.A. programs.

c) Mention of library use, with a description of the library research expectations for the course.

This is only needed for Econ 230A.

Response: We have added the library use expectations to both ECON 230A and ECON 230B.

d) Grading policies, including how assignments are weighted.

Response: Grading policies are now indicated on all of the syllabi.

e) Faculty office location and office hours.

Response: We did not include this information in the syllabi before because office hours are selected by each faculty and change from semester to semester. Furthermore, we are most likely not going to still be in COB when the graduate program is launched. However, we put place holders on the syllabi for this information with the information indicated.

f) Policy statements on academic integrity and the services available to students with disabilities.

Response: All of the syllabi contain the same "Academic Integrity" and "Disabilities Statement" to reflect the need to incorporate this information.

Comment: WASC requires a rubric for the Qualifying Exam that addresses both the written and oral elements of the exam. This will need to be included in Appendix E. We are happy to help draft this rubric.

Response: The Qualifying Exam does not possess an oral component. We have added some language to our description of the Qualifying Exam rubric.

Along similar lines, the Dissertation Proposal and Dissertation rubrics might be revised to more clearly identify expectations for the oral elements of each defense. For instance, the program might include criteria describing how concisely students summarize their dissertation proposal/dissertation, or how clearly and convincingly they respond to questions during the defense. A sample rubric is attached as Appendix C.

Response: We have expanded the rubric for both the Dissertation Proposal and Dissertation to include a section where the committee can make comments on the student's written and oral performance.

Comment: The Dissertation Defense Rubric seems to replicate expectations described in the Dissertation Proposal Rubric, both in the text preceding the rubric as well as in the rubric itself. (For instance, both rubrics are titled Dissertation Proposal Rubric.) It is important that the Dissertation Defense Rubric reflect expectations for a student completing this final stage of the degree.

Response: We have altered the Dissertation Defense Rubric and the Dissertation Proposal Defense rubric to more accurately reflect the expectations at that point in the student's studies.
Comment: WASC reviewers have recommended that programs define the meaning of rubric scores for the purposes of helping students and faculty understand program expectations. For example, other UC Merced graduate programs have equated a score of Introductory or Poor with the proficiency expected of a B.A. recipient, or a Ph.D./M.A. student who has not acquired skills beyond the B.A. level. Expert or Excellent has been equated with the proficiency expected of an Assistant Professor (for a Ph.D. student) or a Ph.D. recipient (for a M.A. student). Along similar lines, it would be helpful to determine what a "Good" exam looks like. We recommend Barbara Lovitts and Ellen Wert's Developing Quality Dissertations in the Social Sciences as a helpful for resource for this purpose.

Response: We have added a section in the Appendix that defines the four levels of the rubric used for evaluation.

Comment: The program has thoughtfully designed its rubrics to reflect its PLOs. To improve the value of the rubrics to the program, we encourage a shift from three to four levels of performance. Adding a fourth level will help clarify differences in performance/ achievement within the middle group (e.g. "Good"), thereby providing more useful information on which a program can act.

Response: We have changed all of the rubrics so that they use 4 levels versus the 3 we had before. In addition, we have added an appendix item that describes our expectations for each of the levels as suggested in your previous comment.

Comment: The biannual review meeting is an important source of information regarding student development and achievement. Toward this end, the program might find it helpful to add some questions to the Student Progress Report that address student achievement of the PLOs, as well as some evaluation of the extent to which students are meeting expectations for degree progress. A sample Student Progress Report is attached as Appendix D.

Response: We have added a section for the faculty to assess the student according to the 6 PLOs.

Graduate Division Review Response

Comment: They have 7 full-time faculty, with an 8th joining in January. Five of the eight are assistant professors. They anticipate reaching 11 faculty by fall of 2016, and 16 faculty by 2020. I do not see a firm administrative commitment to these lines, leading to the question: If they do not achieve this level of growth, can they support the proposed program as well as their undergraduate responsibilities? As a related question, is the projected undergraduate growth more ambitious than is realistic? (This affects the number of students they can support with TA appointments).

Response: We completely understand the Graduate Division's concern regarding resource commitments. However, given that we do not definitively know what the future direction of hiring is going to be at this time we are left to our best estimate of projected growth based on the Dean's letter. This said, we have reduced our projected growth in the proposal to a more conservative and modest level that assumes our growth would actually be below the level we would achieve if future faculty growth were uniformly distributed across the campus. Furthermore, it is possible for us to launch our graduate program with the currently existing faculty so we have changed the language to reflect this fact. We would also like to note that we are currently hiring 2 LPSOEs to facilitate the execution of our ECON and MGMT majors that we are responsible for staffing. This will further increase our ability to meet both or undergraduate and graduate needs. This information has been added to the proposal as well. Finally, the Provost recently identified five pillars for the future of UC Merced. One of these pillars is "Management and Entrepreneurship." which includes a proposal submitted by the Economics group in collaboration with others on campus. The recent faculty discussion regarding this pillar clearly indicated that the creation of this pillar was extracted from the School of Innovation, Management and Economics proposal that our faculty wrote with faculty in Management as part of our recent strategic focusing initiative. Given this we expect that our projected growth will be greater than that outlined in the proposal.

Comment: How will graduate students be supported, beyond TA appointments? Do they anticipate supporting students on research grants? If not, why not?

Response: Our graduate students will use the same funding model as the other social science disciplines at UC Merced. We expect to use TAs to fund a majority of the graduate students. This is not only consistent with the other social sciences at UC Merced but with the other economics graduate groups with the UC System. We surveyed the other economics programs in the UC System and discovered that between 90% and 100% of the graduate students are funded using TAships. This said, we currently have faculty who are actively pursuing grants to fund graduate students so we do anticipate that from time to time we will have funds available for graduate students that are obtained from grants. We would also like to point out that the lack of Economics Ph.D. students at UCM have left Economics faculty unable to execute large funded research projects. With well-trained Economics graduate students available Faculty will now be able to seek external funding much more extensively. This will lead to significant additional revenue for the campus. Additional information has been added to the proposal to clarify this information.

Comment: The proposal indicates that they will focus in four key areas: (1) Economic Geography and Trade; (2) Environmental & Resource Economics; (3) Health Economics; and (4) International Development. Additional discussion of whether these

are distinctive foci in the national context (beyond simply our sister UC institutions) would be helpful.

Response: We have added additional discussion to the proposal to highlight the importance of these fields.

Comment: They anticipate interdisciplinary research and interaction with Biology, Cognitive Science, Ecology, Political Science, Psychology, Sociology and the proposed new graduate programs in the Management of Innovation, Sustainability and Technology and Public Health. I applaud this interdisciplinary engagement. However, it is not clear to what extent these programs, and particularly the Economics, MIST and Public Health proposals, all depend upon the same faculty. I suggest inclusion of letters indicating impact from the other affected existing and proposed programs.

Response: We do not completely understand your comment. Our program does not in any way rely on the existence of any of these programs for the execution of our program. Therefore, we have elected to not obtain letters from these respective groups. All we wished to point out in the proposal is that our program complements the existing programs and programs that are in development. The structure of our graduate program is such that a student will have the opportunity to take a course or two in other disciplines if they are interested in doing so, however this is not required. Therefore, we do not see the need to include letters indicating the impact from other affected existing and proposed programs.

Comment: A clearer discussion of their decision not to admit students in 2017 and 2019 would be helpful. My concern is that this may create confusion as to whether or not they are admitting students in a given year, resulting in reduced applications in years when they are admitting students.

Response: A discussion of our decision to not admit students in 2017 and 2019 is contained in Section 1.3. We have also added information that indicates we will post our admission cycle information on our department website to ensure that students are fully informed of the timing of our admissions.

Comment: Related to the above, the growth in faculty: student ratio is very slow, not reaching 1:2 until 2021, five years into the program. Thus it appears that they could support admitting a cohort of students each year.

Response: We have reduced our projected faculty growth and also increased our projected graduate student enrollment by 20%. As a result of this we will reach a 1:2 ratio in 2018-19 with a small reduction in the ratio in 2019-20. However, as the graduate program continues to grow we will reach a ratio of 1:3.1, which is on par with the ratios at the University of California, Riverside and the University of California, Irvine.

Comment: Page 8, please note that the current Graduate Dean is Marjorie Zatz.

Response: We apologize for this mistake and have fixed this in the document.

Comment: Please clean up typos (e.g, page 18, forth member instead of fourth; pg 44, Teach Assistantships instead of Teaching).

Response: Thank you for noting our typos, we believe we have addressed them in the revised draft.

Comment: Further discussion is needed for the decision to have the Grad Group Chair serve as faculty advisor for all students for their first two years, and then to appoint advisors. What is the rationale for these decisions? Advising all students in their first two years is a significant amount of work for the grad group chair, and the chair and students might be better served if other faculty assist in the temporary advisement of students. Also, this heavy mentoring responsibility is not listed in the chair's responsibilities.

Response: We have changed the faculty advisor assignments so that the Grad Group Chair is the advisor for only the first year. Given that all first year students take the same courses, the advisory role duties are minimal relative to the other years of the program. The only circumstance under which the Grad Group Chair will continue as advisor is if the pairing is the preferred faculty advisor assignment given the student's research interests.

Provost and Executive Vice Chancellor Response

Comment: Overall, this is a reasonably well-written proposal that articulates specific areas of emphasis for the planned expansion of the economics graduate program. My primary concern is about the relative size of the program proposed, compared to other graduate programs at UC Merced that similarly seek to expand during the course of our campus's growth.

Response: Thank you for your comments regarding our proposal. The relative size of our proposed program is on par with the size of the other social science graduate programs at UC Merced. Although this growth is modest, it is at a level where we feel we can obtain a solid foundation for future growth in the graduate program while maintaining a high level of academic quality that contributes to the distinction of our campus. We anticipate that as our faculty and university continue to grow we will be able to increase the number of graduate students.

Comment: The authors point out that UC Merced is the only UC campus exclusive of San Francisco that does not offer a PhD in economics. Given our small but growing size, I expect that there are a number of programs, both at the undergraduate and graduate level, that are found at all other UC campuses but not here at UC Merced. This is an unsurprising characteristic of the campus, and is not in itself an argument for starting a program.

Response: We definitely agree that there are other graduate programs present at other UCs that are not here at UC Merced and this fact alone does not justify the creation of our graduate program. This said, we do wish to be competitive with the other UCs in terms of academic reputation and our graduate student population. We also seek to leverage areas of excellence that have been developed on this campus to contribute to building a world-class research university. Given the focus of our graduate program and the fact that our fields of specialization are underserved within the UC System, we believe that our graduate program is uniquely positioned to excel at UC-wide, national and international levels. We have added some additional information to the proposal to highlight the uniqueness of our graduate program and the importance it will serve.

Comment: The graduate economics program is probably appropriate for this campus. However, the proposed student-faculty ratios are simply too low to be reasonably sustainable over the long-term. Careful re-analysis of the growth of faculty, as well as the planned growth in graduate students, should be considered. Some attention needs to be paid in the proposal to the probability that a much higher graduate student-faculty ratio is warranted, as well as a more realistic estimation of the anticipated number of TAs assigned to the program. Planning to support all graduate students on institutional funds, primarily TAs, is not realistic.

Response: Thank you for agreeing that a graduate program in economics is probably appropriate for this campus. To address your comment, as well as others made of a similar nature, we conducted a survey of the other graduate programs in the UC System. We found that our initial faculty to student ratios were a little bit too low and have increased our enrollment projections by 20%. As a result of this, as well as a reduction in our faculty growth projections, we will reach a faculty to student ratio of approximately 1:3.1 when the program reaches a steady-state. This is on par with the ratios observed at the University of California, Riverside and the University of California, Irvine. Our ratios are lower in the initial years of the program, but we feel this is necessary to ensure

that we are able to focus on producing a high quality graduate program. With regard to our use of TAships, we anticipate using the same graduate funding model as the other social sciences at UC Merced. In our survey of the other graduate programs in the UC System we found that between 90% and 100% of the students are funded using internal resources such as TAships. This is consistent with the other social sciences here at UC Merced and we anticipate being able to equally benefit as they have from the use of TAships. This said, it is worth pointing out that the selection of our fields are highly fundable and represent disciplines that can successfully obtain external funding. Furthermore, many of our faculty actively pursue external funding (one faculty has applied for three grants totaling over \$1.5M this year – this is uncommon in economics) so we anticipate that we will be able to provide more support for our graduate students using more external funds than many of our peer institutions in economics. We are also revising our major to incorporate additional large general education courses that will attract a range of majors and provide additional resources to TA positions. However, funding projections do involve a high degree of uncertainty.

GUIDELINES ON ACCEPTING AND MANAGING EQUITY IN RETURN FOR ACCESS TO UNIVERSITY FACILITIES AND/OR SERVICES

/__/2015

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I. INTRODUCTION

Across the nation, universities are being asked by their external stakeholders to be an active participant in the entrepreneurial and innovation ecosystem. One element of this participation is supporting new businesses created by students, staff and faculty and/or based on university-developed inventions. Campuses are creating incubators and accelerators where new companies can begin to develop business or product development plans.

A common element of non-university incubators or accelerators is the ability to accept equity in the companies as an element of the financial consideration for access to space and business support services. On June 20, 2014, President Napolitano authorized the University to initiate a pilot program whereby the University may accept equity in a company as full or partial consideration for access to University facilities and/or services ("AFS") in in the context of University Incubators or Accelerators. This document provides guidelines to campuses seeking to develop new programs or modify existing programs to take advantage of this pilot. Through this pilot, the University seeks to understand if and how any permanent program could or should be operated and what, if any policy changes will be needed to formally enact it. The guidelines seek to provide a systematic and consistent framework for campuses to implement the pilot so that it can both be effective in its implementation and provide meaningful feedback for determining the basis upon which to formally enact certain or all aspects of the pilot as conceived in one or more modalities as implemented by campuses.

This pilot program has been created so that the university can understand how to best manage this issue, based on the experiences of campus-based programs that participate. These guidelines are designed to ensure that any program does not create unmanageable risk, either directly for the program, or for the University. This pilot program will run for three years, at which time the Office of the President will evaluate the outcomes and determine if and/or how to codify this pilot program into University Policy.

II. REFERENCES

A. Policies, Principles and Guidelines

University of California Policy on Disclosure of Financial Interests and Management of Conflicts of Interest Related to Sponsored Projects, October 15, 1997.

University Policy on Integrity in Research, June 19, 1990.

University Policy on Disclosure of Financial Interests & Management of Conflicts of Interest, Public Health Service Research Awards Principles of Delegation of Authority and Protocol (<u>http://policy.ucop.edu/_files/da/da_definitions.html</u>)

Summary Statement of Principles and Policies on Institutional Conflict of Interest in Research (<u>http://www.ucop.edu/raohome/cgmemos/11-05.pdf</u>)

B. State of California Government Code

California Political Reform Act, Government Code Sections 81000-91015.

California Fair Political Practices Commission, Political Reform Act of 1974 - 2015

III. DEFINITIONS

| Designated Campus Manager ("DCM") | In accordance with the Principles of Delegation of Authority and Protocol (http://policy.ucop.edu/ files/da/da_definitions.html), each campus shall identify and grant delegated authority to the Designated Campus Manager (DCM) to 1) execute AFS agreements wherein approval to accept equity may be required, 2) ensure compliance with system-wide guidelines and policy, and 3) request formal equity acceptance approval from the Executive Director of Innovation Alliance and Services. In accordance with these Guidelines, for the benefit of consistency, and in compliance with state, federal, and institutional requirements, each campus may wish to identify a single position title for its (DCM.) |
|--|--|
| Equity: | Shares of common or preferred Stock, Warrants, options, convertible instruments, units of a limited partnership or limited liability company ("Units"), or any other instrument conveying ownership or economic interest in a corporation, limited partnership, limited liability company or other business entity. |
| Incubator or Accelerator | A UC-designated physical location where UC-associated startup companies can start commercial ventures. |
| Innovation Alliances and Services ("IAS") | The University-wide office within the Office of the President responsible for coordinating, facilitating, and reporting on the University's technology commercialization program. |
| IAS Equity Approval Manager ("EAM") | The individual designated by IAS to have responsibility for managing Equity approvals. |
| Laboratory: | The U.S. Department of Energy's Lawrence Berkeley National Laboratory. |
| Stock: | An equity or ownership interest in a corporation. Its unit of measurement is the share, and the owner is entitled to certain rights in the company pursuant to its status as a Stock holder whether pursuant to law or contractually agreed upon rights, as well as distribution of assets upon liquidation or dissolution of the company. Ownership of Stock may be evidenced by a written instrument known as a stock certificate. |

| Stockholder's Agreement | An agreement or agreements (separate from any other agreement) that sets forth the rights and duties of the holder of Equity and the |
|----------------------------|---|
| C | company with regard to the Equity being held, including such issues as registration rights, transfer rights, dilution considerations, future |
| | rights, co-sale and rights of first refusal, special voting rights, etc. |
| Warrant | A contract or agreement that gives the holder the right to subscribe for, purchase or otherwise acquire shares of the underlying Stock or convertible securities for a specified price and within a specified time period. |

IV. EQUITY GUIDELINES

A. Scope

The AFS pilot program shall be limited to campus created and authorized Incubator and Accelerators. These guidelines apply to transactions related to early stage businesses/companies with issued Equity in the form of Stock or Units or those that intend to issue Equity in the form of Stock or Units that are: a) founded by the University's faculty, staff, and/or students or having a defined relationship to the University based on the affiliation of its founders, and b) advancing academic innovations wherein campus management grants such companies (a "Company") access to their local campus Incubator or Accelerator facilities and services. These guidelines also apply to the Department of Energy's (DOE) Lawrence Berkeley National Laboratory to the extent that there is no conflict with the obligations of the University under its management and operating contracts with the DOE. These guidelines are intended to support the implementation of the AFS pilot program. Note that each participating campus and the Laboratory is expected to designate a DCM who has the relevant experience with and knowledge of startup equity transactions, complex financial instruments and University policy so as to be able to develop its own procedures by ways of standard templates consistent with these guidelines and to allow for the acceptance of equity in return for access to University resources, in compliance with University policies and applicable law. Appendix F highlights some material items that should be considered by the DCM when preparing internal procedures and forms to implement the pilot.

B. Accepting Equity

The University may accept Equity in Companies to support recently organized or incorporated businesses that arise from or have relationships to the University based in part on the affiliation of their founders. The acceptance of Equity for AFS is subject to the provisions of these guidelines:

- 1. A portion of the financial consideration may be provided in the form of cash, taking into account the financial condition and structure of the Company and the specific elements of the campus programs under which the Equity is accepted.
- 2. The University's preference is to take Equity in the form of Stock, Units or similar securities that are fully paid for rather than Warrants or options which are a right to later purchase securities of a company at a predetermined price. Acceptance of options or Warrants may be approved on a case-specific basis by exception. At a minimum, approval for such exception will require that 1) private funding (e.g., not state funding) is available and reserved to provide cash needed to exercise such options or Warrants and 2) the options or Warrants comprise a minority portion of total financial consideration. In addition, prior arrangements would need to be made by the campus to manage the rights and interests of all involved parties in such options or Warrants.
- 3. The DCM should be aware that there are strict rules under the tax laws that prohibit certain "private use" of tax-exempt bond-financed space or equipment by private individuals or entities. In order to avoid such private use issues in connection with the AFS pilot program, the Accelerator or Incubator should not be financed, in whole or in part, with the proceeds of tax-exempt debt. In specific circumstances the University may permit limited private use of tax-exempt bond-financed space or equipment by a private party participating in the program provided the DCM can demonstrate in advance to the satisfaction of the University that such use is in compliance with rules allowing for a limited percentage of space to be set aside for private-use and that such private-use will not jeopardize the tax-exempt status of any bonds. The DCM should contact the individual at the campus, Laboratory or University who is responsible for maintaining its tax-exempt bond financing records to determine whether such space or equipment falls within this prohibition.
- C. Conflict-of-Interest and "Private-Benefit" Considerations
 - 1. University acceptance of Equity for AFS shall be based upon the educational, research, and public service missions of the University over financial or individual personal gain.
 - 2. The support of new businesses affiliated with the University is in the public interest and furthers the University's training and educational objectives. Further, University

engagement with new businesses is appropriate and represents a useful contribution because the University's engagement with industry is consistent with the University's mission. Any involvement of University employees, however, must be in accordance with the California Political Reform Act of 1974 ("Act"), federal law and regulations, and University policy.

- 3. Because University employees may have the opportunity to influence University decisions in ways that could lead to personal gain or give advantage to companies in which they have a financial interest, the employees must be aware of and be in compliance with the relevant state and federal laws and regulations and University policies.. Generally, University employees are prohibited from "making, participating in making or influencing a University decision," if they have a disqualifying personal financial interest in the decision, unless certain specific actions are taken. Disclosure of financial interests, institutional review and management of conflicts of interest may also be required.
- 4. In order to comply with the Act, the Designated Campus Manager ("DCM") must ensure that any University employee, unless specifically permitted under University Conflict of Interest Policy and the California Political Reform Act, with a current or likely future interest in the Company is excused from, does not to participate in, and does not influence or attempt to influence any decision involving Equity acceptance for AFS. A sample communication to the employee is provided in Appendix A.
- 5. The University's status as a Section 501(c)(3) organization could be jeopardized if it provides more than "incidental" benefits to any private party. To help avoid such "private benefit" issues as well as conflicts of interest in the University's decision making, accusations of favoritism, misuse of University resources and other related legal issues, campuses should establish and have documented a uniform methodology for determining the amount of equity in lieu of cash consideration for University resources in a manner that ensures the University is receiving fair or equivalent value for the resources provided. The amount of equity (i.e., number of shares) in lieu of cash for University resource(s) provided to a company would be determined by dividing (i) the fair market cash value for access to University resource(s) provided by (ii) the price per Unit of the Company (as reasonably determined in good faith by the DCM in accordance with the provisions of these guidelines) at the time the equity transaction was sought. If a uniform methodology for valuing University resource(s) is not established or is not used in a particular case, the DCM must have documents showing how the fair value of any University resource(s) provided was calculated and provide an affirmative written statement of what cash consideration would otherwise be due and that the Equity accepted in lieu of cash is deemed by the DCM's independent and

good faith assessment to be fair or equivalent in value to the resource(s) provided. For assistance with the foregoing, the DCM is strongly encouraged to discuss in advance their methodology with the EAM to ensure that it meets all policy and legal requirements. See Appendix F for additional information that may be useful to a DCM when addressing the fair market valuation issues described above.

D. Board Representation / Voting Rights

Employees of the University, acting in their capacity as University employees, shall not accept a position on the board of directors in a Company in which the University has an Equity interest pursuant to this program, nor shall they exercise related voting rights, but may accept and exercise observer rights on such boards. Active board participation and/or the exercise of voting rights by an individual in his or her capacity as a University employee might expose the University to unacceptably large management, conflict of interest, and public relations problems. A University employee who is an inventor of intellectual and tangible property licensed by the University to a Company may participate on the scientific advisory board of that Company, but only if such boards do not have delegated voting authority to act independently on behalf of the full board of directors.

E. Future Relationships with Company

The University shall manage all subsequent relationships with a Company in which the University has accepted Equity at arms-length and in a fair manner pursuant to relevant University policies and guidelines.

The University has an affirmative obligation to prevent "pipelining" of inventions (intellectual property) to a Company in which the University holds an Equity interest. For example, University inventions should be made available for licensing to appropriate companies and should not automatically be made exclusively available to Companies in which the University has taken Equity under this pilot. At the same time, holding Equity in a Company should not preclude the Company from licensing any invention when that Company is best able to develop the successor inventions

F. Company-Sponsored Product Testing

A University investigator may perform clinical trials or other comparable product-testing involving human subjects for Companies in which the University holds Equity as part of an AFS transaction on the campus/Laboratory where that technology arose provided that the campus conflict of interest committee has assessed any real or perceived organizational conflict of interest in the performance of such trials or testing activities and determined

whether a management plan is required, and the relevant IRB has reviewed and approved the protocol.

G. Determining How Much Equity to Accept

The University must ensure that it is receiving fair or equivalent value as consideration for University resources accessed by a company in accordance with the provisions set forth in Section V.C.5 and Appendix F of these guidelines. At the same time, the University shall not accept a level of Equity that places it in a controlling position of a company, since such a situation may expose the University to unacceptable management, conflict of interest, and public relations and other problems. Generally, the University's Equity holdings in a publicly traded company shall be less than ten percent (10%).

For a privately-held company (startup), the University's initial equity ownership can sometimes be greater than 10% (especially where such entity is only recently formed) as that the expectation is that that ownership stake will be diluted over time by subsequent rounds of financing, etc. Accordingly, the DCM may request approval to accept more than 10% equity in a privately-held company (startup,) but less than twenty percent (20%) (in the aggregate, cumulative from all transactions including but not limited to G-44, this AFS pilot, and as calculated on a fully diluted and as converted basis) provided there is a clear expectation of subsequent dilution to less than a ten percent (10%) share ownership at the time the company goes public.

A DCM considering taking Equity in a Company must review the total percentage preexisting ownership, if any, the University may already hold in the company through other transaction arrangements, including any technology licensing-related arrangements (G-44). IAS will maintain on a restricted-access basis, a listing of Companies in which the University holds such Equity interests, the name of campus from which the service or access-related transaction arose, and other relevant information. The DCM should consult the EAM who will provide the most current information regarding any other University Equity holding in that Company.

V. APPROVAL OF EQUITY ACCEPTANCE.

A Required Approvals

In addition to the Office of the President approvals listed below, campuses are responsible for creating standardized procedures to ensure that relevant campus offices review and approve

the transaction.

- 1. Acceptance of an Equity interest in a Company shall be in accordance with these guidelines and upon the case-specific approval requests submitted by the DCM, review by the Office of the General Counsel, and approval by the Executive Director of IAS. In the course of supporting the equity acceptance approval review process, the EAM may provide guidance and make recommendations to the DCM concerning legal and policy issues related to the acceptance of Equity. Upon request of the DCM, the EAM may also provide recommendations to the DCM concerning any business issues related to the acceptance of an Equity request.
- 2. Office of General Counsel ("OGC") review and approval as to legal form must be obtained for all agreements and documents related to the University's acceptance of Equity. No preliminary legal reviews of the agreement would obviate the need for formal review and approval as to legal form of Equity acceptance of the entire proposed final agreement.
- 3. A campus-designated conflict of interest committee shall review agreements and, if appropriate, recommend management plans to the DCM, who shall submit verification of this review and management plan, if any, with the request for approval to accept equity submitted to IAS.
- 4. Consideration of requests for any required legal and Equity approval will be managed by IAS. IAS will consider such requests using the process described in Sections B through E, below.

B. Submission to IAS

DCM requests for approval to accept equity shall be submitted to: Innovation Alliances and Services University of California Office of the President 1111 Franklin Street, 5th Floor Oakland, CA 94607-5200

ATTN: Equity Approval Manager

C. Contents of Submission

A completed Equity Approval Request Checklist (Appendix B) should be submitted with the DCM's request for approval of Equity acceptance along with relevant and required documentation referenced therein.

D. Requests for Exceptions

Any requests for deviations from these guidelines should be submitted in writing by the DCM to the EAM. Upon review, written authority to proceed (if accepted) will be provided by the Senior Vice President - Finance or the appropriate designee.

E. Timing of Submission

The DCM should allow sufficient time after IAS receipt of all the information provided under Section C and D, above, for IAS, legal and policy reviews in support of the Senior Vice President's or the appropriate designee's consideration of an Equity approval request. Normally, if forms submitted by the DCM are complete and approved by OGC, IAS will have approved the request to accept Equity within 10 business days. Requests for approval should be submitted to IAS when the terms of an agreement are negotiated for such Equity acceptance, even if pursuant to the agreement, the actual delivery of Equity shares may come at some later point in time. However, preliminary informal discussions with the EAM concerning AFS related transaction terms and Equity arrangements are strongly encouraged to expedite subsequent formal review and approval.

F. Where to Send Equity and Corporate Actions

1. University Shares

Regents Bylaw 21.4(c) states, "The Chief Investment Officer shall be the custodian of all bonds, stocks, notes, contracts of sale, mortgages, and deeds of trust for real property held or acquired for investment purposes, and all other securities belonging to the Corporation ... and shall keep them in such places and in such manner as shall be approved by the Committee on Investments."

Therefore, Equity interests in Companies, including Stock certificates, Unit certification, options, and Warrants, due to The Regents pursuant to the terms of an AFS transaction agreement shall be issued by the Company to The Regents' nominee

name of "Shellwater & Co." and delivered to the DCM. The DCM shall forward such Equity, together with the completed University Acceptance of Equity Form (Appendix C) to:

Office of the Chief Investment Officer of The Regents of the University of California 1111 Broadway St., 14th floor Oakland, CA 94623-1000

ATTN: Director, Treasury Operations

A copy of the University Acceptance of Equity Form, with attachments, shall be sent by the DCM to the IAS as follows:

Innovation Alliances and Services University of California Office of the President 1111 Franklin Street, 5th Floor Oakland, CA 94607-5200

ATTN: Equity Approval Manager

3. Corporate Actions

All correspondence received by the DCM from the Company concerning Company actions (including, without limitation, shareholder or member voting actions and notices, merger notifications, meeting notices, etc.) resulting from the University's Equity interest in the Company should be forwarded to the Office of the Chief Investment Officer ("CIO") at the address listed above.

VI. CHIEF INVESTMENT OFFICER'S MANAGEMENT OF EQUITY

- A. General
 - 1. All decisions and administrative actions concerning the management of Equity issued to the University by a Company and all subsequent corporate or other entity actions received by the DCM pertaining to the University's shareholder, membership or other interest in a Company shall be made by and at the sole discretion of the CIO. This

includes decisions on when Equity will be converted to cash and when options, Warrants and similar convertible securities will be exercised. No consideration shall be given to Company information uniquely available to the University through its AFS pilot. The CIO intends to carry out such functions using the Equity Management Model (Appendix D) or other processes as the CIO may approve, based upon sound business practice and publicly available information. Such functions shall be consistent with the guidelines in this Bulletin.

- 2. At least monthly, the CIO shall notify the EAM and the EAM in turn shall notify the DCM of all significant actions taken by the CIO, including those involving purchase, distribution, or transfer of Equity, and those involving Company mergers, acquisitions, and similar change of control transactions or name changes.
- 3. Any decision made by the CIO to purchase additional shares of Equity in a Company in which the University has accepted Equity as part of an AFS transaction should be evaluated in terms of the financial return to the University. Such subsequent investments should be considered and maintained separately from the original AFSrelated arrangement and the resulting proceeds from such subsequent investments shall not be considered for distribution under the University Equity Policy.

B. Valuation

- 1. The CIO shall record the value of Equity issued to the University by a Company
- 2. Upon transmittal of such Equity to the CIO, the DCM shall provide the CIO with its good faith and reasonable estimate of the valuation of such Equity using Appendix C, University Acceptance of Equity Form unless stock has been obtained at par value in which case par value will be communicated to the CIO by the DCM.
- C. Distribution of Equity Interests to the Campus or Laboratory
- 1. The University's Equity interests received directly pursuant to the AFS program will be converted to cash and distributed to the Campus or Laboratory in accordance with Section 2, below.
- 2. Upon conversion to cash of the University's Equity interests received directly pursuant to the AFS program, the CIO shall instruct Corporate Accounting to transfer such cash proceeds to the appropriate Campus or Laboratory account and provide the Campus or Laboratory with appropriate identifying information. For clarification purposes, any additional Equity subsequently purchased by the University or University affiliates or assignees of participation rights related to such Equity (with such purchase occurring

pursuant to the exercise of any assigned participation or other rights, or otherwise) that is liquidated by the CIO will remain the property of such subsequent purchaser and will not be distributed to the campus or Laboratory that acquired the initial Equity pursuant to the AFS program. Each Campus or Laboratory obtaining Equity interests in a third party should use reasonable efforts to obtain participation rights for the University or University affiliates or assignees in future rounds of financing undertaken by such third party.

3. The Campus or Laboratory's subsequent use and distribution of its portion of any cash proceeds shall be handled in accordance with the schedules, formulas, and practices established by the Campus or Laboratory, and other applicable policies.

APPENDIX A

Sample Notice to employees: Prior to the University accepting equity in a company pursuant to this pilot, the DCM shall give this notice to any and all campus or Laboratory employees with a current or likely future interest in a Company considered to be a party to an AFS transaction, to ensure any such University employee is excused from, does not to participate in, and does not influence or attempt to influence any decision involving the Equity acceptance for AFS under consideration. This notice may be excerpted or adapted by campuses or Laboratories for their own use as they may choose.

What University Employees Need to Know about Conflicts of Interest with respect to the University accepting Equity in companies in which they may have a substantial financial or controlling interest in return for Access by the company to University Facilities and/or Services

(March ____, 2015)

The University of California's policy on conflicts of interest provides that none of the University's "faculty, staff, managers, or officials shall engage in any activities which place them in a conflict of interest between their official activities and any other interest or obligation." In addition under UC policy, University faculty and staff must comply with state statutes and regulations governing conflicts of interest, specifically the Political Reform Act of 1974-2015 (the Act).

The Act requires public officials to "perform their duties in an impartial manner, free from bias caused by their own financial interests or the financial interests of persons who have supported them." (Gov. Code, § 81001, subd. (b)). Accordingly, University employees must not allow their personal financial interests to influence their or other's University decisions regarding the provision of access to University facilities and/or services to a Company.

Any University employee with a current or likely future interest in the Company **must** excuse him or herself from and not to participate in any University decision making process as to whether to accept Equity from that Company. The DCM must also confirm to the University that no University employee with a current or potential financial interest in the Company in any way participated in or influenced the transaction decision-making process. University employees who are the sole owners or who have sole control of the Company may communicate with the University decision makers so long their communications are in the same manner as is afforded to any member of the public.

APPENDIX B

EQUITY APPROVAL REQUEST CHECKLIST

Please complete, attach supporting documentation, and submit this Appendix-B (Equity Approval Request Checklist) to IAS to formalize your request for approval to accept equity as consideration for an AFS transaction. Any deviations from the guidance provided in the University of California Guidelines: Accepting and Managing Equity in Return for Access to University Facilities and/or Services document should be separately noted and justified as an exception for consideration by the Executive Director, IAS.

Please note that in carrying out space/facility access, equipment use, and/or service transactions, the Designated Campus Manager ("DCM") is called upon to make decisions by applying his or her professional judgment and experience when considering of a multiplicity of facts and circumstances surrounding each transactions. The DCM's transaction records should include appropriate documentation supporting assessments and representations made on the Equity Approval Request Checklist.

Please submit the completed checklist with appropriate documentation to:

Innovation Alliances and Services (IAS) University of California Office of the President 1111 Franklin St., 5th Floor Oakland, CA 94607-6090 ATTN: <u>Equity Approval Manager</u>

Basic UC Identification Information

| Campus: | | DCM Contact: | |
|------------------------|----------------|-------------------|--|
| DCM: | | Phone Number: | |
| | | | |
| Company Information | | | |
| | | | |
| Company: | | | |
| Address: | | | |
| City: | | State: Zip: | |
| | | | |
| Status of Company: | Privately Held | Inventor Start-Up | |
| (Check all that apply) | Pre-Start-Up | Start-Up Other | |

If "Other," please describe:

Agreement Terms/Documents

Submittal of the following documents is **<u>REQUIRED</u>** prior to the initiation of the formal review process for approval. Please indicate those documents included with this request for approval by checking the appropriate boxes below:

| Stockholder's Agreement, Stock Purchase/Transfer Agreement, or other comparable | | | | |
|---|--|--|--|--|
| documents | | | | |
| | | | | |
| | | | | |
| Additional Transaction Agreement (Check type of agreement submitted) | | | | |
| Space/Facility Use Agreement | | | | |
| Equipment Use Agreement | | | | |
| Service Agreement | | | | |
| Other (please describe): | | | | |
| | | | | |
| | | | | |
| Other legal agreements/documents pertaining to the transaction (e.g. right of first refusal | | | | |
| and co-sale agreements, voting agreements, pre-existing or draft licensing agreements by | | | | |
| and between the campus and Company, promissory notes, any internal | | | | |
| campus/Laboratory committee recommendations or decisions to manage possible conflict | | | | |
| of interest, etc.) | | | | |
| | | | | |
| | | | | |
| Please list: | | | | |
| | | | | |
| | | | | |
| | | | | |
| Status of All Agreement(s) Checked Above: | | | | |
| Draft | | | | |
| Executed; Effective date: | | | | |

| In those cases where all agreements are not available (usually due to the early stage of the |
|--|
| Company formation), indicate the location of specific language in the agreements related to |
| the draft or executed transaction agreement that allows the University to terminate the |
| agreement or renegotiate the terms to eliminate the equity consideration or replace it with |
| other consideration. |

Please list:

| DCM used the following method to determine the fair market value for Equity received by | r |
|---|---|
| the University pursuant to the AFS program: | |

For Common Stock:

| Recent 409A valuation | or other third | party valuation |
|-----------------------|----------------|-----------------|
|-----------------------|----------------|-----------------|

Most recent option issuance price

Recent sales or issuance price

For early –stage startups where the above is not available, stock par value for recently issued founders' shares

Other based on DCM reasonable determination as made in good faith (Please describe or, if there are any specific questions, call IAS to discuss):

For Equity other than Common Stock (eg, Preferred Stock, Units, etc):

Recent sales price

Other based on DCM reasonable determination as made in good faith (Please describe or, if there are any specific questions, call IAS to discuss):

Policy Issues

- a. <u>Accepting Equity</u>
 - i. Indicate the form of equity and up-front cash considerations for AFS transaction (Check all that apply):

Up-Front Cash (if any) Amount: \$ Stock# Shares/Type (including class and series):

Other (please describe):

ii. Please identify the University Department and funding source that will forgo all or partial cash payment by accepting instead the proposed equity considerations and indicate how such University Department intends to cover or recoup the cost of such services, facilities or equipment.

b. <u>Use of Facilities or Services Involving Tax-free bond</u>

Will the Company be granted access to facilities constructed or maintained, equipment purchased or maintained, or services made possible due to funding from the sale of tax-free bonds (i.e. Lease Revenue Bonds) ?

No No

Yes

If Yes, please complete the following;

The bond(s) involved is (are)

Percentage used over the lifetime of the bond is_____%

Name, title, and contact information of the campus person responsible for the managing tax-free bond 'use' is

c. <u>Conflict of Interest Considerations</u>

i. Has the DCM given notice (Appendix-A) to any and all campus or Laboratory employees with a current or likely future interest in the subject Company, to ensure any such University employee is excused from, does not to participate in, and does not influence or attempt to influence any decision involving the Equity acceptance for AFS under consideration?

Yes

No

If "No" please provide an explanation why this action has not occurred:

ii. Did any University employee who may have had or was to likely to have any financial interest from decisions relating to taking equity in Company pursuant to the transaction described participate in or attempt to influence the University this transaction

No No

Yes

iii. If the above response was "Yes", did the campus-designated conflict of interest committee review the reported financial interest(s) and determine whether a management plan should be implemented?
No

Yes

iv. By submitting, the DCM certifies that he or she understands and accepts that the Office of the Chief Investment Officer shall manage equity received under this Policy using a "rule-based" equity disposition management model in liquidating stocks.

d. <u>Other University Relationships with Company</u>

Does the University already hold equity in the proposed Company?

(Refer to <u>https://patron.ucop.edu/equity/equity.html</u> and/or other records)

🗌 No

Yes

- If "Yes" please
- i) indicate the following:

- The cumulative total # of shares currently held by the University: _____;

- The number of shares to be provided by Company under the proposed transaction: _____; and

The type of shares to be accepted: Preferred Common

Series:

- The total number of shares outstanding by the Company: _____;

- The cumulative percentage of ownership in Company to be held by the University (includes currently held shares and shares to be accepted under the proposed transaction): _____%; and
- ii) discuss whether this was a factor in DCM's decision to consider accepting equity in the Company under the present transaction agreement.

e. <u>Transaction Terms</u>

Are the transaction agreement terms, other than those relating to equity, consistent with standard

terms in non-equity agreements for University like transactions for space/facility access, equipment use and/or services?

Yes

No

If "No" please identify and justify any non-standard terms:

f. <u>Percentage of Ownership</u>

- *i.* Total number of Company's outstanding shares of capital stock (include information on each class and series of outstanding Equity securities as well): _____
- *ii.* The percentage of ownership in Company to be held by the University (on the basis of total outstanding Equity securities and on a class and series basis where applicable): _____%
- iii. For start-up Companies, will the University's holdings be greater than 19.5%No

Not applicable

Yes

If "Yes" please discuss the timing and extent of anticipated dilution of the University's interest to below the 19.5% cap established by the University Equity Policy:

Additional information

Please provide any additional information or comments that IAS should consider in evaluating this request for approval to accept equity:

APPENDIX C

UNIVERSITY ACCEPTANCE OF EQUITY FORM

(Revised 08/01/2014)

To: *Director, Treasury Operations* Office of the Chief Investment Officer Address: 1111 Broadway, 14th Floor Oakland CA, 94607 Phone: (510)987-9668

| From: | | | | | |
|----------------------|------|-----|-----|-------|------|
| Originating Office | UCSF | UCB | UCD | UCI | UCLA |
| | UCSD | UCM | UCR | UCSB | UCSC |
| | LBNL | | | | |
| Transaction Contact: | | | | Phone | : |
| | | | | | |

Subject: Acceptance of Equity as full or partial consideration for

Space use ____ Equipment Use ____ Service provided ____

Please accept the enclosed stock certificate, as described below, for the above referenced transaction. These equity interests should be managed pursuant to the University Equity Guidelines for Facility Access and Services.

| Company Name: | |
|-------------------------|--|
| Legal Address: | |
| Company Contact: Phone: | |
| Company Contact: Phone: | |

| Total number of shares transmitted: | |
|-------------------------------------|--|
|-------------------------------------|--|

DCM has determined in good faith that a reasonable valuation per share for the Treasurer to book these shares is:

Value of \$ _____

Please attach rationale for this valuation

____ Default valuation (e.g. \$.10 per share)

Are there restrictions on the future transfer or sale of this stock?

| No | |
|-------------------|--|
| Yes, SEC Rule 144 | |
| Yes, Other | |
| | |

Does the transaction include provisions for additional equity to be issued to the University?

____Yes ____No.

If yes, attach explanation.

Attachments:

_____ Stock certificate

____ Approval Letter

_____ Agreement under which equity is accepted

____Other equity-related documents

Designated Campus Manager Signature

Date

DCM Election of a Longer Term Position in Company

The equity disposition management model will allow the campus/Laboratory DCM to make a one-time, irrevocable election to take a longer-term position on the final 25% of the University's equity holdings in a particular Company, on a case-by case basis. Such a longer-term position would be for a fixed period of time ranging from 2-5 years (to be determined at the time of such election) from initiation of disposition under the "rule-based" model employed by the Treasurer's Office, including any inventor shares being held by the Office of the Chief Investment Officer of The Regents.

Please indicate your election below (the default selection is indicated below should the DCM fail to indicate a choice):

- (Default) The DCM does NOT elect to take a longer-term position on the final 25% of the University's equity holdings herein submitted to the Treasurer's Office.

(select one of the following):

| ± | 2 years |
|---|---------|
| ± | 3 years |
| ± | 4 years |
| ± | 5 years |

from initiation of disposition under the "rule-based" model employed by the Office of the Chief Investment Officer of The Regents.

Equity Management Model (Revised 8/5/2014)

Summary

Securities accepted per request from Designated Campus Manager ("DCM") are submitted to the Office of the Chief Investment Officer of The Regents ("OCIO") for management in accordance with the provisions of the University's Guidelines on Accepting Equity for Facility Access or Services. Such securities usually carry some restriction or a "lock up" period restricting when the OCIO is free to sell the shares. The OCIO will handle all corporate actions, restriction removals, and registration activities until the securities qualify for transfer to the Depository Trust Company ("DTC") whereby the securities would have an established market value and are re-registered free and clear (without the restrictions). The OCIO, at its discretion, may solicit feedback from the Office of the General Counsel and the DCM regarding such actions.

Once the securities are DTC-qualified, the OCIO will use the following "rule-based" equity disposition management model in liquidating stocks resulting from approved University Access to Facility or Services transactions:

- 1) 50% of the security will initially be sold at the first available opportunity;
- 2) 25% of the shares will be sold approximately six months later; and
- 3) the remaining 25% will be sold approximately six months after that unless the DCM has previously elected to take a longer term as provided for in Appendix C.

This disciplined strategy reflects the Treasurer's preferred approach to capturing, on balance, reasonable value from the class of securities typically received under a licensing-related transaction.

Should the DCM wish to capture a portion of the longer-term potential value of equity received under a University Access to Facility and Service transaction, the OCIO's equity disposition management model will allow the DCM the option of making a one-time, irrevocable election to take a longer-term position on the final 25% of the University's equity holdings in a particular transaction, on a case-by case basis.

Such a longer-term position would be for a fixed period of time ranging from 2-5 years (to be determined at the time of such election) from initiation of disposition under the "rule-based" model and would apply to the final 25% remaining shares of equity held by the OCIO. This one-time election can be exercised by the DCM by indicating its preference on the University Acceptance of Equity Form Access to Facility and Service when the equity is initially transferred to the OCIO.

Responsibilities

Designated Campus Manager ("DCM")

- Negotiate, have approved, and have executed Transaction agreement
- Secure local and UCOP/IAS approvals to accept equity
- Transmit stock certificates to the Office of the Chief Investment Officer of The Regents
- in good faith, determine reasonable value of equity received by the University and to be held by OCIO

UCOP/Innovation Alliances and Services ("IAS")

- Provide policy guidance to the DCM
- Provide equity approval consideration
- Coordinate administrative processes between IAS and OCIO

Office of the General Counsel ("OGC")

• Review and, if acceptable, approve all signature documents (legal form)

Office of the Chief Investment Officer ("OCIO")

- Manage equity portfolio
- For unregistered stock in equity portfolio:
 - Remove restrictions from stock certificates
 - Re-register stock certificates
 - Manage corporate actions for unregistered stock certificates
 - secure legal review of documents
 - solicit feedback from DCM at OCIO's discretion
- For DTC-qualified stock in equity portfolio:
 - Implement the "rule-based" equity disposition management model
APPENDIX E

PROCEDURES

Equity Acceptance Review Process

- 1. Designated Campus Manager ("DCM") negotiates the terms of access agreements after consultation with and sign-off from any campus officials with requisite delegated authority.
- 2. DCM requests from IAS approval to accept Equity as consideration for access to space, equipment use and/or services. Requests for approval to accept Equity should be forwarded to the Equity Approval Manager ("EAM"). Such requests <u>must</u>:
 - a) Be submitted <u>directly</u> by DCM (or, alternatively, by an individual designated in writing by the DCM).
 - b) State that any potential conflict of interest issues have been addressed by the campus.
 - c) State that the deal adheres to the Guidelines on Accepting Equity for Facility Access and/or Services.
 - d) Include a <u>fully completed</u> Equity Approval Request Checklist for Facility Access and/or Services.
 - e) Include all relevant documents (*e.g.*, copy of transaction agreements, Stockholder's Agreement, Stock Purchase/Issuance Agreements, any existing agreements the company may have with the University, or other relevant legal agreements/documents. All agreements requiring signature from UC managers (legal forms) must be reviewed and approved in writing by the Office of the General Counsel ("OGC").
- 3. EAM responds to indicate that request has been received, and reviews documentation to ensure that it is complete.
 - a) If after initial review there is information missing, whether the requested acceptance should cause The Regents to hold more than **19.5%** of the Company's total capitalization of the company at the time of approval or more than 10% of a company upon its initial public offering (as determined on an as converted and fully-diluted basis), or there is a need for clarification, EAM writes back to DCM indicating so.
 - b) If no information missing and no clarification required, EAM sends all documentation for written approval from Executive Director, IAS.

- 4. If approved, Executive Director sends a letter to DCM indicating that the request for Equity approval has either been accepted, or that the acceptance is conditional (in which case any changes required are outlined in the letter). Message from Executive Director IAS will further include a copy of the University Acceptance of Equity Form, and a request that the form be used when accepting Equity. Any Equity issued to The Regents must be in the nominee name "Shellwater & Co.", and the actual Stock certificates issued, as well as any stockholder information received, should be forwarded directly to the Office of the Chief Investment Officer of The Regents (with a copy of the transmittal to Executive Director's attention). Copy of any amendments to any related agreement(s) should be sent to the attention of the Executive Director, IAS.
- 5. Normally, if forms submitted by the DCM are complete, accurate and with all legal forms approved, IAS will approve the request to accept Equity within 10 business days.

Notes:

- Contacts at Innovation Alliances and Services (IAS): *William Tucker*, Executive Director, 1111 Franklin St., Suite 5100 <u>william.tucker@ucop.edu</u>; 510-587-6037 *John Shih*, Equity Approval Manager, 1111 Franklin St., Suite 5110 <u>john.shih@ucop.edu</u>; 510-587-6034
- Contacts at the Office of the Chief Investment Officer: *Trevor Woods*, Investment Accountant: 1111 Broadway St., Suite 1400 <u>trevor.woods@ucop.edu</u>; 510-987-0859 *Robert Yastishak*, Director, Treasury Operations: 1111 Broadway St., 14th Floor <u>robert.yastishak@ucop.edu</u>; 510-987-9668

APPENDIX F

SUMMARY OF SOME MATERIAL ISSUES FOR CAMPUS AND LABORATORY CONSIDERATION WHEN PARTICIPATING IN THE PROGRAM TO ACCEPT EQUITY AS CONSIDERATION FOR ALLOWING ACCESS TO UNIVERSITY FACILITIES AND/OR SERVICES

Pursuant to the Guidelines on Accepting and Managing Equity in Return for Access to University Facilities and/or Services (the "Guidelines"), the University is rolling out a pilot program pursuant to which participants in the program may accept equity in recently organized or incorporated Companies affiliated with the University as full or partial consideration for access to authorized Incubators or Accelerators and the University resources offered by such Incubators or Accelerators. As per the Guidelines, each program participant is expected to develop its own procedures and forms to allow for the acceptance of equity in return for access to University resources. To help ensure the success of the program, as well as protection of the University's interests, the following is a non-exhaustive list of some identified issues that program participants should address at the outset. Program participants should still carefully review the entire set of Guidelines before accepting equity in exchange for providing access to University facilities, equipment or services.

1. Bond Financed Space and Equipment

There are strict rules under the tax law restricting certain "private use" of tax-exempt bondfinanced space or equipment by a private party (e.g., a for-profit corporation or private individual). In order to avoid such private use issues in connection with the AFS pilot program, the strong preference of the University is to not permit a private party to use any of its space or equipment that has been financed, in whole or in part, with the proceeds of tax-exempt debt. In limited circumstances the University may permit limited private use of tax-exempt bondfinanced space or equipment provided the DCM can demonstrate in advance to the satisfaction of the University that such use is in compliance with rules allowing for a limited percentage of space to be set aside for private-use and that such private-use will not jeopardize the tax-exempt status of any bonds. A program participant should contact the individual at the campus, Laboratory or University who is responsible for maintaining its tax-exempt bond financing records if it is not sure whether University space or equipment falls within this prohibition.

2. Private Benefit

The University's status as a Section 501(c)(3) organization could be jeopardized if it provides more than "incidental" benefits to any private party. To address this "private benefit" concern, the Guidelines require a University program participant either to ensure: (1) that it receives at least fair market value for the goods or services it provides to any private party or, (2) where the fair market value for generalized or incidental services provided by a University program participant to a private party cannot be reasonably ascribed, that a formulaic and fair process

applied on a reasonable and consistent basis among all third-party startup companies be used. This may be a difficult undertaking given that the valuation of the equity in a recently organized or incorporated typically would be negligible. With regard to valuation of shares of a startup corporation that is issuing common stock, the fair market value per share of common stock most likely would either be (i) the price any company options are being issued at, since those need to be issued at fair market value under Internal Revenue Code ("IRC") and many existing companies will either have a board determination or third party IRC Section 409A valuation noting the current fair market value for the common stock which would be valid until the earlier of one year from the date of the valuation or occurrence of a material event such as a third party financing, etc. or (ii) the latest price at which stock was issued to the founders or that any friends and family investor just paid for such stock (which is most likely the par value or some fraction of a penny for a startup corporation that has recently been formed)(such amount being the "Current FMV"). The University understands that determination of valuation is more complicated with regard to companies that are not corporations or in which a University program participant is taking preferred stock where a third party is not setting the pricing for such stock, but expects a University program participant to use good faith efforts to make a reasonable valuation determination.

Program participants may find it useful to work together with each other, the Innovation Alliances and Services ("IAS") group and Office of General Counsel ("OGC") to establish alternatives or a formal process to adequately address this issue. Additionally, a program participant may find the following non-exhaustive list of potential financing options helpful when establishing its own procedures to ensure the University is receiving fair value in return for resources it provides to third party participants in the AFS program:

- Charge cash for the space and services provided. A flat amount of equity in the company could also be part of this transaction. It would be prudent to have a slight corresponding reduction in the cash amount charged for the space equal to the Current FMV per share if that can be determined, or at least the par value, to show a payment of at least par value for that Equity.
- Rather than accepting only cash for the space and services, subject to compliance with applicable finance lender laws, take a note or convertible note with a principal amount equivalent to the value of the space and services provided. The note would need to have a reasonable rate of interest which can be determined based on the then current applicable federal rate or AFR (<u>http://apps.irs.gov/app/picklist/list/federalRates.html</u>). Similar to above, additional common stock in the company could be taken at the time the note is issued pursuant to a warrant or direct issuance of stock (with a minor adjustment to the note amount to reflect the value of any common stock that is issued outright to ensure that par value at least has been paid in).

- Accept equity in the form of a convertible security (such as the "YC SAFE", "KISS forms" championed by 500 Startups: <u>http://500.co/kiss</u>) with a reasonable rate of interest at the AFR where applicable. Such a convertible security would convert at a later time upon a triggering event such as a change of control or third party financing that values the company. Similar to a convertible debt security, additional common stock in the company could be taken at the time the note is issued pursuant to a warrant or direct issuance of the same (with a minor adjustment to the convertible security amount to reflect the value of any common stock that is issued outright to ensure that par value at least has been paid in).
- With regard to startups where the fair market value for generalized or incidental services cannot be readily determined, a University program participant may consider accepting a flat percentage of equity in such startups based on what is market consideration for other incubators operating in a similar region or space or providing similar services and resources; provided, the University program participant has made a determination that any such flat percentage arrangement is arrived at pursuant to a formulaic and fair process and such process is applied on a reasonable and consistent basis to all similarly-situated startups. This is important to ensure that the University program participant may wish to consult with OGC in making such determination.

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The following fictitious example is included solely to demonstrate what may constitute a formulaic and fair process that would be applied on a fair and consistent basis to all similarly- situated startups where the value of University services offered cannot be readily determined. Assume that a campus incubator offers all newly-formed startups accepted into its program with the same service and resource package and250 square feet of campus incubator space. In this example, the campus may choose to take a flat amount of equity in each newly-formed startup (such as 2% of the startup, with such amount to be tied to relevant market research of what other similarly situated incubators typically charge for similar resources and services, and such amount to be updated on a regular basis). For a newly formed startup using 500 square feet of campus space and other standard incubator services, a campus might take twice as much equity calculated on a flat percentage basis (or 4% of of the startup as per the example). The square footage and percentage equity amounts in the prior example are fictional and solely for purposes of example only.

3. Unrelated Business Income

It is possible that income distributions associated with the University's equity interest in certain entities could generate unrelated business taxable income ("UBTI"). Any UBTI that is generated needs to be tracked and reported in accordance with University policies and procedures. Investments in entities taxed as "c" corporations that produce dividends generally should not generate UBTI. Investments in Companies that are formed as LLCs, partnerships or "s" corporations that distribute income may generate UBTI to the extent any such entity generates operating income from the active conduct of a trade or business (i.e., income is not subject to an exception from UBTI under the tax law, e.g., is not merely a "passive" investment) Whether an investment may generate UBTI requires additional review of the facts and circumstances and may delay the ability of IAS to internally approve an investment. As such, use of the corporate form for newly established start-up entities (especially those intending to seek venture financing or exit pursuant to a change of control, merger or public offering) is encouraged.

4. IAS and OGC Review

Each program participant is encouraged to establish a uniform set of agreements which would allow, among other benefits, for the ability of the IAS and OGC to more efficiently review any requests from a program participant to accept equity in accordance with the Guidelines.

Incubators in the private arena have established various customary sets of form that are generally accepted in the accelerator/incubator market space. Such forms (especially those such as a convertible equity or convertible debt security that defer the valuation of a startup until the occurrence of a significant trigger event such as a third party financing or change of control) may be an ideal starting point for the drafting of University forms. If appropriately used, these forms may also be useful in addressing the fair market valuation issue described above.

5. Operational Considerations

Each campus should consider issues of a general operational nature that may arise as a result of participating in the program. The following are a few high level concerns that have been expressed and will require a program participant to consult its advisors with assistance with addressing these and other relevant concerns:

- Facilities Need to (i) confirm leased space is actively being used for its intended purpose; (ii) address the University's ability to remove a tenant and any resulting impacts an early removal would have on equity delivered in advance of the completion of the rental term; (ii) address concepts such as security deposit, utilities and insurance for matters that occur on the leased premises; and (iv) determine the form of agreement that will be used to address the above (i.e., simple lease, professional services agreement, or some similar form of agreement).
- Equipment Where applicable, need to (i) ensure that Company service providers using University equipment are properly trained on such equipment; (ii) set clear usage guidelines to ensure that there is not an expectation of unlimited use or use that interferes with existing University obligations; and (iii) establish procedures to monitor equipment use, among others.

Justification for Revisions to Bylaw 182: University Committee on International Education

The University Committee on International Education (UCIE), was initially established in 1965 to provide faculty Academic Senate governance over the university-wide study abroad program.¹ At that time and for many years thereafter, the University's principal systemwide activities in international education took the form of the education abroad program, which is now called the University of California Education Abroad Program (UCEAP).² Given this, UCIE's bylaws have only covered faculty governance of student exchange programs associated with UCEAP. Over time however, and especially in the last decade, the University has expanded both its formal and informal international activities. While UCEAP's activities in student exchanges remain significant part of UC's international portfolio of international activities, it is no longer the principal expression of this activity, which now includes the enrollment of significant numbers of international students, formal and informal international research collaborations, international service learning by undergraduates, an increasing number of MOUs and other international agreements between UC campuses and institutional partners, and even Presidential Initiatives. The increase in these activities necessitates an expansion in UCIE's purview from a committee that simply oversees student exchanges through UCEAP to one that has an advisory role in all of the University's systemwide international activities. With that in mind, the following justification will briefly describe UC expansion in international activities, the role of shared governance in such activities, and an explanation of the amendments being proposed.

Over the last decade, UC's international presence and engagement has expanded significantly. One example of this phenomenon is the growth in the enrollment of international students, which have risen from 9,576 in fall 2002 to 19,404 in fall 2012.³ Although the University does not keep records on the international research collaborations by its faculty, data from the National Science Foundation (NSF) show that such collaborations on a national basis are increasing significantly. From 1997 to 2012, the number of science and engineering (S&E) articles in peer-reviewed journals by co-authors from different countries increased from 14% to 25%. The NSF now reports that 35% of U.S. S&E co-authored articles are international in scope.⁴ In addition, more and more students are now taking part in independent research activities abroad (usually with faculty), which have increased by almost 47% between 2010-11 and 2011-12.⁵ At UC, a number of internationally-themed Presidential initiatives have recently been launched as well. These include the UC Mexico Initiative and the Global Food Initiative. These initiatives leverage the international activities already taking place on the campuses, such as UCSF's Global Health Sciences Group and UC Mexus to name only a few.

It is clear that a significant number of universities are internationalizing themselves, which necessitates the creation and maintenance of policy dedicated to international activities. For instance, a recent UC survey found that Harvard, MIT, Stanford, Yale, the University of Illinois, the University of Michigan, the University of New York at SUNY-Buffalo, and the University of Virginia have all instituted policies on international activities. Indeed, many of these universities have set up administrative committees to address such policy.⁶ Given that most international activity is driven by faculty interests and research, it is essential that the Academic Senate not only be consulted, but play an instrumental role in forming such policy. Towards that end, Academic Council endorsed and sent the UCIE-drafted <u>Vision Statement on International Engagement</u> to President Napolitano last summer. UCIE also has a representative on the Academic Planning Council's International Activities Working Group, which is drafting a Presidential Policy on International

¹ In its earliest form in the 1960s, UCIE was constituted as the "Committee on Education Abroad Program" under Bylaw 122. Originally the Senate shared responsibility with a separate administrative committee, until it gained complete control over courses taken abroad in 1971. UCIE took its current form in May 2003 under Bylaw 185. ² UCEAP should not be confused with the acronym for the original University Committee on Education Abroad Program or "UCEAP".

³ See Statistical Summaries and Data on UC Students, Faculty, and Staff, UC Institutional Research and Academic Planning, <u>http://legacy-its.ucop.edu/uwnews/stat/</u>.

⁴ See National Science Board (2014). Chapter 14. In Science and Engineering Indicators 2014. Arlington VA: National Science Foundation (NSB 14-01). Retrieved from <u>http://www.nsf.gov/statistics/seind14/</u>.

⁵ See Open Door 2013 Report, Institute for International Education, <u>http://www.iie.org/en/Research-and-Publications/Open-Doors</u>.

⁶ Harvard has set up one such policy committee, the University Committee on International Projects and Sites, which is mainly populated by a mix of faculty and administrators. See <u>http://provost.harvard.edu/university-committee-international-projects-and-sites</u>.

Activities. Therefore, the proposed amendments to these bylaws formalize faculty governance in this area, as well as laying out reporting relationships between both Senate agencies and Administrative entities. First, the following bylaw amendments expand the UCIE's purview from simply student exchange associated with UCEAP to international research collaborations, the welfare of international students and scholars, international engagement initiatives, UC educational centers abroad, and any experiential and service learning arrangements. Second, the new bylaws would allow UCIE to initiate policy proposals (the existing bylaws only allow UCIE to consider matters that are referred to it by the President of the University, the Academic Council, the Assembly, or a Divisional or any Senate Committee). Similarly, UCIE would now formally be designated as the liaising Senate agency between UCOP international policy working groups and Academic Senate leadership. Finally, the new bylaws formalize the consulting, reporting, and feedback mechanisms between UCIE and Administrative and Senate agencies.

In proposing changes to its bylaws, UCIE is also trying to make its bylaws conform to those bylaws already in place at a number of Senate Divisional Committees on International Education (or their equivalents), as indicated below:

- UCI's Subcommittee on International Education has the authority to opine on formal educational activities of UCI students abroad, faculty exchanges between UCI and foreign universities, and other academic issues involving international education.
- UCLA's Committee on International Education both provides consultation to the International Education Office (IEO) and the Vice Provost, International Institute and serves as liaison between the IEO and Academic Senate leadership, helping to ensure that policies and procedures are appropriately vetted by the Senate.
- UCR's Committee on International Education advises the Division on various aspects of international education, including the well-being of foreign students and faculty at UCR, the participation of UCR in international exchange agreements, and the participation of UCR faculty and students in international research and educational programs other than the EAP.
- UCSD's Executive Committee on the Committee on International Education formulates policies and programs that will serve to better integrate international education into the campus academic programs.
- UCSB's Committee on International Education formulates a bi-annual survey of international students that helps guide UCSB's policy concerning this growing portion of the student body. The committee consults with the Office of International Students and Scholars as well as the EAP Campus Office, and advises the Associate Vice Chancellor on International Affairs.

Tracked Changes:

182. International Education (Formerly 165 Education Abroad Program) (Am 28 May 2003)

- A. Membership shall be determined in accordance with Bylaw 128, except that the Chair shall normally serve a two-year term. One undergraduate student and one graduate student shall sit with the Committee. [See Bylaw 128.E.] The Vice Chair shall be chosen in accordance with Bylaw 128.D.2. and 3. On a campus that has no equivalent committee, a member shall be an at-large Senate member. (Am 28 May 2003)
- B. Duties. Consistent with Bylaw 40, the Committee shall: (Am 28 May 2003)
 - 1. Consider and report on matters of international education **and research** referred to the Committee by the President of the University, the Academic Council, the Assembly, a Divisional or any Senate Committee (Am 28 May 2003).
 - 2. <u>Report to the Academic Council and other agencies of the Senate and confer</u> with and advise the President and agencies of the University Administration on matters concerning international engagement, including:
 - i. <u>International research in which UC students and/or faculty</u> <u>participate.</u>
 - ii. <u>Participation of UC faculty and/or students in international</u> <u>exchange agreements.</u>
 - iii. <u>The status and welfare of international students and scholars on</u> <u>the UC campuses.</u>
 - iv. Educational Centers run by UC campuses abroad (other than UCEAP).
 - 3. <u>Initiate policy recommendations regarding international engagement programs</u> and the status and welfare of international students and scholars at UC, including policies that will better serve to integrate international education and research into UC academic programs.
 - 4. <u>Serve as liaison between UCOP international policy working groups and</u> <u>Academic Senate leadership, helping to ensure that proposed policies and</u> <u>procedures are appropriately vetted by the Academic Senate.</u>
 - 5. <u>Evaluate and advise on UC's international service learning or experiential learning programs.</u>
 - Provide continuing review of the Education Abroad Program and its policies. (EC 28 May 2003) Consult with the University Office of Education Abroad Program on future program development, including modification of the programs of existing Study Centers, establishment of new Study Centers, and disestablishment of EAP Programs. (Am 28 May 2003)
 - i. Represent the Senate in the selection of Study Center Directors. (Am 28 May 2003)
 - ii. Maintain liaison with the Council of Campus Directors. (Am 28 May 2003)
 - iii. Advise the University Office of Education Abroad Program Director on all matters of international education. (Am 28 May 2003)
 - iv. Have the responsibility for the final academic review of new Study Centers and Programs after the first three years, and for regular reviews of all centers and programs every ten years or as conditions may require. (En 4 May 89; Am 4 Jun 91; Am 28 May 2003)
 - v. Authorize and supervise all courses and curricula in the Education Abroad Program. (Am 2 Dec 71; Am 4 May 89; Am 28 May 2003)

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 - i. International research in which UC students and/or faculty participate.
 - ii. Participation of UC faculty and/or students in international exchange agreements.
 - iii. The status and welfare of international students and scholars on the UC campuses.
 - iv. Educational Centers run by UC campuses abroad (other than UCEAP).
 - 3. Initiate policy recommendations regarding international engagement programs and the status and welfare of international students and scholars at UC, including policies that will better serve to integrate international education and research into UC academic programs.
 - 4. Serve as liaison between UCOP international policy working groups and Academic Senate leadership, helping to ensure that proposed policies and procedures are appropriately vetted by the Academic Senate.
 - 5. Evaluate and advise on UC's international service learning or experiential learning programs.
 - Provide continuing review of the Education Abroad Program and its policies. (EC 28 May 2003) Consult with the University Office of Education Abroad Program on future program development, including modification of the programs of existing Study Centers, establishment of new Study Centers, and disestablishment of EAP Programs. (Am 28 May 2003)
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 - v. Authorize and supervise all courses and curricula in the Education Abroad Program. (Am 2 Dec 71; Am 4 May 89; Am 28 May 2003)

Policy Title: University of California Policy on Copyright and Fair Use Reproduction of Copyrighted Materials for Teaching and Research

| Responsible Officer: | Vice Provost Susan Carlson |
|------------------------|---|
| Responsible Office: | Academic Personnel and Programs |
| Origination Date: | April 29, 1986 |
| Date of this Revision: | TBD, 2015 |
| Scope: | Faculty, academic appointees, staff, and students |

| Contact: | Joanne Miller |
|---------------|--------------------------|
| <u>Title:</u> | Library Planning Analyst |
| Email: | joanne.miller@ucop.edu |
| Phone: | <u>(510) 587-6141</u> |

I. POLICY SUMMARY

The PolicyTo fulfill its teaching, research, and Guidelines are intended public service mission, it is the policy of the University of California to encourage the legitimate educational broad dissemination and use of photocopied materials and to reduce the University's potential liability for information in accordance with copyright infringement.

<u>Iaw.</u> The assumption of the Guidelines is that individual University <u>will defend its</u> employees will take responsibility for makingwho use copyrighted materials in an informed, good faith manner and within the necessary decisions respecting compliance with the law. Consequently, it is essential that the Policy and Guidelines be widely distributed and that faculty and staff be made fully awarescope of their contentsUniversity employment.

II. **DEFINITIONS**

Not applicable.

II. DEFINITIONS

<u>N/A</u>

III. POLICY TEXT

In the course of their duties, faculty and Faculty, staff, and students of the University of California may wish to use photocopied materials in the classroom and for research. In many cases, photocopying can facilitate the University's missions created by others for the purposes of teaching, learning, research, andor public service. The University therefore wishes to encourage encourages the appropriate use of such material materials within the spirit and the letter of the United States Copyright Law (Title 17 United State Code).

Copyright is a constitutionally conceived property right which is designed to promote the creation and dissemination of original works of authorship. That purpose is implemented by giving a scope of copyright owner certain exclusive rights with respect to the owner's work, subject to certain limitations, in the mutual interest of the author, the owner, and the public. These rights include exclusive rights of reproduction, preparation of derivative works, distribution, and performance. The University strongly believes that these rights are vital in maintaining a free flow of ideas in our society.law.

A major limitation on the exclusive rights granted to the copyright owner is the doctrine of "fair use" (17 United States Code, Section 107) which permits certain limited copying of copyrighted works for educational or research purposes without the permission of the copyright owner. "Fair use" is a limited exception to the exclusive use of the copyright owner, which if exceeded, can subject the one making unauthorized copies and the University to severe penalties. The wide availability of copying machines has created a situation where this exception can easily be breached.

To provide guidance to all University employees, the attached Guidelines are to be used to determine whether copying is within the "fair use" doctrine. If the copying is not within the Guidelines, permission should be obtained from the copyright owner before any copies are made. If it is unclear whether copying would require such permission guidance should be requested from the Office of the General Counsel.

It is important that this Policy and Guidelines be widely distributed so that the numerous users of photocopied materials in the University will be aware of the Copyright Law.

As described in the U.S. Constitution, the purpose of copyright is to "promote the Progress of Science and useful Arts." Copyright owners are granted certain exclusive rights to their works for a limited time, including the right to reproduce, modify, distribute, display, and publicly perform their works. Because these rights are exclusive, such creators may prohibit others from using their works without permission in many circumstances.

Copyright law in the U.S. includes a number of exceptions to copyright owners' exclusive rights. The most flexible of these exceptions is "fair use." Fair use allows people and organizations to reproduce, modify, distribute, display, and publicly perform works created by others in certain circumstances and for certain purposes, including criticism, comment, news reporting, teaching, scholarship, or research. In addition to the purpose and character of the proposed use, fair use requires consideration of the nature of the copyrighted work, the amount and substantiality of the portion of the original work used, and the effect of the use upon the potential market for (or value of) the copyrighted work.

Determining whether fair use applies can be complex and is generally handled on a case-by-case basis. The University will provide general guidance and resources for faculty and others to aid their understanding of copyright and help them follow the law. Members of the University community are encouraged to review the copyright and fair use guidelines available on University's copyright website (http://copyright.universityofcalifornia.edu), among other resources, and to contact their campus librarians, campus counsel office, or the Office of General Counsel if further advice is needed.

In the unlikely event of a copyright infringement claim, the University will defend its employees who acted within the scope of their University employment and who made use of the copyrighted work at issue in an informed, reasonable, and good faith manner. The University will do so to the greatest extent provided under the relevant laws and policies.

The University believes that the right of instructors, students, and others to access and share copyrighted works within the scope of the fair use doctrine is paramount for the promotion of academic freedom, creative expression, education and instruction, and ultimately, the full participation by all members of society in furthering the pursuit of knowledge. The University encourages respect for the rights of copyright owners as well as the thoughtful invocation of fair use principles within the bounds set forth in copyright law to support those goals.

IV. RESPONSIBILITIES

The Policy and accompanying guidelines are intended to encourage the legitimate educational use of photocopied materials and to reduce the University's potential liability for copyright infringement.

The assumption is that individual University employees will take responsibility for making the necessary decisions respecting compliance with the law. Consequently, it is essential that the Policy and guidelines be widely distributed and that faculty and staff be made fully aware of their contents.

<u>N/A</u>

V. PROCEDURES

See the UC Copyright Website: http://copyright.universityofcalifornia.edu

The University encourages all members of the University community to review the information on this website, and to contact their campus librarians, campus counsel office or the Office of General Counsel when further advice is needed.

A. Introduction

The purpose of these Guidelines is to provide direction on photocopying of copyrighted materials for teaching and research. Some kinds of works are not covered by copyright and therefore may be freely reproduced and distributed. Examples of such works are presented in Section B.

Under the "fair use" provision of the Copyright Act of 1976, you are permitted to photocopy and distribute portions of copyrighted works for educational use without securing permission from the owner or paying royalties. The law in this area is quite general, however, and it is important that certain conditions are met to insure that the copying does fall under this fair use exemption. Section C describes the explicit factors that you should take into consideration before reproducing and distributing copyrighted materials.

Situations may arise in which intended copying is not exempted under fair use. In such cases it is necessary to obtain written permission from the copyright owner before copying is done. Section D explains some kinds of circumstances that require you to obtain permission. Information on securing permission can be found in Section VI, below. It is the policy of the University that users secure such permission whenever it is legally required.

B. Unrestricted Photocopying

1.--<u>Uncopyrighted Published Works</u>

Anyone may reproduce without restriction works that entered the public domain. Any work published in the U.S. before January 1, 1978 without a copyright notice entered the public domain.

Copies of works protected by copyright must bear a copyright notice, which consists of the copyright symbol (a letter "c" in a circle, the word "Copyright" or the abbreviation "Copr.") plus the year of first publication for books and the name of the copyright owner. Prior to 1/1/78, in the case of a book or other printed publication, this notice had to be on the title page or the page immediately following: for periodicals, on the title page, the first page of the text of each separate issue or under the title heading. "Notice" requirements for works published after 1/1/78 have been relaxed somewhat with respect to both the position of notices and inadvertent omission of these, so there may be limited protection for some works on which notices do not appear. However, in such instances, if you were to innocently infringe a copyright, in a reliance upon an authorized copy from which the copyright notice had been omitted, there would be no liability for actual or statutory damages for any infringing acts committed before

receiving actual notice of copyright registration, if it is proved that you were misled by the omission of copyright notice; in such a case, a court may allow or disallow recovery of any of the infringer's profits attributable to the infringement, and may enjoin the continuation of the infringing undertaking or may require the infringer to pay the copyright owner a reasonable license fee as a condition of continuation of the infringing undertaking.

2. Published Works with Expired Copyrights

Anyone may reproduce without constraint published works whose copyrights have expired. All U.S. copyrights dated earlier than 75 years ago have expired. Copyrights dated later than that may also have expired because the initial period of copyright protection prior to 1978 is for 28 years if there is no renewal. The work probably will not contain notice of the renewal. We recommend that you either assume the protection is still in effect for copyrights more recent than 75 years old, or ask the owners of them (or the U.S. Copyright Office) whether they are still subject to copyright protection. Usually publishers are either the owners or know the owners' locations. If not, owners may be located through the U.S. Copyright Office in Washington, DC.

3. U.S. Government Publications

U.S. Government publications are documents prepared by an officer or employee of the U.S. Government as part of that person's official duties. Government publications include the opinions of courts in legal cases, Congressional Reports on proposed bills, testimony offered at Congressional hearings, and reports of government employees. Works prepared by outside authors on contract to the Government may or may not be protected by copyright. As with other publications, copyright notices may be in the front (for pre-1978 publications) or on the front and back (in works published since 1/1/78. In the absence of copyright notice in such works, it would be reasonable to assume they are in the public domain.

C. Permissible Photocopying of Copyrighted Works

Teachers may reproduce copyrighted works for classroom use and for research without securing permission and without paying royalties when the circumstances amount to what the law calls "fair use."

1. "Fair Use" - Current Law

In determining whether the use is a "fair use" the law requires consideration of the following factors (17 U.S.C. sec. 107):

- a. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purpose;
- b. the nature of the copyrighted work;

- c. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- d. the effect of the use upon the potential market for or value of the copyrighted work.

The Guidelines in this report discuss the boundaries for fair use of photocopied material. Fair use cannot always be expressed in numbers - either the number of pages copied or the numbers of copies distributed. Therefore you should weigh the various factors in the Act to determine whether the intended use of photocopied copyrighted material is within the spirit of the fair use doctrine. You should secure permission from the copyright owner unless the intended use is clearly permissible under fair use.

2. UC Guidelines for Determining "Fair Use"

Educators including representatives of higher education developed, along with publishers, a set of minimum standards of fair use which were set forth in the "Agreement on Guidelines for Classroom Copying in Not-for-Profit Educational Institutions" (the Ad Hoc Committee Guidelines).

These standards are reproduced in their entirety in Appendix 1 and can be used as a practical approach to determine fair use. Any copying that falls within the Ad Hoc Committee Guidelines is considered to be fair use and permissible.

Since these standards are often not realistic in a University setting, the following Guidelines should be used to judge if intended photocopying of copyrighted materials constitutes fair use in teaching and research at the University of California.

a. Single Copying for Teachers

A single copy may be made of any of the following by or for a teacher at his or individual request for his or her scholarly research or use in teaching or preparation to teach a class:

i. A chapter from a book;

- ii. An article from a periodical or newspaper;
- iii. A short story, short essay or short poem, whether or not from a collective work;
- iv. A chart, graph, diagram, cartoon, or picture from a book, periodical, or newspaper;

b. Multiple Copies for Classroom Use Multiple copies (not to exceed in any event more than one copy per pupil in a course) may be made by or for the teacher giving the course for classroom use or discussion provided that:

- i. The copying does not substantially exceed the test of brevity as defined below; and
- ii. Meets the cumulative effect test as defined below; and
- iii. Each copy includes a notice of copyright.

1. Definitions

- a. Brevity
 - 1) Poetry: A complete poem if less than 250 words or, from a longer poem, an excerpt of not more than 250 words.
 - 2) Prose: Either a complete article, story or essay of less than 2,500 words or an excerpt of not more than 2,500 words from any prose work.
 - 3) Illustration: One chart, graph, diagram, drawing, cartoon, or picture per book or per periodical issue. In some cases, such illustrations are copyrighted individually and cannot be reproduced under fair use. (See D.3. below)
- b. Cumulative Effect
 - 1) The copying of the material is for only one course per class term of the instructor for whom the copies are made.
 - 2) Not more than one short poem, article, story, essay or two excerpts may be copied from the same author, nor more than three from the same collective work or periodical volume during one class term.
 - 3) There shall not be more than nine instances of such multiple copying for one course during one class term.

The limitations stated in (1) and (2) above shall not apply to current news periodicals and newspapers and current news sections of other periodicals.

2. Prohibitions as to a) and b) above

Notwithstanding any of the above, the following shall be prohibited:

- a. There shall be no copying of or from works intended to be "consumable" in the course of study or of teaching. These include workbooks, exercises, standardized tests and test booklets, answer sheets, and like consumable materials.
- b. Copying shall not:
 - 1) substitute for the purchase of books, publishers' reprints, or periodicals;
 - 2) be directed by higher authority;

3. Situations Not Specifically Covered by UC Guidelines

The doctrine of "fair use" may permit reproduction of copyrighted works in excess of the word limit restriction specified in the UC Guidelines.

1. Since this is an area of unclear legal definition, you should use caution and discretion in such copying and should seek advice from the General Counsel's Office for a legal opinion, or request prior written permission directly from the copyright owner to perform copying substantially the limits enumerated in the Guidelines.

-2. Any questions regarding the application of the Guidelines in specific cases, whether a work is covered under copyright protection, or the ways to secure permission from publishers should also be referred to the General Counsel.

D. Copying Requiring Prior Written Permission from.

1. Copying for Profit

"Fair use" extends only to nonprofit copying. Teachers should not charge students more than the actual cost of photocopying, and should not make copies for students who are not in their classes without obtaining permission. This applies to classroom copies made and distributed by a commercial copy center outside the University, as well as University facilities.

2. Unpublished Works

One should obtain permission from owners of unpublished works in order to copy from them. The law gives automatic copyright protection to unpublished works from the time they are created until they are published. Unpublished works, such as theses and dissertations, may be protected by copyright. If such a work was created before January 1, 1978 and was not copyrighted, the work is protected under the new Act for the life of the author plus fifty years after or until December 31, 2002, whichever shall later occur. (17 U.S.C. Section 303). Works created after January 1, 1978 and not published enjoy copyright protection for the life of the author plus fifty years. (17 U.S.C. Section 302).

3. Special Works

In some cases, certain specialized materials such as maps, anatomical diagrams, and drawings are copyrighted separately even though they appear in a text book or other printed work. In this situation, the reproduction of the material would not constitute fair use even if only one illustration from a book were used. You must obtain permission to reproduce such individually copyrighted materials.

³⁾ No charge shall be made to the student beyond the actual cost of the photocopying.

4. Consumable Works

Teachers must secure prior written permission before making multiple copies of copyrighted works which are intended to be consumed in classroom activities such as workbooks, exercises, and standardized tests and their answers.

E. Infringement

Owners of copyrights can attempt to halt infringement by suing for injunctions, impounding or destruction of infringing articles, and can seek costs of suit and attorneys' fees. Additionally, they can seek recoup actual money damages suffered by the copyright owner as well as the infringer's profits. When there are only nominal monetary losses, owners can, instead of seeking their actual damages, claim "statutory" damages up to \$10,000 (or up to \$50,000 if the infringement was "willful"). The University will defend an employee who photocopies in the course and scope of his or her employment duties.

Even if the copying is held to infringe, the Copyright Act exempts employees of nonprofit educational institutions, libraries, or archives from statutory damages, if the employee believed that the copying was a fair use and had reasonable grounds for that belief. Adhering to the Guidelines in **B** and **C** above should afford reasonable grounds for believing one is engaging in "fair use."

E. RELATED INFORMATION

Related Policies:

UC Copyright Ownership Policy (http://policy.ucop.edu/doc/2100003/CopyrightOwnership)

Ownership of Course Materials Policy (http://policy.ucop.edu/doc/2100004/CourseMaterials)

UC Open Access Policy (http://osc.universityofcalifornia.edu/open-accesspolicy/)

Digital Millennium Copyright Act Guidelines (http://policy.ucop.edu/doc/7000472/DMCA)

Other Information:

UC Copyright Website (http://copyright.universityofcalifornia.edu)

<u>"Thinking Through Fair Use," University of Minnesota Libraries</u> (https://www.lib.umn.edu/copyright/fairthoughts)

<u>"Fair Use Evaluator, American Library Association</u> (http://librarycopyright.net/resources/fairuse/)

F. REVISION HISTORY

This policy was originally issued in 1986 with pages of attached guidelines.

This revised version was issued in _____, with theguidelines available on the UC Copyright OwnerWebsite

UNIVERSITY OF CALIFORNIA UCINERCED

Academic Senate Faculty Research Grants Call For Proposals

Deadline For Submission: April 15, 2015

PURPOSE

Faculty research grants are designed to support the research activities of UC Merced faculty and provide seed funds to assist in the development of extramural proposals to support research at UC Merced.

ELIGIBILITY CRITERIA

- 1. Each full-time member of the UC Merced Division of the Academic Senate, including emeritus members, is eligible to submit one grant proposal in response to this call.
- 2. Each faculty member may request up to \$5000 in research funding. Funds may be requested for most research costs, with some exceptions. (See Allowable and Unallowable Expenses, below.)
- 3. Faculty members may collaborate to submit a joint proposal, in which case the collaborators may not also submit individual proposals. Each faculty member may participate in only one proposal. Joint proposals may request funding up to an amount which is a multiple of \$5000, with the multiple being the number of collaborators contributing to the proposal. Regardless of the number of participating faculty, awards may not exceed \$20000, however.
- 4. Faculty on sabbatical leave or leave of absence (in residence or elsewhere) may apply for research funds. Grants will not be awarded, however, without assurance that the awardee will return to UC Merced after the absence.
- 5. Undergraduate students, graduate students, and postdoctoral researchers are not eligible to submit proposals, but faculty members may request funds to support student research activities under the supervision of the faculty member, provided that such activities are integral to a program of research being pursued by the

faculty member. Funds may not be applied to the support of postdoctoral researchers or of other research staff, however.

6. Non-tenured faculty members without extramural support are particularly encouraged to apply.

PROPOSALCONTENTANDFORMAT

Each proposal must include all of the following:

- 1. **Completed Application Form:** The application form requests some basic information about the proposal and its author(s), including: a proposal title, the name(s) of the participating faculty member(s), academic title(s), school affiliation(s), graduate group affiliation(s), electronic mail address(es), the identification of one school (SNS, SOE, or SSHA) to act as the proposal's originating school, and the award date(s) of the most recently received Academic Senate research grant(s) for each faculty participant.
- 2. Proposal Abstract: The abstract must not exceed 350 words.
- 3. **Description of Proposed Research:** This section should explain the research to be conducted with the requested funds, providing adequate background information and context to allow for a clear understanding of the proposal by an academic but non-expert reader. This description should be as specific and detailed as possible, given space limitations and the need to remain accessible to non-experts. This section should explain the potential impact that funding will have on the research program(s) of the proposing faculty member(s), as well as how this funding could assist in the development of research group(s) and faculty career trajectories. All requests for equipment, or other forms of infrastructure, must include an equipment management plan in this section. *The contents of this section may not exceed 3 single-spaced pages, with margins no smaller than 1 inch and fonts no smaller than 11 point.*
- 4. **Reference List:** This section should provide a bibliography of work referenced elsewhere in the proposal document. *This section may not exceed 1 single-spaced page, with margins no smaller than 1 inch and fonts no smaller than 11 point.*
- 5. **Budget:** How provided funds are to be used should be presented in a tabular format, listing the amount required for each line item.
- 6. **Budget Justification:** Each line item in the budget should be explained and justified, particularly with regard to constraints on allowable expenses (see below).
- 7. **Extramural Funding:** This section must list all pending and awarded extramural grants and contracts received by the proposing faculty member(s) for at least the last five years. For each award, the project title, funding amount, start date, and duration should be specified.

- 8. **Internal Funding:** This section must list all pending and awarded funds received by the proposing faculty member(s) from UC Merced sources, including Academic Senate funding programs, covering at least the last five years. For each award, the project title, funding amount, start date, and duration should be specified. For each award granted by an Academic Senate program, a singleparagraph report on the results of the award should be included.
- 9. Alternative Funding: A brief justification of the proposed request for funding when alternative sources of extramural funding for the budgeted items are currently available to the proposing faculty member(s) should be provided in this section. If no such alternative sources of extramural funding are available, that fact should be clearly stated and justified. *This section may not exceed 1 single-spaced page, with margins no smaller than 1 inch and fonts no smaller than 11 point.*
- 10. **Seed Funding:** If the requested funds will support the preparation of one or more proposals for extramural funding, details concerning the extramural funding programs to which such proposals are to be submitted should be provided in this section. If recent attempts to secure extramural funding for the proposed budget items have been made, details concerning those submissions should be itemized, with a special emphasis on any feedback received as a result of those attempts. If the requested funds are not to be used as seed funding to assist in the preparation of extramural funding proposals, then that fact should be clearly stated. If extramural funds have not and will not be pursued for the proposed work due to the lack of an appropriate existing extramural funding program, this section should provide evidence that no such programs exist, describing efforts that have been made to identify possible funding sources.
- 11. **Human Subjects Approval:** If the proposal involves research on human subjects, information concerning institutional ethical review and approval of the proposed work should be presented in this section.
- 12. **Animal Subjects Approval:** If the proposal involves research on non-human animals, information concerning institutional ethical review and approval of the proposed work should be presented in this section.
- 13. **Curriculum Vitae:** This section must contain a CV for each faculty member participating in the proposal.

These sections should be assembled into a single document file in Adobe's *Portable Document Format* (PDF). While sections should appear in the order shown above, each section does *not* need to begin on a fresh page, but each section must be clearly labeled. The proposal file should have a name that begins with "COR_2015", followed by the last names of all participating faculty, separated by underscore characters. For example, a proposal submitted by faculty members Smith and Jones should be named "COR_2015_Smith_Jones.pdf".

ALLOWABLE EXPENSES

Categories of allowable expenses include the following:

- **Research Assistance:** Proposals requesting support for assistants must include a statement of each assistant's exact duties, budgeted hours of labor, and rate of pay. For graduate student support, the student to be supported must be identified. This information is to be included in the Budget Justification section of the proposal document.
- Supplies and Equipment: Awarded funds may be used to purchase research equipment and supplies. The purchase of such items is subject to the policies outlined in UC Business and Finance Bulletin BUS 29. Equipment purchased with awarded funds will be the property of the University of California. Books, reports, journals, video or audio recordings, and similar research materials may be purchased with awarded funds, but these should be itemized and their purchase justified in the Budget Justification section of the proposal. Similarly, budget line items for computer equipment or computer software are allowed, but they should be explicitly justified as essential for the research activities proposed, providing capabilities not present in the computer equipment currently available to the proposing faculty member(s). Miscellaneous supply and service costs (e.g., telephone, fax, copying, postage) must be justified as essential for the proposed work.
- **Recharge Fees:** Awarded funds may be applied to recharge fees associated with the use of core research facilities or other shared or institutional research resources. The Budget Justification section should explain how each requested recharge payment is required by the proposed work.
- **Travel for Research Purposes:** Expenses incurred for investigative travel and field work may be allowed if such travel is important for the proposed research. For example, such travel may be necessary to collect data or to inspect materials that cannot be procured by other means. Travel expenses for both the participating faculty member(s) and supervised graduate students may be budgeted. The Budget Justification section should explain the need for the proposed travel, and the Budget should break down such expenses into standard travel categories (e.g., flight costs, ground travel costs, housing costs, food costs, etc.).
- Dissemination of Research Findings: Expenses incurred for travel to academic conferences or other meetings to present research results arising from the proposed work are allowed. Travel expenses for both the participating faculty member(s) and supervised graduate students may be budgeted. The Budget Justification section should specify and describe intended forums for presenting research findings, and the Budget should break down such expenses into standard travel categories (e.g., flight costs, ground travel costs, housing costs, food costs, etc.). Research findings may also be disseminated through publication, and reasonable required publication fees may also be included in the Budget section.

Other kinds of expenses may be considered, but they will require special justification in the proposal document.

UNALLOWABLE EXPENSES

Categories of expenses that are not allowed to be covered by awarded funds include:

- **Research Assistance:** Awarded funds may *not* be used for faculty salary support, salary support for postdoctoral fellows, or salary support for other research staff. These funds may *not* be used to support curricular, administrative, or teaching aids.
- Supplies and Equipment: In general, awarded funds may *not* be used to purchase equipment that serves routine productivity purposes (e.g., printers, scanners, mobile telephones, mobile telephone service, calculators). Similarly excluded are standard office and computer supplies (e.g., paper, pens, pencils, flash drives), office furniture, and costs associated with the maintenance, operation, or repair of standard office equipment. Individual subscriptions to periodicals and professional society dues are also considered inappropriate budget items.
- **Travel:** If a participating faculty member will be on sabbatical leave or a leave of absence during the period of an award, then, except under special circumstances, awarded funds may *not* be used for travel between the Merced campus and the locale of leave. Also, subsistence during the period of leave is not fundable.

HUMAN AND ANIMAL SUBJECTS

- **Human Subjects:** Proposed research involving the use of human subjects must be approved by the Institutional Review Board before funds will be allocated. A copy of the approval or protocol number and applicable dates must be provided prior to the awarding of funds.
- Animal Subjects: Proposed research involving the use of non-human animals must be approved by the Institutional Animal Care and Use Committee. A copy of the approval or protocol number and applicable dates must be provided prior to the awarding of funds.

USE OF FUNDS

• **Budget Adaptation Post-Award:** Each line item in the proposal Budget must be justified in terms of the specific research activities being proposed. Expenditures of awarded funds are expected to generally conform to budgeted allocations by category and purpose. Faculty who receive awards must request approval from the Committee on Research (COR) prior to any change in the use for which funds were allocated. Reasonable requests within the scope of the proposed research activities will typically be granted.

- Award Period: Grants awarded by this program have a period of a single year. All award monies must be spent before June 1, 2016. Funds will not be provided for expenses incurred prior to the date upon which a grant is awarded. Faculty awardees are responsible for the administration of their grants, including the covering of overdrafts. Faculty awardees are expected to promptly return any funds that will not be spent before their grants expire. Any unexpended funds remaining on the grant expiration date will automatically revert to the Provost/Executive Vice Chancellor for redistribution.
- **Equipment:** Any equipment purchased with awarded funds will be the property of the University of California, and possession is retained by the University of California beyond the completion of the period of the grant.
- **Compliance:** All expenditures are subject to applicable University of California regulations.

EVALUATION PROCESS

Proposals that are incomplete or do not meet minimum conformance standards with regard to the requirements outlined in this document will not undergo further review.

Complete and properly formatted proposals will be evaluated based on their fit to the goals of this funding program, as well as the quality of the proposed research and the case made by the proposal. In order to provide quality assessments informed by relevant expertise, proposals will undergo an initial evaluation managed by the Executive Committee of the school (SNS, SOE, SSHA) specified by the authors as the originating school for the proposal. The originating school is specified on the application form, and at least one author of the proposal must have an appointment in the selected originating school. The Executive Committee of each school will be asked to leverage the expertise of their faculty in order to identify and rank the highest quality proposals, selecting the top proposals whose aggregated budgets do not exceed \$82000. (*Please note that this is the first year in which this program has involved a school-level competition and ranking of proposals.*) These ranked, high quality, proposals selected by the schools will then be examined by the members of the Committee on Research (COR) of the Academic Senate and assessed for fit to the goals of this funding program, based on the following criteria:

- 1. *Evidence of funding need:* Proposals that demonstrate a lack of alternative available extramural funds for the proposed research activities will be preferred over those for which other extramural funds appear to be available. Current funding should be reported with a statement of why this is not appropriate or sufficient to support the proposed project.
- 2. Targeted extramural funding programs and efforts to secure extramural funding: Proposals that request seed funds to support the preparation of one or more extramural applications should explicitly specify the targeted extramural sources. In addition, proposals showing past efforts to secure extramural funding that have resulted in positive feedback or review without a positive funding decision will be ranked highly. In such cases, applicants should include reviewer comments or

communications indicating the assessed strengths of the proposed research and the reasons for a lack of funding at this time. Proposals that make a convincing case that no appropriate extramural funding programs exist will be ranked highly, along with those for which previous extramural proposals have received positive feedback.

- 3. *Juniority:* All other factors being equal, junior tenure track faculty will be preferred over more senior tenure track faculty, and tenure track faculty will be preferred over other members of the Academic Senate. For proposals involving multiple faculty members, the rank of the most junior participant will be used to assess the joint proposal.
- 4. *Time since the receipt of a research award from the Academic Senate:* In general, proposals from faculty members who have not recently received support through this program (or its predecessor) will be preferred over those from faculty who have recently received such support.

Based on these criteria, as well as the quality rankings provided by the originating schools, the members of COR will deliberate and make final funding decisions. Given currently available financial resources, it is anticipated that approximately half of the proposals recommended by the schools will be funded. In general, COR will rank the recommended proposals, and funds will be allocated to these proposals in the order in which they have been ranked, until available funds are exhausted. In some situations, however, COR may, based on a majority vote, reduce the size of some awards below requested amounts so as to increase the number of awards granted. Also, in an effort to produce an award portfolio that reflects the range of research being conducted at UC Merced, COR reserves the right to adjust rankings, using an approach that is regularly employed by federal funding agencies.

The award recommendations produced by COR will be communicated to the Academic Senate Divisional Council, and they will be provided to the Vice Chancellor for Research and Economic Development, as well as to the Provost/Executive Vice Chancellor, to guide the administration in the delivery of award funds. Once an award is made, funds will become immediately available to the participating faculty member(s).

APPLICATION PROCESS

Each proposal must consist of a single PDF file, formatted and named according to the instructions provided above. Completed proposal documents should be delivered to the Academic Senate Office c/o Simrin Takhar: <u>stakhar@ucmerced.edu</u>. Proposals must be received by the end of the day (i.e., before midnight) on April 15, 2015.

If an award is made, funds will become available immediately. All award monies must be spent before June 1, 2016.

Academic Senate Faculty Research Grants Application Form

| Proposal Title: | | |
|--|----------------|--|
| Originating School: | | |
| Participating Faculty 1: | | |
| Name: | | |
| Academic Title: | Email Address: | |
| School and Graduate Group Affiliation(s): | | |
| Award Date of Most Recent Academic Senate Funding: | | |
| Participating Faculty 2: | | |
| Name: | | |
| | Email Address: | |
| | | |
| Award Date of Most Recent Academic Senate Funding: | | |
| Participating Faculty 3: | | |
| Name: | | |
| | Email Address: | |
| School and Graduate Group Affiliation(s): | | |
| Award Date of Most Recent Academic Senate Funding: | | |
| Participating Faculty 4: | | |
| Name: | | |
| Academic Title: | Email Address: | |
| School and Graduate Group Affiliation(s): | | |
| | | |
| Award Date of Most Recent Academic Senate Funding: | | |