REVISED COMMITTEE ON RESEARCH (COR)

Wednesday, January 28, 2015

3:00 – 4:30 pm

KL 362

UCMCROPS/COR1415/Resources

I. Chair's Report

Updates from January 21 Division Council meeting.

II. Consent Calendar **Pg. 1-5**

Action requested: Approval of January 14 meeting minutes.

III. Campus Review Items

A. Graduate Council's proposed substantive revisions to the Procedures for Submitting Proposals for Graduate Emphasis Areas and Graduate Programs. **Pg. 6-16**

COR members discussed the revisions in the January 14 meeting.

Action requested: COR members to approve the draft memo appended to this packet. Final memo will be sent to the Senate Chair by February 3.

B. Establishment of Centers **Pg. 17-33**

The Provost/EVC drafted a policy for the establishment of centers. COR is the lead reviewer for the Senate and members discussed the policy in the January 14 meeting.

Action requested: COR to approve the draft memo appended to this packet. Final memo will be sent to the Senate chair by February 12.

C. ORU Review **Pg. 34-41**

VCR Traina recently drafted procedures for ORU review and Senate committees are asked to opine.

Action requested: COR to review the policy in the context of the Senate's comprehensive policies on establishment and review of research units, approved last academic year. COR's comments are due to the Senate chair by February 10.

D. Campus Climate Action Plan **Pg. 42**

In response to the campus climate survey results in March 2014, Chancellor Leland has proposed the action plan that is appended to this packet. All Senate committees are invited to comment. The survey results can be viewed at *UCMCROPS/COR1415/Resources/Informational Items*

Action requested: COR to review the campus climate action plan and submit comments to the Senate Chair by February 4.

IV. Senate Faculty Grants Program **Pg. 43-89**

Pursuant to the action item from the January 14 meeting, the memo to the Provost/EVC that illustrates the need for increased funding for the faculty grants program has been revised to include the survey data and anecdotal information from respondents. COR members will also begin the discussion on the criteria for evaluating this year's grant submissions.

Action requested: COR members to approve the draft memo and begin the discussion on drafting the AY 14-15 Call for Proposals.

Relevant background documents, including the previous awardees, proposals, and calls, as well as information from the other UC campuses, are posted at:
UCMCROPS/COR1415/Resources/Faculty research grants

V. Other Business

Committee on Research (COR)
Minutes of Meeting
January 14, 2015

Pursuant to call, the Committee on Research met at 3:00 pm on January 14, 2015 in Room 362 of the Kolligian Library, Chair David C. Noelle presiding.

I. Chair's Report

Chair Noelle informed the members that UCORP's first meeting of the spring term was cancelled, but the main topic of email discussion was the proposed bill in the legislature to remove the autonomy of the Regents over the UC system. Such a removal requires changing the California constitution. Legislators are concerned over tuition hikes, but UCOP's position is that the Regents' oversight over UC should be protected.

II. Consent Calendar

ACTION: The December 17 meeting minutes were approved as presented.

III. Reviewing CRU Bylaws

Prior to this meeting, the manager of the Spatial Analysis & Research Center (SpARC) contacted COR Chair Noelle to inquire whether COR should review the center's bylaws. COR members discussed the request at the December 17 meeting and concluded that the current cycle of initial CRU/ORU establishment and subsequent five-year review gives COR ample opportunity to review and comment on bylaws. In the December 17 meeting, COR members suggested that annual reviews of SpARC bylaws be completed by the center's Steering Committee who is in the best position to judge the appropriateness of SpARC's bylaws. VCR Traina pointed out that he requests that all research units submit annual reports. COR members agreed that these annual reports would provide sufficient information about the units' activities. Shortly after the December 17 meeting, a memo was drafted

from COR to SpARC, detailing COR's response. At today's meeting, COR members reviewed and approved the memo.

ACTION: COR analyst to send memo to SpARC staff.

IV. Campus Review Items

--revised proposal from SSHA to establish a minor in Community Research and Service. COR endorsed the proposal last year but other Senate committees had several concerns. SSHA has submitted a revised proposal based on these comments. COR members discussed the revised proposal and echoed Undergraduate Council's concerns regarding faculty teaching credit and resources. COR supports the concept of the minor, but believes that the revised proposal does not sufficiently address the resource challenges surrounding the delivery of the minor. COR members also noted that the revised proposal's provision of offering a faculty research support stipend violates section 662-16 of the APM.

ACTION: COR analyst to send a draft response memo to the COR chair for approval. The revised memo will be circulated among committee members for a vote. The final memo will be submitted to Division Council by January 26.

--Graduate Council's GC proposed revisions to procedures for submitting graduate proposals.

COR members discussed and endorsed the proposed revisions.

ACTION: COR analyst will draft a brief response memo and add to the January 28 COR agenda for a broader committee vote.

--Establishment of Centers.

COR members discussed the policy recently drafted by the Provost/EVC on the establishment of centers. COR is concerned that the document does not recognize that Centers are CRUs which fall under the Senate's previously approved policies created in conjunction with administrative consultation

during the last academic year. COR requests that the Provost/EVC suggest revisions to these previously approved policies so that the Senate and Administration can establish one comprehensive policy, rather than two.

ACTION: COR analyst to send a draft response memo to the COR chair for approval. The revised memo will be circulated among committee members for a vote. The final memo will be placed on the January 28 COR agenda for broader committee input.

V. Proposed Bylaws for Library and Scholarly Communication Committee

In fall 2014, COR submitted a proposal to Division Council to establish a standing Senate committee on library and scholarly communication. Division Council expressed concern over lack of resources and staff for such a committee. COR submitted a response, assuaging the resource and staffing concerns and emphasizing the need and timeliness for a standing committee devoted to library issues, in light of the hiring of a new university librarian and of the crisis of the lack of appropriate publications for faculty usage. Division Council submitted a response requesting that COR propose bylaws and committee membership.

COR members reviewed and discussed the memo to Division Council that details the proposed bylaws and membership for a standing Senate committee on library and scholarly communication. COR members voted to approve the memo.

Action: COR analyst to send the COR memo to Division Council with a request that it be added to the January 21 Division Council agenda.

VI. Faculty Research Grants

Prior to this meeting, the committee analyst compiled the responses received from prior faculty awardees of GRC/COR grants and the funding levels of other UC campuses for their Senate grants. Based on this information, a COR member drafted a graph to illustrate the declining trend of funding for Merced Senate faculty grants in relation to our growth in faculty numbers.

This data is included in the draft memo from COR to Provost/EVC Peterson to illustrate the importance of increased funding of the Senate faulty grants program.

COR members also discussed how best to use the anecdotal information received from the survey that was conducted of previous faculty awardees. Members previously agreed that the responses should be divided into four main categories and analyzed further: 1) number of extramural awards received as a result of the Senate faculty grants, 2) number of publications generated from the grants, 3) number of presentations delivered due to the grants, and 4) number of graduate students supported. This data is also included in the memo to the Provost/EVC as well as a few anecdotes from faculty members about the awards' positive impact on their research.

COR's draft memo to the Provost/EVC notes that UCM's per capita funding rate is not significantly below that of other campuses, however, other campuses have more funding sources such as departmental funding and bridge funding. It is quite challenging for UCM faculty members to obtain large extramural awards so these Senate faculty grants can make a significant difference to faculty members' research programs. The memo also mentions that UCM faculty members do not have the safety net that exists at the larger, well-funded campuses. Also, other campuses distribute their funds in different ways. At UCM, some amount of funding gets distributed to school deans and graduate groups, but that is not sufficient to cover the research needs addressed by programs at other campuses, such as bridge funding. A lack of funds for research support can contribute to a decrease in faculty morale, a fact also noted in the letter.

COR members reviewed and discussed the draft memo. Members agreed that a note about the survey and methods should be included in the memo, as well as a sentence referring to the Provost/EVC to an appendix to read all the comments submitted by faculty members on the positive impact of these Senate grants on their research programs.

ACTION: COR analyst to revise memo to include the aforementioned items and send to the COR member who took the lead on drafting. The revised memo will be circulated among committee members for a vote and the final version will be submitted to the Provost/EVC. After submission, COR will turn its attention to drafting the call for proposals for AY 14-15.

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

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January 28, 2015

To: Jian-Qiao Sun, Chair, Division Council

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

Re: GC proposed revisions to the Procedures for Submitting Proposals for Graduate Emphasis Areas and Graduate Programs

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COR reviewed Graduate Council's proposed revisions to the procedures for submitting proposals for graduate emphasis areas and graduate programs. COR holds that the revisions align with the campus's research mission, and, therefore, endorses them.

cc: COR members
Division Council members
Senate Office

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ACADEMIC SENATE, MERCED DIVISION
GRADUATE COUNCIL (GC)
KATHLEEN HULL, CHAIR

UNIVERSITY OF CALIFORNIA, MERCED
5200 NORTH LAKE ROAD
MERCED, CA 95343
(209) 228-6312

January 6, 2015

To: Jian-Qiao Sun, Senate Chair

From: Kathleen Hull, Chair, Graduate Council (GC)

Re: GC proposed revisions to the Procedures for Submitting Proposals for Graduate Emphasis Areas and Graduate Programs

Graduate Council is proposing substantive revisions to the Procedures for Submitting Proposals for Graduate Emphasis Areas and Graduate Programs. With the recent revisions to the CCGA Handbook, revisions must be made to the January 19, 2010 approved GC policy so that our campus policy is aligned with the new CCGA requirements and procedures. Furthermore, CCGA stated (see May 9, 2014 memo to our campus) that it does not expect any new emphases to be created within the IIGP and GC has revised the procedures to no longer allow new emphasis areas to be proposed within the IIGP.

Members approved the proposed revisions and would like the document to go through a formal Senate review process. A track-changes copy and final versions are included for review.

We look forward to having a revised approved document no later than March 11, 2015. In order to accomplish this task, the Division Council should transmit a final version of the document to Provost/EVC Peterson and VPDGE Marjorie Zatz no later than February 18, 2015 for their formal review and approval.

Cc: Graduate Council
Division Council
Academic Senate Office

Graduate ~~and Research~~ Council (G~~R~~C)
Procedures for Submitting Proposals for ~~Graduate Emphasis Areas and~~ Graduate Programs

Approved by G~~R~~C on ~~January 19, 2010~~?

In 2003, the Interim Individual Graduate Program was put in place at UC Merced. ~~This umbrella program contains several disciplinary and interdisciplinary emphasis areas with individualized program requirements.~~ The intention of this program ~~i~~was to incubate graduate program areas to the point where they ~~a~~were ready to become stand-alone graduate programs. Faculty members must submit proposals ~~to create new emphasis areas within the interim program, or~~ to convert existing emphasis areas into stand-alone graduate programs.[1]

For ~~new~~ existing emphasis areas as well as new graduate programs, proposals should be written to make the case that: (1) the proposed program fits ~~at~~ the mission of UC Merced; (2) that there is demand for the proposed program in ~~CA~~ California and society at large; (3) that there are viable career paths for graduates of the program; and (4) the proposing graduate group has adequate resources (i.e., intellectual, personnel, space, and funding), plans, and procedures to grow a UC-quality graduate program. Proposals ~~for new graduate programs~~ should demonstrate growth to the point of being ready to service a full-fledged graduate program~~, whereas proposals for new emphasis areas should have clear plans and timelines for developing into a full fledged graduate program~~.

Proposals are first reviewed internally at UC Merced (UCM). Once approved, they are then submitted to the UC Coordinating Committee on Graduate Affairs (CCGA). Proposals ~~for new graduate programs and new emphasis areas~~ are also converted to the appropriate format and submitted to the ~~Western Association of Schools and Colleges (~~WASC~~)~~ Senior College and University Commission (WSCUC)[2]. Both of these bodies must approve new graduate programs before students may be admitted and degrees conferred. CCGA and W~~A~~SCUC each have their own guidelines for preparing graduate program proposals. While these guidelines are similar in many respects, the proposal formats are different. Procedures for writing and submitting CCGA and W~~A~~SCUC proposals are as follows.

1. ~~For new emphasis areas, proposing faculty members should follow the proposal format described at the end of this document. For new graduate programs, p~~Proposing faculty members should write a CCGA proposal in accordance with instructions and guidelines found in the CCGA Handbook. ~~http://www.universityofcalifornia.edu/senate/committees/ccga/ccgahandbook_current.pdf~~
2. Policies and procedures should conform to ~~policies and procedures detailed in~~ the UCM Graduate ~~Advisors~~ Policies and Procedures ~~——~~Handbook.

[1] CCGA does not expect any new emphases to be created within the IIGP umbrella, see Appendix A.
[2] Formally known as the Western Association of Schools and Colleges (WASC).

~~http://graduatedivision.ucmerced.edu/sites/graduatedivision/files/public/documents/UCMGrad uateAdvisorHandbook.pdf.~~ Graduate groups may impose additional or more stringent policies and procedures, but they cannot conflict with or diminish those already detailed in the Graduate ~~Advisors Handbook~~Policies and Procedures Handbook. The graduate group policies and procedures should be prepared as a W~~w~~ord document and be formatted according to the Graduate Group Policies and Procedures Template. Once the graduate program is approved by CCGA and WSCUC, the approved GC policies and procedures should be posted to the graduate program's website.

3. ~~In the By-Laws, the structures of one or more faculty committees (internal to the graduate program) should be outlined who are responsible for curriculum and program assessment, and substantive change review.~~The Bylaws should be prepared as a W~~w~~ord document and be formatted according to the Graduate Group Bylaws Template.
4. Proposing faculty members should contact the W~~A~~SCUC ~~Academic~~ Accreditation Liaison Officer (ALO), who will identify a W~~A~~SCUC Substantive Change Specialist to work with faculty members to ~~discuss~~meet WSCUC requirements~~on translating the CCGA proposal into the corresponding WASC proposal~~.
5. Proposing faculty members should work with Administration to identify and appoint a Lead Dean for the proposed graduate program (e.g., the Dean of the School that is most closely associated with the proposed program). The Lead Dean is appointed by the Chancellor.
6. Proposals should include Program Learning Outcomes, a Curricular Map, and an Assessment Plan as W~~A~~SCUC instruments. The Program Learning Outcomes should be posted to the graduate program's website, once the graduate program ~~or emphasis area~~ is approved by CCGA and WSCUC.
7. The proposal should be voted on and approved by faculty members of the proposed graduate program. Proposing faculty members should also consult with other UCM faculty groups who may be affected by the proposed graduate program. Consultation may consist of informal communications, for example, or proposals may include letters of support from consulted faculty groups.
8. A list of the chairs (or program directors) of comparable UC programs to whom the proposal was sent, a sample of the cover letter, and any feedback received from those chairs should be included.
9. Proposals are ultimately submitted to the Academic Senate Office by the Lead Dean of the proposed graduate program. Submissions should include a transmittal letter with the result of above-mentioned faculty vote and consultation process, plus a letter of recommendation from the Lead Dean regarding academic resources and support for the proposed program. The Academic Senate Office transmits the proposal to G~~R~~C (for academic review), the Committee on Academic Planning and Resource Allocation (CAPRA), the Provost/Executive Vice Chancellor (~~Provost/EVC,~~ for budgetary review), and the Vice Provost and Dean of Graduate Education (VPDGE), the WSCUC Accreditation Liaison Officer (ALO), and any other Senate standing committees as appropriate~~Graduate Dean~~. G~~R~~C must receive~~s~~ comments from CAPRA, the VPDGE, and Provost/EVC ~~and the Graduate Dean~~, and may request revisions from proposing

faculty members. G~~R~~C ultimately votes to approve or reject the CCGA proposal.

~~9.~~10. Approved CCGA proposals are submitted to CCGA for final UC review and approval (see Appendix C of the CCGA Handbook for their review procedures). For new graduate programs and existing IIGP emphasis, ~~At about the same time that proposals are submitted to CCGA, the corresponding WASC proposal should be submitted to WASC if necessary.~~ the corresponding WSCUC proposal will be submitted after CCGA and UCOP approval. The UCM procedure for submitting to CCGA is based in the CCGA Handbook and the UC Compendium and detailed below: ~~detailed in Section VI.D.5 9 of the Compendium (copied here):~~

a. The Divisional Graduate Council's ~~Academic Senate~~ approval after consultation with CAPRA is ~~–~~referred ~~–~~to~~–~~ ~~the~~ the VPDGE ~~Graduate Dean for~~ for ~~comment and~~endorsement and final transmittal to the Provost/EVC. A copy of G~~R~~C's approval is also sent to the Chair of the Divisional Academic Senate for the information and approval of the Divisional Council.

b. The Provost/EVC reviews the proposal and consults with appropriate members of the administration to determine if the degree program will be supported by the campus, including providing appropriate resources, and advises the Chancellor.

~~c.~~ The Chancellor transmits campus approval and ~~recommendation~~ all required materials to Systemwide reviewers, including the UC Provost, designated UCOP staff, Academic Council Chair, CCGA Chair and Vice Chair, and CCGA Analyst. ~~to the Office of the President for system wide approval.~~ Copies are also sent to the Provost/EVC, ~~Vice Provost and Dean of Dean of Graduate Education~~VPDGE~~Studies~~, the Chair of the Divisional Senate, ~~and~~ the Chair of the Graduate ~~and Research~~ Council, Accreditation Liaison Officer, GC Analyst and Academic Senate Office.

~~d.~~c. ~~The GRC Chair transmits the proposal to the Coordinating Committee on Graduate Affairs for system wide Academic Senate approval.~~

~~e.~~d. When approved by the Office of the President and ~~system wide~~Systemwide Academic Senate, the Chancellor and/or Chair of the Divisional Academic Senate notify the G~~R~~C Chair and ~~Vice Provost and Dean of Graduate Education Graduate Dean~~VPDGE who notifies the graduate program, and Offices of Business~~Accounting~~ & Financial Services, Admissions, Assessment, University Communications, Registrar, Institutional Research and Decision Support, and Planning and ~~Resource Management~~Budget.

Effective Date: ?

~~Proposal Format for New Emphasis Areas~~

~~1. Name of the program, principal faculty contact person, proposed lead dean, and proposed degree(s) offered (M.S., M.A., and/or Ph.D.)~~

~~2. Brief description of the program: what it is, why it should be established at Merced at this time, and its relationship to existing and planned graduate groups, graduate emphasis areas, and/or institutes at Merced.~~

~~3. Resources: new faculty, staff, courses, and facilities (including equipment, space, library) that are needed.~~

~~4. Provide an estimate of the number of graduate students likely to be involved, both initially and at steady state.~~

~~5. Describe likely employment opportunities after degree completion.~~

~~6. Timeline: when does the new emphasis area plan to start offering courses and accepting students? On what time scale would this emphasis area expect to become a full-fledged graduate group?~~

~~7. Policies and Procedures, and By-Laws~~

> ~~Note: The Graduate Advisors Handbook (GAH) details policies and procedures for graduate programs at UC Merced. Emphasis areas may impose additional or more stringent policies and procedures, but they cannot conflict with or diminish those already detailed in the GAH. For clarity, policies and procedures specific to the emphasis area should be clearly referenced to the section in the GAH to which they relate. This should be achieved by (1) using just one paragraph for each additional policy or procedure that the emphasis area may impose, (2) the first sentence in each paragraph should indicate the section in the GAH to which the additional policy or procedure relates, (3) the paragraph should not be a modified copy of sentences or a paragraph from the GAH, but should clearly state what the additional policy or procedure is.~~

~~8. Program Learning Outcomes, Curricular Map, and Assessment Plan. The Policies and Procedures Manual should reference the Program Learning Outcomes, Curricular Map articulating alignment between Program Learning Outcomes and Course Outcomes, and Assessment Plan, which are separate documents.~~

~~: January 19~~**Appendix A**

CCGA Memo- Status of Interim Individual Graduate Program (IIGP)

UNIVERSITY OF CALIFORNIA, ACADEMIC SENATE

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Donald Mastronarde, Chair
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University of California
1111 Franklin Street, 12th Floor
Oakland, California 94607-5200

May 9, 2014

VALERIE LEPPERT, UCM GRADUATE COUNCIL CHAIR

Dear Valerie,

I am pleased to inform you that CCGA voted unanimously at its meeting of May 7, 2014, to extend for Academic Year 2014-2015 its authorization of the Interim Individual Graduate Program (IIGP) at UC Merced.

CCGA congratulates the campus and the Graduate Council on the progress that has been and is being made to complete the transition from this interim arrangement to disciplinary departments and departments taking full responsibility for graduate programs and degrees.

CCGA requests that the campus provide at this time a brief account of current emphases still under the umbrella of the IIGP and the expected timetable for their transition to regular status. The IIGP is an interim strategy that should no longer be needed in the near future, and we reiterate that CCGA does not expect any new emphases to be created within the shrinking IIGP.

We would be very grateful if you would provide this account no later than June 23, 2014.

Sincerely,

Donald J Mastronarde

Donald Mastronarde, Ph.D.
Chair, CCGA

cc: William Jacob, Academic Council Chair
Martha Winnacker, Academic Senate Executive Director
Todd Giedt, Academic Senate Associate Director
Tom Peterson, UCM Provost and Executive Vice Chancellor
Annette Garcia, UCM Assistant Chancellor and Chief of Staff
Chris Kello, UCM Acting Dean of the Graduate Division
Laurie Herbrand, UCM Registrar
Laura Martin, UCM Accreditation Liaison Officer

Graduate Council (GC)
Procedures for Submitting Proposals for Graduate Programs

Approved by GC on ?

In 2003, the Interim Individual Graduate Program was put in place at UC Merced. The intention of this program was to incubate graduate program areas to the point where they were ready to become stand-alone graduate programs. Faculty members must submit proposals to convert existing emphasis areas into stand-alone graduate programs.[1]

For existing emphasis areas as well as new graduate programs, proposals should be written to make the case that: (1) the proposed program fits the mission of UC Merced; (2) that there is demand for the proposed program in California and society at large; (3) that there are viable career paths for graduates of the program; and (4) the proposing graduate group has adequate resources (i.e., intellectual, personnel, space, and funding), plans, and procedures to grow a UC-quality graduate program. Proposals should demonstrate growth to the point of being ready to service a full-fledged graduate program.

Proposals are first reviewed internally at UC Merced (UCM). Once approved, they are then submitted to the UC Coordinating Committee on Graduate Affairs (CCGA). Proposals are also converted to the appropriate format and submitted to the WASC Senior College and University Commission (WSCUC)[2]. Both of these bodies must approve new graduate programs before students may be admitted and degrees conferred. CCGA and WSCUC each have their own guidelines for preparing graduate program proposals. While these guidelines are similar in many respects, the proposal formats are different. Procedures for writing and submitting CCGA and WSCUC proposals are as follows.

1. Proposing faculty members should write a CCGA proposal in accordance with instructions and guidelines found in the CCGA Handbook.
2. Policies and procedures should conform to the UCM Graduate Policies and Procedures Handbook. Graduate groups may impose additional or more stringent policies and procedures, but they cannot conflict with or diminish those already detailed in the Graduate Policies and Procedures Handbook. The graduate group policies and procedures should be prepared as a Word document and be formatted according to the Graduate Group Policies and Procedures Template. Once the graduate program is approved by CCGA and WSCUC, the approved GC policies and procedures should be posted to the graduate program's website.
3. The Bylaws should be prepared as a Word document and be formatted according to the Graduate Group Bylaws Template.
4. Proposing faculty members should contact the WSCUC Accreditation Liaison Officer

[1] CCGA does not expect any new emphases to be created within the IIGP umbrella, see Appendix A.
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(ALO), who will identify a WSCUC Substantive Change Specialist to work with faculty members to meet WSCUC requirements.

5. Proposing faculty members should work with Administration to identify and appoint a Lead Dean for the proposed graduate program (e.g., the Dean of the School that is most closely associated with the proposed program). The Lead Dean is appointed by the Chancellor.
6. Proposals should include Program Learning Outcomes, a Curricular Map, and an Assessment Plan as WSCUC instruments. The Program Learning Outcomes should be posted to the graduate program's website, once the graduate program is approved by CCGA and WSCUC.
7. The proposal should be voted on and approved by faculty members of the proposed graduate program. Proposing faculty members should also consult with other UCM faculty groups who may be affected by the proposed graduate program. Consultation may consist of informal communications, for example, or proposals may include letters of support from consulted faculty groups.
8. A list of the chairs (or program directors) of comparable UC programs to whom the proposal was sent, a sample of the cover letter, and any feedback received from those chairs should be included.
9. Proposals are ultimately submitted to the Academic Senate Office by the Lead Dean of the proposed graduate program. Submissions should include a transmittal letter with the result of above-mentioned faculty vote and consultation process, plus a letter of recommendation from the Lead Dean regarding academic resources and support for the proposed program. The Academic Senate Office transmits the proposal to GC (for academic review), the Committee on Academic Planning and Resource Allocation (CAPRA), the Provost/Executive Vice Chancellor (for budgetary review), and the Vice Provost and Dean of Graduate Education (VPDGE), the WSCUC Accreditation Liaison Officer (ALO), and any other Senate standing committees as appropriate. GC must receive comments from CAPRA, the VPDGE, and Provost/EVC, and may request revisions from proposing faculty members. GC ultimately votes to approve or reject the CCGA proposal.
10. Approved CCGA proposals are submitted to CCGA for final UC review and approval (see Appendix C of the CCGA Handbook for their review procedures). For new graduate programs and existing IIGP emphasis, the corresponding WSCUC proposal will be submitted after CCGA and UCOP approval. The UCM procedure for submitting to CCGA is based in the CCGA Handbook and the UC Compendium and detailed below:
    a. The Divisional Graduate Council's approval after consultation with CAPRA is referred to the VPDGE for endorsement and final transmittal to the Provost/EVC. A copy of GC's approval is also sent to the Chair of the Divisional Academic Senate for the information and approval of the Divisional Council.
    b. The Provost/EVC reviews the proposal and consults with appropriate members of the administration to determine if the degree program will be supported by the campus, including providing appropriate resources, and advises the

Chancellor.

c. The Chancellor transmits campus approval and all required materials to Systemwide reviewers, including the UC Provost, designated UCOP staff, Academic Council Chair, CCGA Chair and Vice Chair, and CCGA Analyst. Copies are also sent to the Provost/EVC, VPDGE, the Chair of the Divisional Senate, the Chair of the Graduate Council, Accreditation Liaison Officer, GC Analyst and Academic Senate Office.
d. When approved by the Office of the President and Systemwide Academic Senate, the Chancellor and/or Chair of the Divisional Academic Senate notify the GC Chair and VPDGE who notifies the graduate program, and Offices of Business & Financial Services, Admissions, Assessment, University Communications, Registrar, Institutional Research and Decision Support, and Planning and Budget.

Effective Date: ?

Appendix A
CCGA Memo- Status of Interim Individual Graduate Program (IIGP)

UNIVERSITY OF CALIFORNIA, ACADEMIC SENATE

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January 28, 2015

To: Jian-Qiao Sun, Chair, Division Council

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

Re: Establishment of Centers

COR reviewed the Provost/EVC's policy on the establishment of Centers. COR is concerned that the document does not recognize that the Senate has previously approved policies, created in conjunction with administrative consultation, that specify procedures for the establishment and review of Centralized Research Units (CRUs), which appear to be essentially identical to the Centers described in the document under review. (Current policies for CRUs are attached.) COR requests that the Provost/EVC frame his document as revisions to these previously approved policies, so the Senate and Administration can establish one unified policy for research groups of this kind.

COR looks forward to a response from the Provost/EVC concerning how the new proposal contrasts with existing policies, as well as an indication of how current policy fails to address the needs of the campus.

cc: COR members
Division Council members
Senate Office

Establishment of Centers at UC Merced

A “Center” at the University of California is a unit that is typically smaller than an Institute or an ORU, furthers research in a designated field or is engaged in providing research facilities for other units and departments. A Center may also be established to advance other aspects of the University’s mission, such as teaching or service, and in many instances, is supported by extramural resources that may be supplemented by intramural funding. Sometimes several Centers will form an Institute. The Center has evolved as a structure to facilitate collaborations by multiple investigators on a research problem of common interest. A Center may be established as a pilot in a strategic area, where institutional support may be provided for a defined time; it may be the result of a Federal or other external award; it may originate as a line item from the Legislature; it may be funded by philanthropy; or it may be created by a group of scholars focused on a research theme of mutual interest and which does not require extramural resources.

Centers at UC Merced are created as follows:

1. The PI must have approval from the appropriate dean, VCR, and Provost/EVC before submitting any proposal for either extramural or intramural funds that includes the term “Center” in the project title.
2. Upon campus receipt of funding from an extramural source, or a proposal for the use of intramural funds, the Dean consults with the initiator of the original funding request and proposed Center Director (if different than the proposal initiator) to discuss the appointment of the Director. In cases of cross-school centers, consultation with appropriate deans and the VCR is required.
3. The Dean prepares a recommendation memo for the appointment of the Director of the new Center. The Dean’s memo is forwarded to the Provost/EVC, who may consult with the appropriate Deans, Units Chairs, or others and decides whether to approve the Directorship and the formation of the Center.

The case for the establishment of a Center should include the following elements:

a. A strategic plan describing the mission and goals of the new Center.
b. An operational plan for the first 3-5 years of the proposed center which should include an organization chart, a description of the role of the advisory committee (if deemed necessary), the process for selection of committee membership, the proposed initial advisory committee members and an outline of proposed center activities.
c. Budget estimates for the first five years of operation to meet the strategic objectives of the proposed Center.
d. Articulation of the immediate resource needs (e.g., space, capital equipment, library resources, etc.) of the proposed Center, related commitments to meet those resource needs identified by source, and realistic projections of future resource needs.

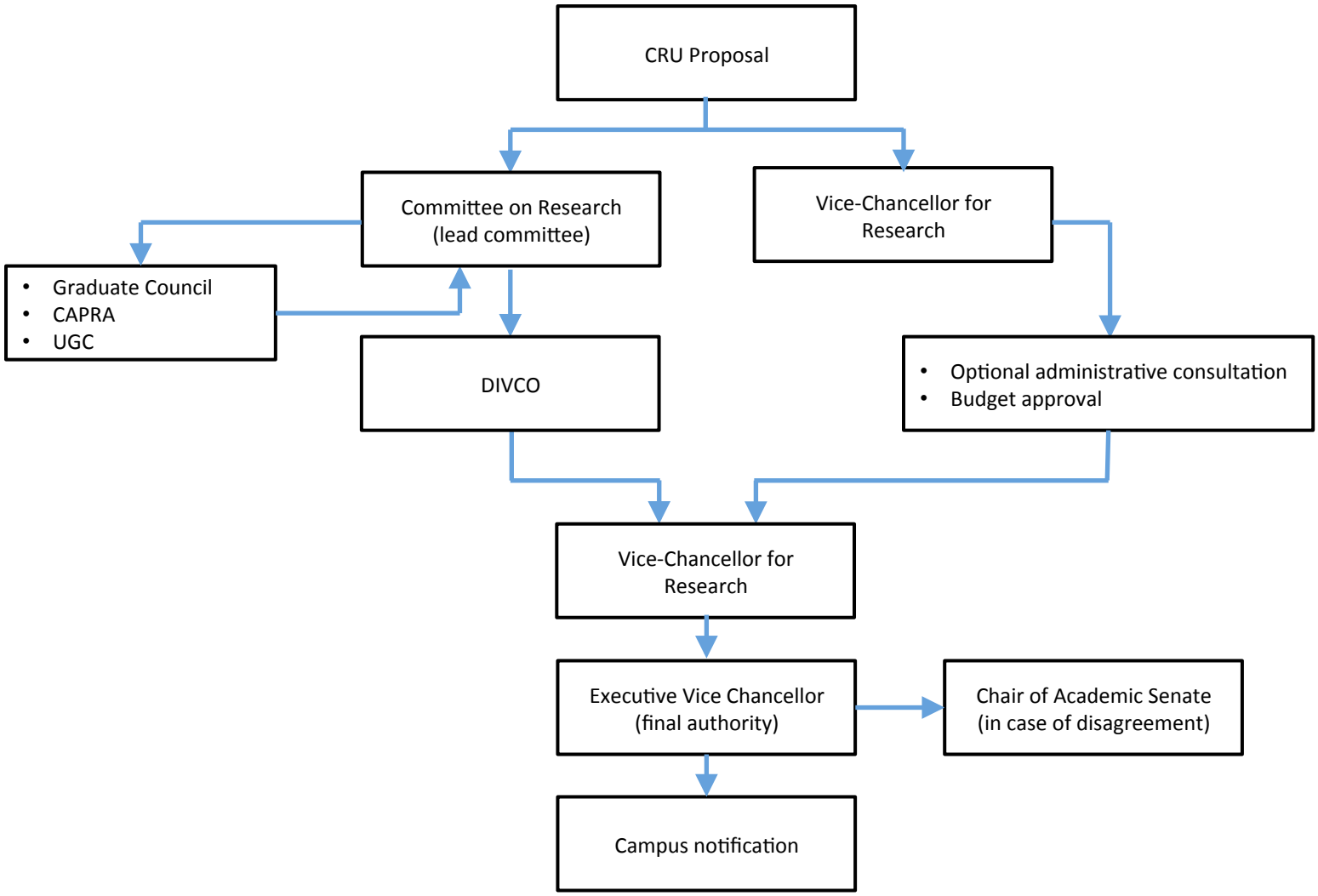
Several principles and processes should guide the establishment of Centers:

•Each Center should have a clearly defined mission that supports the major strategic objectives and core academic mission of the campus, School, and/or Units.
• Centers should contribute to the teaching, research and outreach missions of the campus, School, and/or Unit faculties. They must contribute to the intellectual capital of the campus, and to the education of graduate and undergraduate students.
• The mission and activities of a Center should not duplicate those of an existing Unit or Center on the campus or within the School(s).
• A Center's viability must not depend solely on the work of one faculty member, and should be formed only under those circumstances in which several faculty members plan to be seriously involved in the Center.
•Centers should have a clear model for financial sustainability. At the time of the Center's establishment, clear justification by appropriate campus unit(s) must be provided for any anticipated university-provided core support or cost-sharing. It is acknowledged that not all centers will have access to significant extramural funding given their topics and in no way should this disqualify the proposed center from consideration. In this instance, center proposers should carefully document the limitations of funding in their subject areas and outline how they will maintain the intellectual viability of their center without access to significant levels of extramural or intramural funding.
• All Centers will be subject to regular five year sunset reviews. These reviews will be conducted by panels external reviewers expert in the subject area.
• Center Directors serve in an "At Will" capacity, and are subject to regular review before reappointment. Such review will be conducted by the appropriate Dean in consultation with the relevant stakeholders. The Provost/EVC will make any decision regarding reappointment.
• Centers should generate value beyond that resulting from the research and scholarship of the participating faculty members in their respective Units.

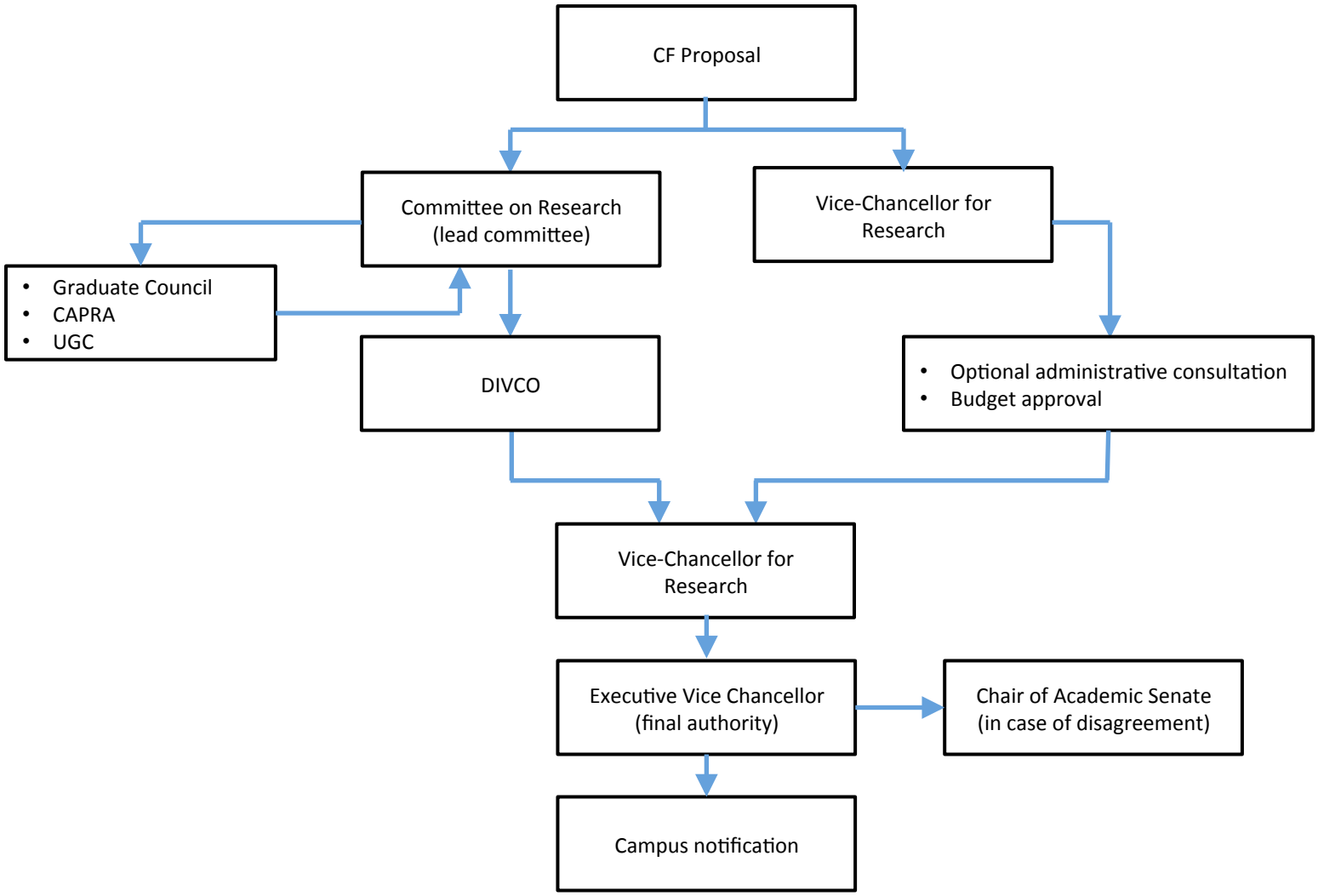
	CRU	Core Facility (CF)	ORU	MRU
Designations	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station
Lines of Responsibility	CRU responsible to Vice Chancellor for Research (VCR) for administration, budget, space, personnel, and scholarship	CF responsible to VCR for administration, budget, space, personnel, and scholarship	ORU responsible to Chancellor or Chancellor's Designee (CD) for administration, budget, space, personnel, and scholarship	MRU responsible to the President and report through Chancellor or CD at host campus
Administration	Headed by Director who is a faculty member. Aided by Advisory Committee appointed by VCR.	Headed by Director who is a faculty member. Aided by Advisory Committee appointed by VCR.	Headed by Director who is a tenured faculty member. Aided by Advisory Committee Appointed by Chancellor or CD.	Headed by Director who is a tenured faculty member, aided by Associate Director on each campus at which unit is active. Aided by Advisory Committee appointed by President or President designee.
Budgetary Support	Potential funding by Office of Research based on merit review	Funding from recharge and contracts. Potential funding by Office of Research based on merit review	"[P]rovision is made in the campus budget for the unit's core administration support, Director's stipend, …"	Administrative support from campus or from Office of the President
Proposal for Establishment	Faculty members submit a proposal stating unit's goals and objectives; describing added values and capabilities; explaining how mission extends beyond interests or needs of a single group, department, or school; and making clear how the unit will foster new intellectual collaborations, stimulate new funding, etc. [NB: CRU Policies include Review Criteria] Executive Vice-Chanceller has final authority for approval.	Faculty members submit a proposal stating CF's goals and objectives; describing added values and capabilities; explaining how mission extends beyond interests or needs of a single group, department, or school; and making clear how the unit will foster new intellectual collaborations, stimulate new funding, etc.	Faculty members submit a proposal stating unit's goals and objectives; describing added values and capabilities; explaining why goals cannot be achieved by existing campus structure; and making clear how the unit will foster new intellectual collaborations, stimulate new funding, etc.	Proposal originates at host campus and is submitted to the VCR, who seeks advice from all appropriate divisional Academic Senate Committees and administrative committees. After campus review, proposal is submitted to Vice Provost for Research by Chancellor or CD of host campus. The Vice Provost for Research reviews proposal and refers it to the Chancellor for comment. The Vice Provost for Research also refers the proposal to the Chair of Academic Council for comment by University Committee on Research Policy (UCORP), University Committee on Planning and Budget (UCPB), and CCGA. Vice Provost for Research retains final authority for recommending establishment of MRU to Provost and President. After Presidential approval, Provost informs Chancellors and Chair of Academic Council of the action.
Director	Appointed by VCR after a nomination procedure on which VCR and CoR agree. For new Director for an existing unit, nominates are solicited from Advisory Committee.	Appointed by VCR after a nomination procedure on which VCR and CoR agree. For new Director for an existing unit, nominates are solicited from Advisory Committee.	Appointed by Chancellor or CD after a nomination procedure on which the Chancellor and the Academic Senate agree. For new Director for an existing unit, nominates are solicited from Advisory Committee.	Appointed by the Provost after consultation with appropriate Chancellors and with advice of Search Committee appointed by Vice Provost for Research.

	CRU	Core Facility (CF)	ORU	MRU
Five-year Review	VCR initiates 5-year reviews. VCR in consultation with CoR should assure 5-year reviews are conducted at proper intervals. VCR appoints review committee from a slate nominated by CoR. Review committee's report should be provided to the Director for comment. Justification for continuation must be documented by review committee. The report is reviewed by appropriate Academic Senate committees. VCR decides on continuation and any changes in CRU, upon consideration of the ad hoc and Senate committee's recommendations. Disestablishment of CRU requires Provost's approval. To maintain portfolio campus CRUs, VCR transmits annual report to Chancellor, Executive Vice Chancellor, and the Academic Senate the establishments and disestablishments and a summary of 5-year reviews of CRUs.	VCR initiates 5-year reviews. VCR in consultation with CoR should assure 5-year reviews are conducted at proper intervals. VCR appoints review committee from a slate nominated by CoR. Review committee's report should be provided to the Director for comment. Justification for continuation must be documented by review committee. The report is reviewed by appropriate Academic Senate committees. VCR decides on continuation and any changes in CF, upon consideration of the ad hoc and Senate committee's recommendations. Disestablishment of CF requires Provost's approval. To maintain portfolio campus CFs, VCR transmits annual report to Chancellor, Executive Vice Chancellor, and the Academic Senate the establishments and disestablishments and a summary of 5-year reviews of CFs.	Chanceller initiates 5-year reviews. VCR in consultation with appropriate Senate Committee should assure 5-year reviews are conducted at proper intervals. The Chancellor or CD appoints review committee from a slate nominated by divisional Academic Senate. Review committee's report should be provided to the Director for comment. Justification for continuation must be documented by review committee. The report is reviewed by appropriate Academic Senate committees. The Chancellor or CD decides on continuation and any changes in ORU, upon consideration of the ad hoc and Senate committee's recommendations. Disestablishment of ORU requires Chancellor's approval. To maintain portfolio campus ORUs, the Chancellor or CD transmits annual report to the Vice Provost for Research listing ORU establishments and disestablishments and a summary of 5-year reviews of ORUs.	The Vice Provost for Research should assure that 5 year reviews are conducted at proper intervals. VCR appoints ad hoc review committee from a slate nominated by Chair of the Academic Council and the Chancellor or CD. Review committee's report should be provided to the Director for information. Justification for continuation must be documented by review committee. The 5-Year Review report is submitted to the Vice Provost for Research, who distributes it to the Vice Chancellors for campus comment and the Chair of the Academic Council for comment by UCORP, UCPB, and CCGA. Based on 5-Year Review Report and comments, the Vice Provost for Research approves continuation of unit, impliments changes, or recommends disestablishment of unit to President.
Procedure for Disestablishment	Following a 5-year review, Executive Vice Chancellor approves request for disestablishment and informs the Chancellor, VCR, and Academic Senate of action.	Following a 5-year review, Executive Vice Chancellor approves request for disestablishment and informs the Chancellor, VCR, and Academic Senate of action.	Following a 5-year review, the Chancellor approves request for disestablishment and the Chancellor or CD informs the Vice Provost for Research of action.	Following a 5-year review, the Chancellor or CD sbmits request for disestablishment to Vice Provost of Research after appropriate campus administrative and Senate consultation and consultation with Advisory Committee. The request is referred by Vice Provost for Research to the Chancellors for comment. The Provost recommends disestablishment to the President. After Presidential approval, Provost informs Chancellors and Chair of the Academic Council of action.
Phase-Out Period	At most one full year after the end of the academic year	At most one full year after the end of the academic year	At most one full year after the end of the academic year	At most one full year after the end of the academic year
Procedure for Name Change	Director prepares a proposal to VCR describing rationale. After review by CoR, CAPRA, and appropriate campus administrators, Provost approves and informs Chancellor, VCR, and Academic Senate of action.	Director prepares a proposal to VCR describing rationale. After review by CoR, CAPRA, and appropriate campus administrators, Provost approves and informs Chancellor, VCR, and Academic Senate of action.	Director prepares a proposal describing rationale. After review by Senate and appropriate campus administrators, the Chancellor or CD approves and informs Vice Provost for Research of action.	Director prepares a proposal describing rationale. MRU Advisory Committee endorses requested name change. After review by appropriate host campus administrators and Senate committees of other participating campus, Director submits proposal package to Vice Provost for Research. After consultation with UCORP and favorable reiew at host campus and participating campuses, the host Chancellor approves name change and submits full documentation to Vice Provost for Research, who notifies other campus and the Cahir of the Academic Council of change in name.
Annual Report	Unit should submit a report to VCR and CoR containing specific information.	Unit should submit a report to VCR and CoR containing specific information.	Unit should submit a report to VCR and CoR containing specific information.	Unit should submit a report to VCR and CoR containing specific information.

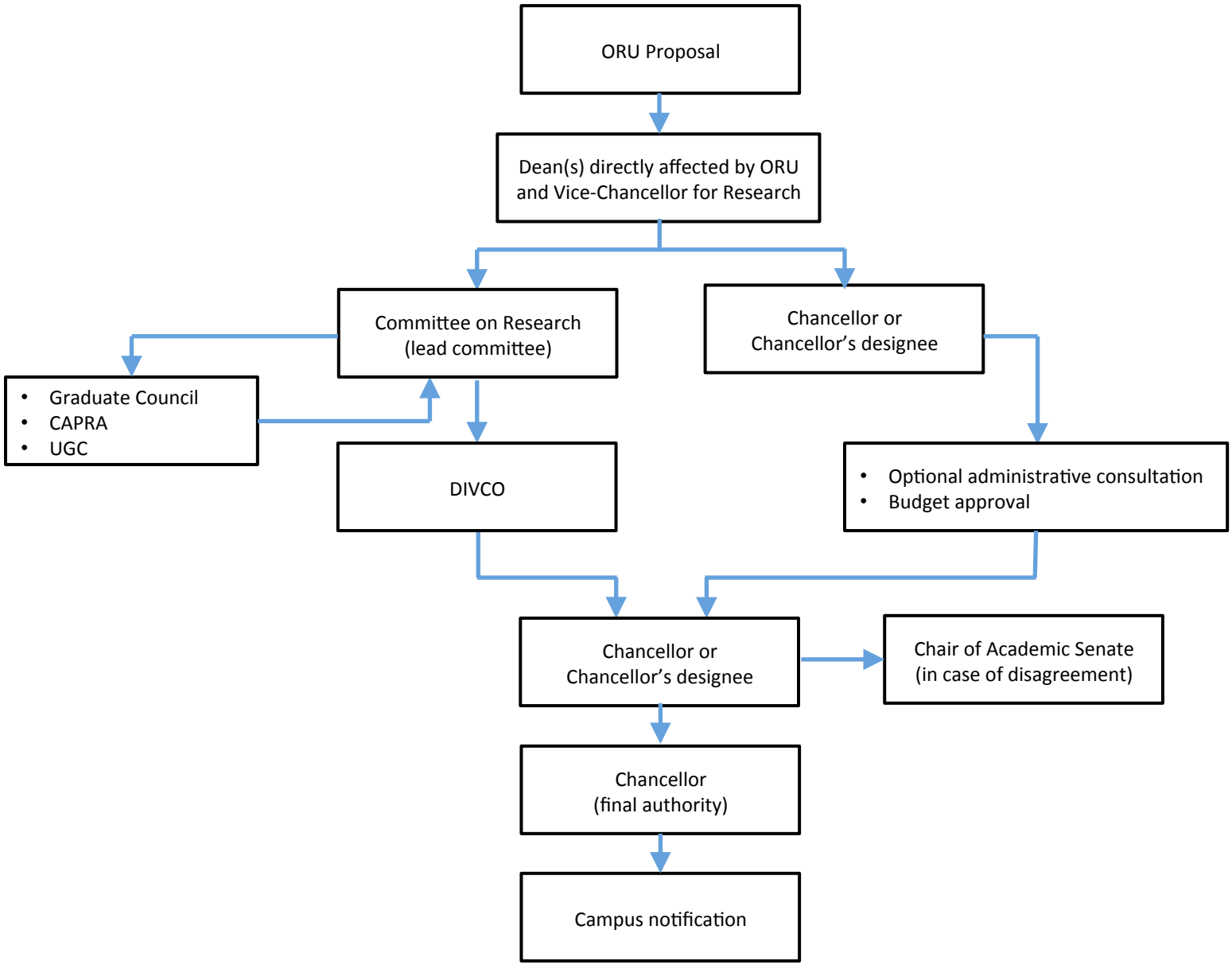
Approval Process for Establishment of a Centralized Research Unit (CRU)



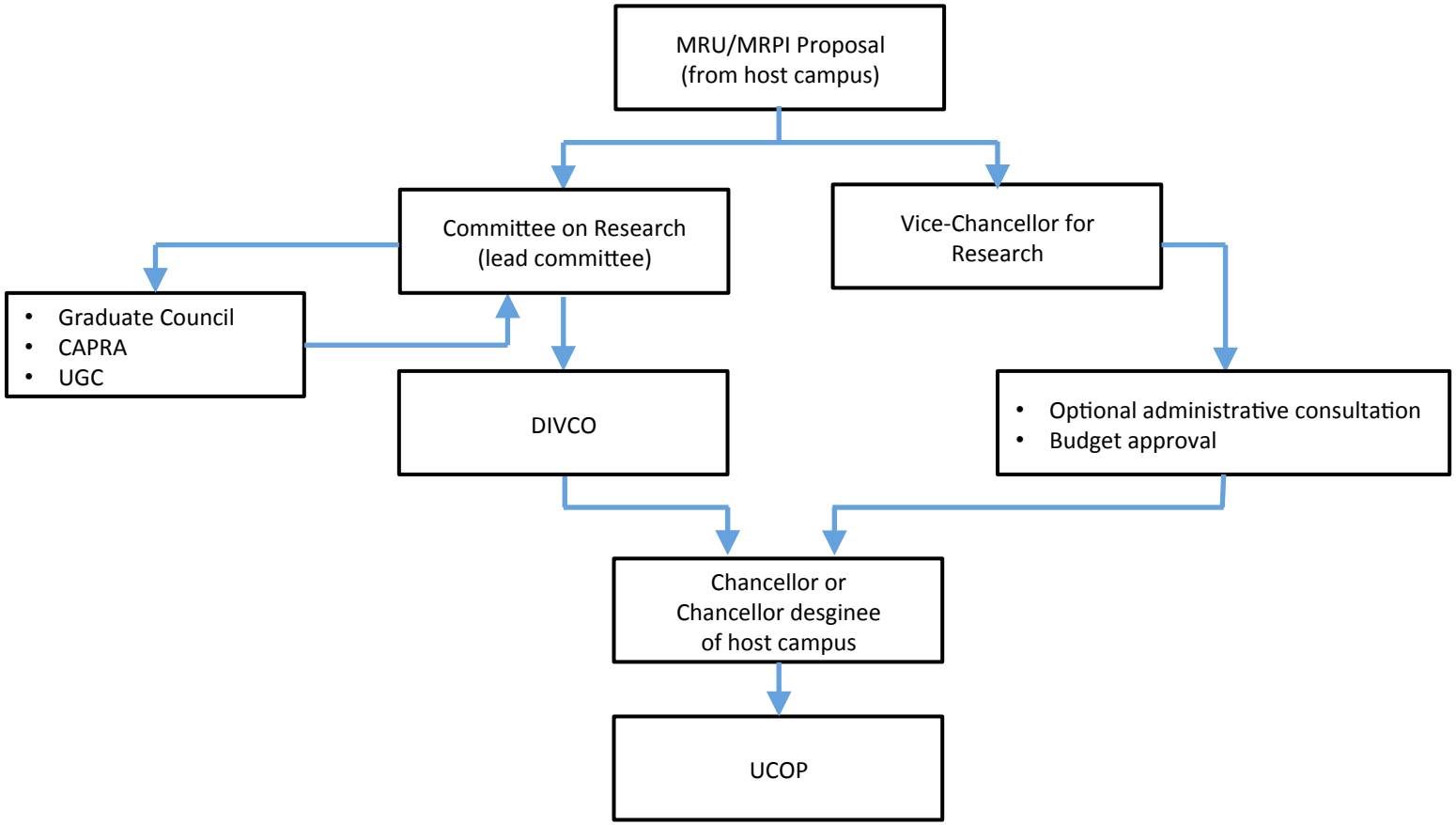
Approval Process for Establishment of a Core Facility (CF)



Approval Process for Establishment of a Organized Research Unit (ORU)



Approval Process for Establishment of an Multicampus Research Unit (MRU)/MRPI



Five-Year Review Criteria for Centralized Research Units

Five-year reviews by the Senate may be additional to reviews conducted by the Office of Research and other cognizant units. The objective of Senate review is to ensure that the units continue to reflect the criteria set by the Senate. The five-year review should be considered standard, but the Office of Research is empowered to request additional documentation at any stage. This review document should be no more than 5 pages.

Centralized Research Units (CRU) reviews will be evaluated according to the following:

1. CRU's original purpose
2. Present functions
3. Accomplishments (e.g., publications, grants, new collaborations, number of users, and educational/outreach activities associated with the unit)
4. Impacts
5. Future plans
6. Continuing development

CRU reviews will assess the following:

1. Adequacy of space and other resources made available to the unit
2. Success in meeting previously established objectives, planned changes in program objectives, and planned steps to achieve new objectives
3. Effectiveness and leadership of the Director and the participation of the Advisory Committee
4. Budget, including funds and expenditures

Five-Year Review Criteria for Core Facilities

Five-year reviews by the Senate may be additional to reviews conducted by the Office of Research and other cognizant units. The objective of Senate review is to ensure that the units continue to reflect the criteria set by the Senate. The five-year review should be considered standard, but the Office of Research is empowered to request additional documentation at any stage. This review document should be 5-10 pages.

Core Facility (CF) reviews must address the following:

1. CF's original purpose
2. Present functions
3. Accomplishments (e.g., publications, grants, new collaborations, number of users, and educational/outreach activities associated with the unit)
4. Impacts
5. Future plans
6. Continuing development

CF reviews will assess the following:

1. Adequacy of space and other resources made available to the unit
2. Success in meeting previously established objectives, planned changes in program objectives, and planned steps to achieve new objectives
3. Effectiveness and leadership of the Director and the participation of the Advisory Committee
4. Budget (including funds and expenditures, and adequateness and appropriateness to support the CF's mission)
5. Compliance with safety and operational regulations

Five-Year Review Criteria for Organized Research Units

Five-year reviews by the Senate may be additional to reviews conducted by the Office of Research and other cognizant units. The objective of Senate review is to ensure that the units continue to reflect the criteria set by the Senate. The five-year review should be considered standard, but the Office of Research is empowered to request additional documentation at any stage. This review document should be 5-10 pages.

Organized Research Units (ORU) reviews must address the following:

1. ORU's original purpose
2. Present functions
3. Accomplishments (e.g., publications, grants, new collaborations, number of users, and educational/outreach activities associated with the unit)
4. Impacts
5. Future plans
6. Continuing development

ORU reviews will assess the following:

1. Adequacy of space and other resources made available to the unit
2. Success in meeting previously established objectives, planned changes in program objectives, and planned steps to achieve new objectives
3. Effectiveness and leadership of the Director and the participation of the Advisory Committee
4. Budget, including funds and expenditures

Five-Year Review Criteria for Multicampus Research Units

Five-year reviews by the Senate may be additional to reviews conducted by the Office of Research and other cognizant units. The objective of Senate review is to ensure that the units continue to reflect the criteria set by the Senate. The five-year review should be considered standard, but the Office of Research is empowered to request additional documentation at any stage. This review document should be 5-10 pages.

Multicampus Research Units (MRU) reviews must address the following:

1. MRU's original purpose
2. Present functions
3. Accomplishments (e.g., publications, grants, new collaborations, number of users, and educational/outreach activities associated with the unit)
4. Impacts
5. Future plans
6. Continuing development

MRU reviews will assess the following:

1. Adequacy of space and other resources made available to the unit
2. Success in meeting previously established objectives, planned changes in program objectives, and planned steps to achieve new objectives
3. Effectiveness and leadership of the Director and the participation of the Advisory Committee
4. Budget, including funds and expenditures

Review Criteria for Establishment of Centralized Research Units

Centralized Research Units (CRU) proposals must address how the proposed unit will:

1. Foster new intellectual collaborations
2. Stimulate new sources of funding
3. Further innovative and original research
4. Support existing funded research
5. Supply research techniques or services to faculty groups
6. Contribute to the instruction mission of the university
7. Perform service and outreach to the public
8. Support a broad array of researchers, graduate group, schools, and the campus
9. Have sufficient faculty and technical expertise to ensure the successful operation of the unit
10. Have a management and financial plan that will ensure sustainability of the unit
11. Have a plan for how immediate and future space needs will be met
12. Procure extramural funds for its establishment and operation

Review Criteria for Establishment of Core Facilities

Core Facility (CF) proposals must address how the proposed facility will:

1. Foster new intellectual collaborations
2. Stimulate new sources of funding
3. Further innovative and original research
4. Support existing funded research
5. Supply research techniques or services to faculty groups
6. Contribute to the instruction mission of the university
7. Perform service and outreach to the public
8. Support a broad array of researchers, graduate group, schools, and the campus
9. Have sufficient faculty and technical expertise to ensure the successful operation of the facility
10. Procure extramural funds for its establishment and operation
11. Have a management and financial plan that will ensure sustainability of the facility
12. Have a plan for how immediate and future space and instrumentation needs will be met
13. Comply with existing safety and operational regulations

Review Criteria for Establishment of Organized Research Units

Organized Research Units (ORU) proposals must address how the proposed unit will:

1. Foster new intellectual collaborations
2. Stimulate new sources of funding
3. Further innovative and original research
4. Support existing funded research
5. Supply research techniques or services to faculty groups
6. Contribute to the instruction mission of the university
7. Perform service and outreach to the public
8. Support a broad array of researchers, graduate group, schools, and the campus
9. Have sufficient faculty and technical expertise to ensure the successful operation of the unit
10. Have a management and financial plan that will ensure sustainability of the unit
11. Have a plan for how immediate and future space needs will be met
12. Procure extramural funds for its establishment and operation

Review Criteria for Establishment of Multicampus Research Units

Multicampus Research Units (MRU) proposals must address how the proposed unit will:

1. Foster new intellectual collaborations
2. Stimulate new sources of funding
3. Further innovative and original research
4. Support existing funded research
5. Supply research techniques or services to faculty groups
6. Contribute to the instruction mission of the UC system
7. Perform service and outreach to the public
8. Support a broad array of researchers, graduate group, schools, the campus, and the university system
9. Have sufficient faculty and technical expertise to ensure the successful operation of the unit
10. Have a management and financial plan that will ensure sustainability of the unit
11. Have a plan for how immediate and future space needs will be met
12. Procure extramural funds for its establishment and operation

REVIEW of ORUs

ORUs contribute substantially to UC's outstanding research reputation. In order to maintain an exceptional ORU portfolio at UC Merced, it is important to periodically assess the performance of existing ORUs. The review process provides ORUs with a mechanism for in-depth, peer-reviewed evaluation of programs and goals, and provides the administration with a means of ensuring that research being conducted is of the highest quality and justifies the space and support received from the University.

Each ORU will be reviewed at intervals of five years. No ORU may be continued without such a review. Leadership changes in an ORU should not delay, extend, or otherwise cause the review cycle to be altered. In exceptional circumstances, the VC-ORED acting in consultation with the Senate may form an ad hoc review committee to review an ORU outside of the normal five-year review cycle. ORUs approaching the end of the second five-year period since their establishment date will be carefully examined to ensure the goals and measures for success, agreed upon by the Director and the VC-ORED at the time of establishment or last review, have been met.

Every review should address the ORU's original purpose, current goals and objectives, and its operations and scholarly accomplishments in light of the current and emerging needs and opportunities within the intellectual domain of the ORU. In addition, working in consultation with the VC-ORED, the ORU should define suitable measures of success that will then be used in the subsequent review of the organization. Likewise, the effectiveness of the ORU Director is reviewed at the same time as the ORU. All ORUs must establish a rationale for continuance, in terms of scholarly merit and campus priorities.

A. The Review Process

The VC-ORED has been delegated responsibility for the review of ORUs on the Merced Campus.

1. To ensure adequate time for the preparation of a proposal for continuance, ORED will notify an ORU it will be reviewed no later than January 15 of the Academic Year preceding the Academic Year in which the review is to be conducted.
2. The ORED will arrange a meeting of the VC-ORED with the ORU Director soon after notification to describe the review process.
3. The ORU Director will prepare a self-assessment covering the ORU's mission, history, resources, and accomplishments, as outlined in Section B. The material will be presented in accordance with the format provided by ORED. After review by the Advisory Committee,

materials will be submitted to the VC-ORED by October 1 of the Academic Year of the review.

4. The VC-ORED will appoint a review committee from a slate nominated by the Academic Senate. The VC-ORED will also appoint at least one committee member from outside UC Merced who has expertise in the field of study. The UC Merced Senate Committee on Research will identify a lead discussant for the review.
5. The VC-ORED will meet with the review committee to provide explicit instructions prior to the beginning of the review.
6. The review committee will interview the ORU Director, Advisory and Executive Committee members, associated faculty, school Dean/s, if appropriate, and other individuals deemed pertinent to the review, including non-UC Merced researchers in the field; and tour the ORU's physical facilities.
7. The review committee will prepare a draft report of its findings in accordance with the review criteria B. below. The draft report will be submitted to the VC-ORED to ensure the review has been thorough and in accordance with the review criteria. If satisfied, the VC-ORED requests the review committee submit a final version of the report.
8. The VC-ORED forwards the final report to the Director, the EVC-Provost, the Academic Senate Committee on Research's Lead Discussant (COR-LD), and the cognizant school Dean/s, requesting comments to the review report.
9. The Director distributes the report to and consults with members of the ORU and the ORU Executive and Advisory Committees. S/he uses this input to prepare a written response to the review report for submission to the VC-ORED.
10. The review committee then meets with the VC-ORED and the COR for the review.
11. The Director then meets with the VC-ORED and the COR for the review.
12. The VC-ORED forwards the ORU's most recent 5-year report, the report of the review committee, the Director's response, and other comments to the report from other sources to the Academic Senate.
13. The Academic Senate reviews the report and the Director's response and makes recommendations to the VC-ORED on both the continuation of the ORU and reappointment of its Director, along with any other issues it deems appropriate.
14. In consultation with the EVC-Provost and the Deans of the cognizant Divisions, the VC-ORED prepares a summary letter for the ORU, identifying recommendations regarding

continuation, the directorship, and other issues raised in the review and requesting specific actions as appropriate.

15. Presuming that the ORU is continued, then after not more than one year, the ORU submits a formal report to the VC-ORED, documenting the ORU's progress on key recommendations from the recent review.

B. The ORU Self-Assessment

To begin a review, an ORU develops a formal proposal for continuation of ORU status, and requests supporting funds and space in the context of current campus and University needs and resources. The review proposal should include the following:

1. The ORU's goals and objectives should be listed, detailing any projected changes to the mission and objectives of the ORU if it is continued. If an ORU proposes to change its name as the result of new research directions or the addition of new fields of research to the unit's mission, the Director will describe the rationale for requesting a new name as part of the review process.

2. Evidence of Accomplishments should be provided, focusing primarily on the preceding five years. The unit's success in meeting the mission and goals previously identified and agreed to by the ORU and ORED should be evaluated. Key elements of this discussion include:

Research. The relevant discussion here may include comments on the quality and significance of completed and ongoing research; significant trends within disciplines represented and their relationship to current research specialties in the ORU; added value and capabilities the ORU has brought to the campus, which would have been difficult to achieve within other campus structures; continuing productivity and influence of ORU participants, locally as well as nationally and internationally; evidence of prominence in the fields represented in the ORU; a description of the ORU's collaborative interdisciplinary work and the quality and impact of the work on other research efforts across campus; degree of postdoctoral scholar training within the ORU; importance of the ORU to Visiting Scholars; contributions to professional development of the ORU's professional staff and faculty; and descriptions of possible sources and availability of extramural funds to support the ORU's research.

Graduate and Undergraduate Research Training. Relevant issues to consider include:

What are the contributions made by the ORU toward graduate and undergraduate research training?

What is the ORU's impact on existing academic programs and units, including the benefits to the teaching programs of the participating faculty members' departments?

Diversity Goals. How has the ORU contributed to campus diversity goals? Contributions to diversity and equal opportunity can take a variety of forms, including efforts to advance equitable access to education, public service that addresses the needs of California's diverse population, or research in a scholar's area of expertise that highlights inequities.

Relationships to Other Academic Units. Questions to address may include: How does the unit interact with other similar units in other research centers or institutions? Are there additional relationships the unit could be exploring that are not currently being pursued? If so, what are the impediments?

Public Service and Outreach. How has the ORU made significant contributions to the public and the community beyond UC Merced? Measures of success can include, for example, intellectual property that is brought to market; research that improves the quality of life for citizens; and events hosted by the ORU that engage the public's interest. What are the measures of success for the unit's future activities?

Administration and Governance. Describe the ORU's Advisory and Executive Committees. What are their roles, how often do they meet, and how well do they function? Are any changes needed to the Advisory, Executive, or other governance committees? Is there adequate and planned turnover of Advisory Committee members to ensure that new ideas and perspectives will be presented over time?

Problems and Needs. Describe any constraints which prevent the ORU from functioning at an optimal level.

Justification for Continuance. Describe the ORU's plans for the next five years. It should be made clear to reviewers how the ORU's plans will evolve from the

situation presented in the self-assessment. Plans for external fundraising should be addressed.

3. In consultation with ORED, clearly define measures of success appropriate for the research focus of the ORU. These measures will then be used in subsequent review of the ORU to determine the degree of the unit's success.

4. Campus Information including:

1.

a. Unit Profile

i. Names of (Co-) Directors, Acting Directors, and Associate Directors, and tenure of appointments.

ii. Members of Executive and Advisory Committees, including members' titles, affiliations, and dates and terms of membership.

iii. Names of UC Merced faculty who were/are members of the ORU, including their departments and dates of affiliation.

iv. Names of faculty who have agreed to participate in the ORU's activities over the next five years.

v. Names of UC Merced professional researchers who have appointments in the ORU, including appointment dates.

vi. Names, home universities, and dates at UC Merced of all visitors during the last five years, including source of support.

vii. Names of undergraduates, graduate students, postdoctoral scholars, their advisors, dates of association with the ORU, and, for graduate students, their department and Masters degree and/or PhD degree conferral date.

viii. Description of any university-industry and university-government activities.

ix. Description of seminar, lecture, and conference programs.

x. Listing of all publications and other scholarly works that have appeared under the auspices of the ORU.

b. Physical Facilities and Space Description of the physical facilities housing the ORU, including:

i. type of space (laboratories, studios, seminar rooms, professional research staff offices, administrative offices, etc.)

ii. assignable square footage

iii. location.

c. Financial Data

i. All income received by the ORU for each fiscal year since it was last reviewed from:

- Federal, state, local, and international grants and contracts;
- Foundations and private gifts;
- UC Merced and other UC-derived funds.

ii. Expenditures for personnel in both FTE and dollars for each fiscal year since the last review:

- Research and student personnel listed by title (Professor, Postdoctoral Scholar, Associate Research Physicist, Specialists, Graduate and Undergraduate students, etc.);
- Technical staff by title (Development Engineer, SRA, Computer Programmer, etc.);
- Administrative staff by title (MSO, Accountant, Secretary, etc.);
- Equipment purchases;
- Supplies and expenses.

C. The Report of the Review Committee

The criteria for preparing the review report are outlined in Appendix B. Justification for continuation of an ORU must be carefully documented. Review committees shall consider and make specific recommendations on the following range of alternatives to the status quo: a change in the mission of the unit; a merger of the unit with one or more academic units on the same or another campus; discontinuance of the unit; a change in funding sources; a change in other resources (such as FTE, space, etc.); or any other changes for improvement of the ORU.

Directors of ORUs are normally appointed for five year terms, the appointment period coinciding with the ORU review period. As noted in Section III.A, extending a director's term of service beyond ten consecutive years should be carefully weighed against the advantage to the campus and the

ORU of a change in leadership. The review committee should look carefully at the Director's stewardship of the organization and comment on its quality. The committee may recommend that the present director be reappointed or recommend a change in leadership.

The review committee may also, if it thinks appropriate, prepare a confidential statement to the VC-ORED. It may also provide the VC-ORED with confidential letters received from individuals during the review process.

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VIII. **PROCEDURE for CLOSURE**

Review committees may recommend continuation or closure of an ORU. In exceptional circumstances, an ORU director with approval of the ORU's Advisory Committee may recommend closure during the period between reviews. In this circumstance, should the EVC-Provost and the cognizant Dean(s) agree with the recommendation, the VC-ORED will notify the Academic Senate of the closure and reason for the decision. As with all ORU-related processes, the closure process for an ORU shall be conducted in a fair and transparent manner.

1. A recommendation to disestablish as part of the review process receives careful consideration by the ORU director and Executive and Advisory Committees, the Academic Senate, chairs of departments and directors of other ORUs that would be affected by the closure, relevant Deans, the EVC-Provost, and the VC-ORED.

2. After reviewing comments from all of the committees and individuals listed in VIII.1. above and if the VC-ORED determines that closure is the best course of action, then the VC-ORED recommends such closure to the Chancellor via the EVC-Provost. The EVC-Provost formally closes the ORU.

3. The VC-ORED sends formal notification to the Academic Senate.

4. The Chancellor, or his/her designee, issues a letter formally disestablishing the ORU.

5. A phase-out period lasting from a few months to up to two years is provided to permit orderly transfer or termination of non-faculty personnel, grants, financial accounts, and programs. ORED will work to ensure research space for existing grants is preserved, and to facilitate the transfer of these grants to other academic units or ORUs for administration on a case-by-case basis.

6. At the time an ORU receives notification it is to close, the ORU Principal Investigator(s), with the assistance of ORED (if necessary) will make reasonable efforts to find all ORU academic appointees a new home department to transfer their existing academic appointment to, provided there is remaining work and grant funding. Reappointment of academic research personnel will be consistent with current campus academic advancement and reappointment policies. If a layoff must be initiated, the ORU must follow PPM 230-7, including providing appropriate notice to the appointee.

7. For research scientist appointments in an ORU that is to close, if the ORU PI is unable to identify a new home department, the ORED will assume primary responsibility for working with the Director, the faculty who have collaborated with these individuals, the Divisions, and the EVC-Provost to assure appropriate reasonable efforts are made to find these appointees a new home department for the remainder of their current appointment period.

8. ORED will provide assistance to non-academic staff in identifying new positions as the result of a closure recommendation.

9. University funding for the ORU reverts to the VC-ORED and/or EVC-Provost to fund needs and opportunities for ORUs, including new ORU proposals. Space assigned to the ORU reverts to the space bank of the EVC-Provost. Within a month of notification by ORED that an ORU will be disestablished, the ORU Director, in consultation with the VC-ORED and EVC-Provost, must develop a plan for the return of space during the phase-out period.

UCMERCED

CAMPUS CLIMATE ACTION PLAN: 2014 - 2017

GOAL #1: Improve Inclusiveness Across All Segments	GOAL #2: Improve Engagement of Faculty, Students and Staff	GOAL #3: Improve Overall Comfort Levels of Under-represented Minority Faculty	GOAL #4: Improve Campus Climate for Those with Physical Mobility or Disability Condition
METRIC: Significant reduction in rates of having experienced exclusionary conduct amongst all segments	*METRIC: Higher level of engagement as evidenced by commonly used surveys (NSSE, CUCSA engagement survey); Significant reduction in rates of considering leaving across all segments*	*METRIC: Significant improvement in reported comfort levels & in rates of considering leaving amongst under-represented minority faculty*	*METRIC: Significant improvement in overall comfort level, considering leaving and having experienced exclusionary conduct for those with physical mobility or disability condition*
Implement strategic communication and awareness campaigns on cultural appreciation including best practices on intercultural communication	Gather regular input on issue of "considering leaving" (specifically minority, disability and LGBTQ groups)	Convene under-represented minority faculty (including non-senate faculty) for the purpose of learning more about the challenges they face	Conduct survey and/or focus groups on mobility issues
Foster creation and support success of student identity groups to further enrich a multi-cultural and diverse campus	Enhance performance management processes including development of management training series on core competencies and behavioral expectations	Implement best practices in faculty recruitment and hiring, to include candidate diversity statements	Create action plan based on results of survey/focus groups
Conduct survey on effectiveness/ frequency of cross-campus communications every 2-3 years with data separated by functional division or area	Explore opportunities for engagement of employees (academic and non-academic) from various levels and divisions to work toward common institutional goals (i.e., initiatives, committees)	Develop diversity statement for use in recruitment efforts and to promote UC Merced's diversity commitments	
Convene university-wide conversation on diversity led by panel of prominent researchers	Conduct meaningful exit survey and analysis for all populations	Evaluate and enhance existing faculty mentoring program	
Increase outreach to and face-to-face interaction with student LGBTQ population	Enhance staff recognition programs – both formal and informal	Clarify advancement procedures for faculty (including non-senate faculty)	
Provide education about cultural and generational differences including development of a cultural awareness program for students	Formally communicate about philosophy on hiring, promotion, compensation and succession planning including conflict of interest in hiring and promotion		
Develop conflict resolution services and enforcement mechanisms	Provide training for all supervisors aimed at fostering positive culture		
Conduct focus groups with under-represented student populations to learn more about their challenges			

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January 28, 2015

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

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

Re: Request to Increase Funding Level to Senate Faculty Research Grants

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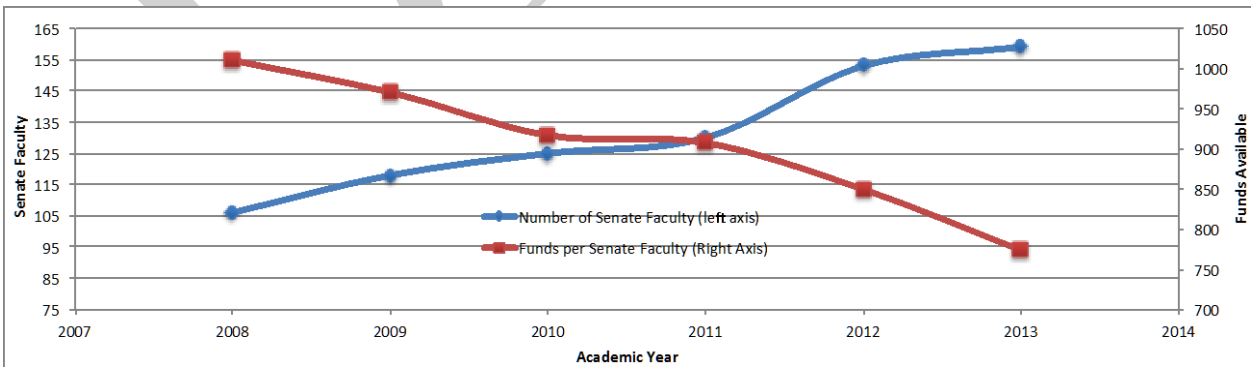
COR currently administers a small fund ($123,000) which is used to support small research grants to faculty members. Since its inception these funds have been utilized in a variety of ways including bridge funding, targets of opportunity, travel research and small equipment. In part, these funds represent one of the only on campus forms of access to discretionary funds, meaning this fund has had to fill a lot of gaps. While the campus population has grown substantially since 2008 when the fund was created (106 senate faculty in 2008 vs. 159 in 2014) the funding level of this grant has not kept pace with this growth ($107,000 in 2008 vs. $123,000 in 2014). This represents a per capita decrease in funds from $1,009 per senate faculty down to $773 (See graph). Furthermore, the demands on this fund have dramatically increase, in part due to the emerging needs of the campus as it enters the next stage of maturity, but also in light of a tragically bleak federal funding climate. The combination of these events has taxed this fund heavily. If this current level of support continues we run the risk of losing a precious and diminishing resource.



While UCM's per capita funding rate is not significantly below that of other campuses, however, other campuses have more funding sources such as departmental funding and bridge funding, early career awards, endowed professorships, travel awards, graduate student scholarships etc. This one fund has been forced to acts an omnibus solution to a diverse and expanding funding need on our campus.

Effectively, without these other funds sources in place, UCM faculty lack the kind of safety net that exists at the larger, well-funded campuses. While we all agree that a long term funding source solution must be crafted, involving some find of financial autonomy of smaller groups (akin to a department type structure) for the time being these research grants have stood as a stop-gap resource to help our rapidly growing campus remain competitive and respond to rapidly changing research economy.

In addition, given the "start up" nature of our campus, these seemingly small research awards have a very large impact. It is quite challenging for UCM faculty members to obtain large extramural awards so these Senate faculty grants can make significant difference to faculty members' research programs. This fund has done a great deal of good. Since its inception it has been directly responsible for: 1) number of extramural awards received as a result of the Senate faculty grants, 2) number of publications generated from the grants, 3) number of presentations delivered due to the grants, and 4) number of graduate students hired.

COR informally polled past awardees from AY 2008/2009 – AY 2013/2014 via email and found that the Senate faculty grants have had a significant impact on faculty members' research programs. The poll yielded that these awards have lead to at least 20 extramural grants, 52 publications, 35 presentations, support for 22 graduate students, and the creation of 15 new collaborations. COR also requested that past awardees briefly summarize the importance of these grants and a complete list of responses are included in Appendix A.

In addition, this fund represents one of the only, internal competitive awards on campus. This speaks to an issue of campus morale. At the moment without other sources of funding this one resource must be adequately bolstered to help demonstrate the commitment to grow

We are asking for the Provost to consider increasing the funding to a per capita level equal to its inception ($1000 per senate faculty member) or $159,000 and then commit to maintain this funding level as the campus grows. This would help to bolster the fund and allow greater impact. More importantly, this would only require an additional $36,000 over current allocation. We feel that this modest commitment of additional resources would be very well served and have major impact in terms of productive gains to the research enterprise on campus.

cc: COR
Division Council
Senate Office
Susan Sims, Chief of Staff and Special Assistant to the Provost & Executive Vice Chancellor

APPENDIX A – IMPACT ON RESEARCH PROGRAMS

Response # 1

AY 2008-2009
Surface Enhanced Resonance Raman Studies of Organic Polymer Solar Cell Materials Interacting with Metal Nanoparticles
PI
$3,723.00
As the grant "Surface Enhanced Resonance Raman Studies of Organic Polymer Solar Cell Materials Interacting with Metal Nanoparticles" was awarded some time ago, I no longer have records on exactly how the funds were spent, i.e. whether they went to pay student stipends or were used for chemicals, lab supplies, etc. However, I can give some outcomes of the project for which this funding was awarded:

Publications: Two peer-reviewed publications resulted directly from this project:

1. Marina Stavytska-Barba and Anne Myers Kelley. Surface enhanced Raman study of the interaction of PEDOT:PSS with plasmonically active nanoparticles. J. Phys. Chem. C **114**, 6822-6830 (2010).

2. Marina Stavytska-Barba, Michael Salvador, Abhishek Kulkarni, David S. Ginger, and Anne Myers Kelley. Plasmonic enhancement of Raman scattering from the organic solar cell material P3HT/PCBM by triangular silver nanoprisms. J. Phys. Chem. C **115**, 20788 (2011).

These two papers have received 17 and 27 citations, respectively, according to the ISI Web of Science.

Presentations: I presented this work at a number of conferences and university seminars, but I no longer have records of exactly what work I presented at each venue.

Related competitive grants awarded: American Chemical Society/Petroleum Research Fund grant #48820-ND10, "Metal nanoparticle enhancement of solar cell efficiency: Raman and optical studies", 2/1/09-8/31/12, $100,000 total.

Students supported: Marina Stavytska-Barba was supported mainly on this project, which composed the bulk of her Ph.D. dissertation. She completed her Ph.D. in May 2012.

Collaborations enabled: Our initial work in this field, and a presentation I gave at an American Chemical Society meeting, led to a collaboration with the research group of David Ginger at the University of Washington. We ended up carrying out spectroscopy on samples that they sent to us, and this resulted in the second of the two publications listed above.

Response #2

The $4,000 grant I received in AY 2008-2009 to work on my book manuscript "Dragons in the Land of the Condor: The Asian Diaspora in Peru's Cultural Production" resulted in the publication of my book *Dragons in the Land of the Condor: Writing Tusán in Peru*. U of Arizona P, 2014. 243 p. Thanks to this grant, I had the opportunity to consult libraries and archives in Lima, and to interview authors and members of the Chinese community in several Peruvian cities.

In addition, I published two edited volumes related to the topic of Asian Latin American cultural production and East-West cultural relations:

1. *Peripheral Transmodernities: South-to-South Dialogues between the Luso-Hispanic World and "the Orient."* Cambridge Scholars Publishing, 2012. 332 p.

2. *One World Periphery Reads the Other: Knowing the "Oriental" in the Americas and the Iberian Peninsula.* Cambridge Scholars Publishing, 2009. 405 p.

Besides the three aforementioned books, the grant also led to the publication of nine scholarly articles on Peruvian authors of Chinese descent:

1. "Julio Villanueva Chang's revival of the *crónica* and the profile: a *neo-conceptista* in the twenty-first century." *Altertexto* (Universidad Iberoamericana, Mexico City).

2. A Spanish version is forthcoming in *Desde el Sur* 6.1 (Nov. 2013): 11-30.

3. "Building the nation from the outside: Flexible citizenship, American war propaganda, and the birth of anti-Japanese hysteria in Peru." *One World Periphery Reads the Other. Knowing the "Oriental" in the Americas and the Iberian Peninsula.* Ed. Ignacio López-Calvo. Newcastle, England: Cambridge Scholars Publishing, 2010. 130-47

4. I also published articles on Peruvian authors who write about Asian issues or characters: "The Death of the Author through False Translation in Mario Bellatin's Orientalised Japan." *Bulletin of Latin American Research* 32.3 (2013): 339–53.

5. A Spanish-language translation of this paper will be published in *Extremo Occidente y Extremo Oriente Herencias asiáticas en la América hispánica y huellas americanas en el Extremo Oriente*. Ed. Axel Gasquet and Georges Lomné. Lima: IFEA-PUCP, 2015.

6. And "*El sexto* and the grotesque body: The Japanese character at the boundaries of national belonging." *Chasqui* 41.1 (Nov. 2012): 137-46.

7. A Spanish version of this essay was published with the title "El cuerpo grotesco en *El sexto* de José María Arguedas y el personaje japonés en las fronteras del proyecto nacional" in the academic journal *Desde el sur* (Lima, 2013).

8. The research I was able to do thanks to these funds was also used to publish more general articles on Asian Peruvian and Asian Latin American writing, such as "Asian-Peruvian Literature." *Oxford Bibliographies in Latin American Studies*. Ed. Ben Vinson. NY: Oxford U P, 2012

9. And "Latin America and the Caribbean in a Sinophone Studies Reader?" *Sinophone Studies. A Critical Reader*. Ed. Shu-mei Shih, Chien-hsin Tsai, and Brian Bernards. Irvington, New York: Columbia University Press, 2013. 409-24

Finally, I also used the research carried out thanks to this grant to participate in thirteen professional conferences and invited lectures in Latin America, Asia, Africa, and the United States:

1. "La escritura sinoperuana: el caso de Siu Kam Wen." *Orientalismos europeos e intercambios culturales y literarios entre América Latina y Oriente: Divergencias y afinidades.* Rabat, Morocco. Oct. 29-30, 2014.

2. "Construction and conflict of Sino-Latin American labels." Chinese American Museum. Los Angeles, California. Sept. 15, 2014

3. "El surgimiento de los discursos tusán y nikei en Perú." *Intersecciones entre Asia del Este y Sudamérica: formaciones transnacionales en la literatura y las artes visuales contemporáneas*. Organized by New York University. Buenos Aires, Argentina. May 7-9, 2014

4. "Contraste entre los discursos tusán y nikkei en Perú." *Arqueología, Historia y Sociedad en la inmigración china al Perú. Homenaje a Emilio Choy Ma.* Lima, Peru. Oct. 18, 2013

5. "Constructing an Ethnic Space through Cultural Production: The case of the tusán and Nikkei in Peru." *4th Incheon Asia, Africa, Latin America Literature Forum: From Conflict to Peace*. Seoul National University. Seoul, Korea. April 26, 2013

6. "Emergence of Tusán and Nikkei Discourses in Peru." California State University, Long Beach. Long Beach, CA. Feb. 28, 2013

7. "The cultural politics of belonging: *Adiós to Tears* and the glocal negotiations of flexible citizenship." *3rd Incheon Asia, Africa, Latin America Literature Forum: Finding the Global in the Local*. Seoul National U., Incheon, Korea. Apr. 26, 2012

8. "Proyecto de estudios sobre Orientalismo: diálogos sur-sur entre el "Oriente" y el mundo luso-hispano." Seoul National University. Seoul, Korea. April 30, 2012

9. "Writing and the Japanese body in Mario Bellatin's fiction." Florida International U Miami, FL. Nov. 16, 2011

10. "Asia in/and Latin America: Writers of Asian descent in Cuba and Peru." Wellesley College. Wellesley, MA. Oct. 16-18, 2011

11. "Arguedas's *El Sexto* and the Grotesque Body: The Japanese Character at the Boundaries of National Belonging." U of Georgia. Athens, GA. March 25, 2011

12. "The Nearest East: Asian Migration and the Latin American Cultural Imaginary." The U of Georgia. Athens, GA. March 23, 2011

13. "*Adiós to Tears:* The hidden history of the internment of Japanese Peruvians in US concentration camps during World War II." Baylor U. Waco, TX. March 19, 2009

As to the second grant, $5,000 in AY 2010-2011 to work on my book project "Rereading and rethinking El Periódico: Reconstructing *la crónica* in the Latino literary journalism of Los Angeles, it led to writing one of the chapters in my book *Latino Los Angeles in Film and Fiction: The Cultural Production of Social Anxiety.* U of Arizona P, 2011. 264 p. Reprinted in paperback edition

In addition, I published the essay "La crónica en castellano de Los Ángeles: de Francisco P. Ramírez a *La Opinión*." *Ventana abierta* 28 (Spring 2010): 66-70.

And presented my research at a conference:

"Why study Latino literature and film set in Los Angeles?" *Latino Book and Family Festival*. CSULA. CA. Oct. 10, 2009

Finally, I have now completed the manuscript of an anthology on Los Angeles chronicles and other non-fiction (co-authored with Dr. Victor Valle) and titled *The L.A. Crónica and Other Non-Fiction: The Making of Urban Latina/o Subjectivities*, which is currently under review with Duke University Press.

This research led to my collaboration with Dr. Victor Valle, a journalist and an ethnic studies professor at Cal Poly San Luis Obispo. And of course, part of this research has led to the inclusion of related readings in both my undergraduate and graduate courses at UC Merced.

Response #3

AY 2008-2009
Calorimetry as a rapid clinical diagnostic
PI
$5,000
We were able to prepare a patent and initiate research that is ongoing in this area. I will be submitting a proposal in May 2015 using data from this seed funding. I will also prepare this research more heavily during sabbatical.

AY 2009-2010
PI
Developing methods to derive fitness from phenotype
$5,000
We have developed a high throughput method for measuring fitness in a plate reader and have produced two publications directly from these funds. We were also able to successfully gain NIH funding from these seed funds.

AY 2010-2011
Genomic Approaches for Infection Control
PI
$5,000
We were able to produce two manuscripts from these funds and are currently preparing an NIH STTR with UC Santa Cruz and an industrial partner.

AY 2012-2013
Identifying Antibiotic Prescription Regimes to Reduce the Frequency of Resistance
PI
$4,710
We have submitted two manuscripts and are preparing grant applications for NIH and NSF based on these data. Importantly, this award allowed us to explore environmental impacts of antibiotic waste, which makes our research in line with NSF mission goals. Portia Mira, my graduate student, has already submitted a proposal to NSF and I will be following in due course with another.

Response #4

AY 2008-2009
The Advocacy Network at the U.S. Supreme Court
PI
$4,634

This award served as seed money for an NSF grant ($271,000) that I was subsequently awarded. Details of the NSF grant: "Estimating the Locations of Interests, Governments, and Justices in Legal Policy Space." National Science Foundation (SES-135192; $271,074), 3/2014 - 2/2017. (with Sarah Depaoli)

AY 2010-2011
Economic Retrospection and Voting
PI (with collaborator Brad Gomez)
$4,191

This award led to two papers on economic voting (both coauthored with Brad Gomez, Florida State University). One of these papers ("Economic Retrospection and the Calculus of Voting") has been published by *Political Behavior*, which is the top subfield journal in the area of political behavior. The other ("Reevaluating the Sociotropic Economic Voting Hypothesis") has been granted a revise-and-resubmit by *Electoral Studies*, a leading international journal on elections.

Response #5

AY 2009-2010
Climate Change and Symbiosis: Exploring Conifer-Associated Microbial Communities in The Alpine Treeline Warming Experiment
$9,200

This grant helped fund exploratory work to investigate the microbial communities associated with limber pine and Engelmann spruce growing at Niwot Ridge, CO. The findings led to a publication (Frank and Carrell, Frontiers in Microbiology, 2014), and a preliminary data for a $150,337 grant from the National Science Foundation, which was funded in January 2014, with Frank as a PI and Kueppers as a co-PI (EAGER: Nitrogen fixing bacterial endosymbioses in aboveground conifer tissue). The results from the grant are currently being written up for a submission to Science. Finally, the work initiated a very productive and likely long-standing collaboration which now includes multiple PIs at Lawrence Livermore National Lab, Lawrence Berkeley National Lab, and Stanford University.

AY 2012-2013
Finding the missing nitrogen input in northern forests--do conifers form nitrogenfixing symbioses with bacterial endophytes?
PI
$4,710

The results obtained from the funded work were used as preliminary data for another NSF grant, with Frank as a PI (Dimensions: Taxonomic, genetic and functional biodiversity of above-ground bacterial endophytes in subalpine conifers). We were awarded $1.6 M to further study the nitrogen-fixing symbiosis.

AY 2013-2014
The Role of Endophyte Diversity in Plant Distribution Limits
$14,272.01

This grant has facilitated the establishment of a productive collaboration among Frank, Sexton and Nobile. We expect to submit joint NSF proposals based on the findings from this work, and we expect to publish a paper from this work next year.

Response #6

This GRC (3/21/12-3/31/13, $5,000) grant helped generate some preliminary data that were used attract a grant - New Investigator Research Grant from the Alzheimer's Association (NIRG-12-242598).
Funding amount: $100,000 (direct + indirect)
Funding period: 10/1/12-9/30/14

Also, together with GRC and NIRG, we have just submitted a manuscript to the Journal of Neuroscience, and it is currently under review.

Response #7

AY 2012-2013
Free-standing Superconducting Niobium Membranes for Opto-mechanical Devices
PI
$4,710

My most recent GRC grant supported a fabrication effort which has paid off handsomely:

Free-standing Superconducting Niobium Membranes for Opto-mechanical Devices

The grant objectives were to fabricate and test thin Niobium membranes. Eventually these devices will be used as mirrors which are driven into motion by radiation pressure and which give rise to an array of interesting quantum-mechanical effects.

We spent the money buying substrates and other consumables, and to provide travel, training, and user fees for the Berkeley nanolab user facility. A physics graduate student (Alessandro Castelli) was trained at the nanolab and introduced to numerous researchers there. In particular, the main user of the system that we used was extremely helpful in choosing fabrication parameters, sharing test mounts for our samples, and fine tuning the deposition process for desirable results. The components are of fantastic quality.

Partially as a consequence of our positive results, we were awarded a Phase II STTR contract from DARPA (2 years and $400,000 total) to proceed with the rest of the project which involves a laboratory-scale system for generating and detecting gravitational radiation. The outcome of that study is still to be determined, but if we are successful in detecting gravitational radiation (which is predicted to exist by General Relativity but has not yet been directly observed) the work will be profound. For example, harnessing gravitational radiation for communications would eliminate the need for an unobstructed “line of sight” between transmitter and receiver. Satellite communication networks could then be replaced by ground-based GR networks.

The funding has resulted in to two conference presentations, one at the APS regional meeting at the end of October 2014, and another which has been submitted to the APS March meeting in 2015. Alessandro Castelli has also advanced to candidacy.

Small investments like the GRC program support well-defined programs which lead to outstanding outcomes for graduate students, and provide critical data for larger proposals. Certainly not all of the projects work out as well as this one. GRC support, however significantly increases the likelihood of such positive outcomes.

Response #8

AY 2012-2013
Plasmonic-Enhanced All-carbon Core/shell Heterostructures for Photoelectrochemical Cells
$9,424

This grant enabled us to initiate collaboration which resulted in two journal papers, one published and one accepted for publication. We also since have applied for two NSF grants, although both were declined.

AY 2013-2014
Biodiesel Production from Plasma-Processed Waste Oils for Distributed Power Generation
$13,919.97

AY 2013-2014: The three of us had not prior collaboration. However, we had a discussion at some point about how our respective research areas might complement one another to use plasma to convert used oil into a useful lubricant fluid. This research is just getting started, so I have nothing to report yet, but it is looking promising.

Response #9

AY 2013-2014
The Role of Endophyte Diversity in Plant Distribution Limits
$14,272.01

This award is providing seed funding that is allowing us to collect preliminary data to apply for larger grants. We are still in the process of collecting this data, and have formed a strong collaboration between my lab and collaborators' labs. In addition, we have formed a collaboration with the JGI to assist in the sequencing of our samples. Thus, our chances of being successful with an NSF award have increased significantly with this COR funding.

Response #10

AY 2009-2010
NMR structure determination of proteins using electric field effects on 15N deuterium isotope shifts
PI
$5,000

My lab moved from Texas A&M to University of California at Merced in December, 2007, and had to abandon over $100,000/yr in state grants awarded by the state of Texas. Using UC Merced startup funds, his lab rebuilt its momentum to elucidate the molecular mechanism of the circadian clock of cyanobacteria. By 2009, the lab had developed new ways to study the clock proteins KaiA, KaiB, and KaiC and their interactions using fluorescence and NMR spectroscopy, but was running low on startup funds. The Senate Faculty Grant eased the pressure on maintaining research momentum.

The research supported by this Senate Faculty Grant helped my secure in 2010 a $464,000 grant from the Army. The ripple effect resulted in three more federal grants from the Air Force (2013-17, $614,000), NIH (2014-18, $1,176,000), and Department of Defense (2014-15, $279,000), and three research articles and one review article. Two of the research articles were featured articles in *PNAS* and received significant commentary. Additionally, Andy's lab just got a paper accepted into the journal *Science*.

Without the Senate Faculty Grant, my lab would have not been able to purchase essential research supplies needed to obtain the preliminary data for the grant applications.

Response #11

AY 2009-2010
Development of a Temperature-dependent Obsidian Hydration Rate Formula for Bodie Hills Obsidian
PI
$4,970

This award supported foundational research by the PI that was presented in a 30-page (plus appendices) report submitted to the National Park Service (Yosemite National Park) and shared with regional archaeologists in private consulting or affiliated with museums who are pursuing similar studies of Bodie Hills obsidian hydration in areas adjacent to Yosemite. The limited number of suitable obsidian samples and radiocarbon-dated proveniences from Yosemite ultimately resulted in a less robust hydration rate than had been hoped, so the results were neither published (beyond the report) nor presented at a conference. Nonetheless, this study identified opportunities and needs for future research, and suggested alternate methods for hydration dating with Bodie Hills obsidian in subsequent research presented in a report I recently submitted to the NPS that is currently undergoing peer review. I anticipate that this latter work will result in a peer-reviewed journal article on a topic other than obsidian hydration at a later date. In addition, the "failure" of this research has direct bearing on future studies of prehistoric demography I intend to pursue in Yosemite--the results have established that I must continue to rely on hydration dates for Casa Diablo obsidian in such work, which may constrain the geographic scope of my intended research. Thus, the GRC-funded research has direct bearing on research design and sampling I might propose in an NSF grant application.

Response #12

AY 2014 - 2015 "Nanoscale mechanisms of resistive switching for next-generation memory".

Presentation: I presented an oral presentation at the 2015 MRS Fall meeting (one of the biggest material science-related conference) titled "Interfacial bonding-mediated resistive switching of metal/TiO2/metal cells".

Grant Awards: I recently submitted an NSF proposal titled "Collaborative Research: Interfacial Bonding-mediated Resistive Switching" as the leading PI, based upon the new results we obtained. This proposal is in collaboration with Prof. Ashlie Martini (UCM) and Prof. Yalin Dong (U of Akron).

Collaboration: I recently initiated a collaboration with Prof. Eunseok Lee at University of Alabama - Huntsville on this subject. He will work on simulation to explain the observations we made.

Response #13

AY 2007/08: $5,000. *Ecological assembly and evolutionary diversification in marine islands.* Work completed in May 2008. DNA analyses of *Sphaeramia orbicularis* collected in Palau were used in a student research project presented during Research Week 2008. Analyses of *S. orbicularis* and the marine snail *Nerita savieana* were used in a CAREER proposal submitted thrice, but not funded. These data were used in a successful proposal to NSF (2013–2017 "Dimensions: Collaborative Research: Do parallel patterns arise from parallel processes." OCE-1241255: $1,369,982. PI/co-PI U. Washington, J.P. Sachs; OCE-1241247: $540,001.) and currently are being incorporated in a manuscript describing genetic and species diversity and patterns of evolution in marine islands.

AY 2008/09: $5,000. *Biological mixing: an under-appreciated mechanism influencing physical, chemical, and biological dynamics in some marine ecosystems?*
Fieldwork was undertaken in Fall 2008, as planned. This grant from GRC provided leverage for funding from NSF Biological Oceanography (*SGER: Biomixing - a controversial mechanism influencing dynamics of marine ecosystems.*" OCE-0849308. $75,373). Our work has been featured in NSF updates (http://www.nsf.gov/news/news_summ.jsp?cntn_id=113018&org=OLPA&from=news) and was targeted for further coverage by Ms. Cheryl Dybas based on related presentations at the 2009 *American Society of Limnology and Oceanography* meeting in Nice, France. It has formed the basis of ongoing research collaboration and data and/or the model have been incorporated into a manuscript that we plan to submit for publication in 2015.

AY 2009/10: $3,394. *Evolution of development during speciation: searching for mechanisms of morphological change during rapid radiation of Mastigias medusae, Palau.* Undertook the proposed fieldwork (at no cost to this grant) and collected samples as planned. The three reference genes were sequenced, and will contribute to a publication on the morphological evolution of *Mastigias* medusae which we expect to submit before the end of 2014 or very early in 2015. Unfortunately, however, the developmental genes were not sequenced because the GSR was unable to make robust alignments of DNA sequences from which to design primers.

AY 2010/11: $8,438. *Diversity and activity of microbial life in 'miniature seas': marine lakes of Palau as analogs for the present and future oceans.*
We completed the planned fieldwork August-September 2010. Analyses of samples collected have generated novel results describing the diversity of microbes and phytoplankton in a suite of 16 marine lakes in Palau. These include discovery of species new to science. The new microbial data, with PI's prior research in marine lakes (e.g. as supported by his 2007-2008 GRC award), constituted the preliminary data in a successful proposal to the *NSF Dimensions of Biodiversity* competition, March 2012 (These data were used in a successful proposal to NSF (2013–2017 "Dimensions: Collaborative Research: Do parallel patterns arise from parallel processes." OCE-1241255: $1,369,982. PI/co-PI U. Washington, J.P. Sachs; OCE-1241247:

$540,001.). The phytoplankton data formed part of a co-authored paper that is currently being revised.

AY 2011/12: $4,621. *The role of long-distance dispersal via kelp rafting in establishing patterns of marine population genetics.* Spending against this award has so far enabled specimen collection along the California coast including California Channel Islands, preliminary sequencing, and in the coming month will pay for development of microsatellites for the target species. Work on this project supported a revised NSF GRPF proposal by Ms. Lauren Schiebelhut that was submitted in Fall 2011. Although indirectly related, by supporting Lauren's early research in the marine intertidal, we were prepared to take advantage of an unique opportunity to study marine intertidal organisms in northern California following a massive invertebrate die-off; this work was funded by NSF (2012–2013 "RAPID: Collaborative Research: Ecological and genetic recovery from a massive invertebrate die-off along the central coast of California." OCE-1243970: $76,969. PI/co-PI UC Davis, R.K. Grosberg, B.P. Gaylord; OCE-1243958: $122,691. No-cost extensions 2014 & 2015.) and by California Sea Grant (2012–2013 "Recruitment patterns following a massive invertebrate die-off along the central coast of California." #R/ENV-223PD. $9,991.).

Response #14

AY 2011-2012
Mechanism of Organocatalytic Fluorination: Pictures in Time and Space
$10,000

This grant resulted in

1) Publication - (1) Berry, M. T.; Castrejon, D.; Hein, J. E. Oxidative Esterification of Aldehydes Using Mesoionic 1,2,3-Triazolyl Carbene Organocatalysts. *Org Lett* **2014**, *16*, 3676–3679.

2) Preliminary data which lead to two grant submission - (currently under review)

one to NSF chemistry ($560,000) and one to the UCOP MRPI program (~$1,500,000)

3) Student support for one graduate student summary salary - his advanced to candidacy was mainly due to having the funds to support him as a GSR and focus on research

AY 2012-2013
Ligand-Templated Quantum-Dot Liquid Crystal Hybrid Materials
$14,146.00

1) 2 publications -

(1) Rodarte, A. L.; Nuno, Z. S.; Cao, B. H.; Pandolfi, R. J.; Quint, M. T.; Ghosh, S.; Hein, J. E.; Hirst, L. S. Tuning Quantum-Dot Organization in Liquid Crystals for Robust Photonic Applications. *Chemphyschem* **2014**, *15*, 1413–1421.

2) Just accepted MANUSCRIPT ID: SM-ART-10-2014-002326.R1 TITLE: Self-assembled nanoparticle micro-shells templated by liquid crystal sorting

2) A whole pile of grants submitted

4 to NSF DMR and CHE

One limited submission to the Beckmann foundation.

We are also contributing to the UC Merced Nan-Hub center with this project

This work helped us win the NSF-REU (called AiMM) held by Chemistry and Chemical Biology

3) Helped to provide support for 5 undergrad researchers

Either via small stipend or provide supplies to carry out exploratory research

General comment - These funds have been critical in allowing new projects to blossom. Without these grants we would not have had the resources to take on new ideas quickly. We would have had to find funds and delay work, but instead we were able to move quickly and make striking progress in only a few years. This is especially important as gaining support at a national level would not happen without the visibility provided by out early results

Response #15

AY 2012-2013
Is the relation of infant walking and language development mediated by the language environment?
$9,335

Our faculty research grant fostered a new collaboration. The funds allowed us to purchase the equipment we needed to collect approximately two-dozen daylong home audio recordings of 12-month old infants. This was enough data to obtain some very interesting and statistically significant results showing how infant vocalization, adult speech, and infant vocabulary learning relate to locomotor development. We submitted the work to the 2015 Society for Research on Child Development (SRCD) conference, and plan to begin writing these up for journal submission next semester. We also anticipate that this will be useful as pilot data for a proposal to submit to NSF or NIH to do a more comprehensive study of the home audio-visual environment as children transition from crawling to walking. The data are also being used by a first-year CogSci grad. student, Gina Pretzer, as the basis of her first year project.

— The grant helped to fund recruitment efforts related to the study, as well as community involved engagement. Community engagement was fostered through the (1) dissemination of information relating to infant development to local families of newborn infants, and (2) participation in community events for families and new parents. These efforts helped to strengthen ties between the local community with UC Merced, explain the research efforts taking place on campus, and communicate their relevance to the interests of the Central Valley.

— Families who participated in our research were from diverse ethnic, linguistic, and socioeconomic backgrounds. Research including such a diverse sample is typically difficult in many college settings, but is a source of strength in conducting research in the Central Valley.

— The research project involved the coordination of multiple labs across multiple unites within SSHA. Approximately 8 undergraduate research assistants contributed to the conduct of this research.

— This home-based research helped to confirm and extend previous laboratory research findings reported by PI.

Thank you for advocating for these research funds. The make a tremendous difference for the faculty, particularly junior faculty. Additionally, they are very useful for helping to recruit new faculty and demonstrating access to internal funding mechanisms.

Response #16

AY 2008-2009
F‐Actin Bundle Networks for Tissue Engineering Applications
$9,000
This project investigated the use of semi-flexible biopolymer networks as a scaffold for tissue engineering of stem cells. Hierarchical F-actin networks self-assemble in the presence of cross-linking proteins and provide a relatively stable 'gel-like' matrix. The structural properties of this matrix, such as mesh size and connectivity provide a favorable environment for cell growth. We found this type of gels can support cell growth and presents no cytotoxicity to mammalian cells.

Actin networks are a major component of airway mucus, with the support of GRC, we also obtained critical results for one US patent application and to study mucus dispersion.

"Nanoparticle based therapy for dispersing mucin", 12/2/2010, US patent application 12/958,738.

Chen E Y-T, Wang Y-C, Chen C-S, Chin W-C. Functionalized positive nanoparticles reduce mucin swelling and dispersion. PLoS ONE. 2010. 5(11): e15434. doi:10.1371/journal.pone.0015434. PMCID: PMC2978103

Chen EY, Daley D, Wang Y-C, Garnica M, Chen C-S, Chin W-C. Functionalized carboxyl nanoparticles enhance mucus dispersion and hydration. Sci Rep. 2012. 2: 211. doi:10.1038/srep00211. PMCID: PMC3251626

AY 2010-2011
Cellular Mechanism of Toxin Release in Marine Harmful Algae, *Karenia brevis*
PI
$5,000

We have established critical intracellular signaling steps in controlling toxin from harmful algae. We also found that a common nanoparticle pollutant (TiO_2 nanoparticles) can effectively trigger toxin release. Since TiO_2 nanoparticles are routinely used in many sunscreen and cosmetics products, we believe our findings can provide critical information for coastal management. A NSF application in collaboration with colleagues from Texas A&M was submitted in 10/2014 to NSF CBET.

Chen C-S, Anaya JM, Zhang S, Spurgin J, Chunag C-Y, Xu C, Maio A-J, Chen E Y-T, Schwehr KA, Jiang Y, Quigg A, Santschi PH, Chin W-C. Effects of engineered nanoparticles on the assembly of exopolymeric substances from phytoplankton. PLoS ONE. 2011. 6(7): e21865. doi:10.1371/ journal.pone.0021865. PMCID: PMC3140995

Zhang S, Jiang Y, Chen C-S, Spurgin J, Schwehr KA, Quigg A, Chin W-C, Santschi PH. Aggregation, dissolution and stability of quantum dots in marine environments: the importance of extracellular polymeric substances. Environ Sci & Tech (ES&T). 2012. 46: 8764-8772. PMID: 22834414

Zhang S, Jiang Y, Chen C-S, Creeley D, Schwehr KA, Quigg A, Chin W-C, Santschi PH. Ameliorating Effects of extracellular polymeric substances excreted by Thalassiosira pseudonana on algal toxicity of CdSe Quantum Dots. Aquat Toxicol. 2013. 126: 214-223. PMID: 23246863.

GOMRI "Role of microbial exopolymers in aggregation and degradation of oil and dispersants" $529,237, 1/1/2015-12/31/2017, funded

AY 2012-2013
Bicarbonate Deficiency and Trypsinogen Activation in Cystic Fibrosis
PI
$4,710

We requested no-cost extension for this award to 2014.

Chen EY, Sun A, Chen C-S, Mintz AJ, Chin W-C. Nicotine alters mucin rheological properties. Am J Physiol Lung Cell Mol Physiol. 2014. 307: L149–L157. PMID: 24838753 PMCID: PMC4101795

Response #17

False-belief reasoning: Towards a developmental account.
Faculty Research Grant, University of California Merced Graduate Research Council.
Total Award amount: $5,000.
Project duration: May 2012 – April 2013.

This award funded the initiation of three research projects that investigate the development of false-belief reasoning across the first four years of life. By supporting a research coordinator, these funds allowed me to collect a significant amount of data in all three projects. To date, these projects have resulted in a total of four conference presentations, two at the Society for Research in Child Development in Seattle in 2013, and two at the International Conference of Infant Studies in Berlin in July 2014. Data collection on two of these projects has just completed, and I anticipate submitting the manuscripts within the next several months. The third project is nearing completion, with a target submission date of June 2015. Thus, this award directly supported three manuscripts. Finally, pilot data collected using these funds has served as a basis for two grant submissions, one to NSF and one to NIH.

Response #18

I have only received one GRC grant (for $4710 in 2013) since I joined UCM in 2007, because luckily I have been able to obtain sufficient grants from NSF so far to support my work (which mostly involves supporting students, travel and summer salary). However, this grant was very helpful to support one PhD student in a worthy project for which I tried but didn't get external funding. The work resulted in a paper at a leading machine learning conference, which was presented by the student:

> Vladymyrov, M. and Carreira-Perpiñán, M. Á. (2014): "Linear-time training of nonlinear low-dimensional embeddings". 17th Int. Conf. Artificial Intelligence and Statistics (AISTATS 2014), pp. 968-977.

as well as in Matlab software implementing the algorithm, which we have made available online. This year, the student and I made further progress in this and submitted a second paper to the same conference. So I'd say the return on this $4710 has been pretty good.

More generally, this type of grants are an absolute necessity to act as bridge funds when grant support dwindles (which has become much more likely in recent years).

Response #19

AY 2008-2009
Comparing Quality of Life and Community Health in Merced County Communities
$9,060

This funding allowed a team of researchers from UCM to continue a multi-year collaboration with colleagues at University of the Pacific (Stockton) and CSU Fresno that focused on examining quality of life and collective efficacy in rural communities and urban neighborhoods in the Central Valley. The faculty involved are discussing a follow-up project.

--(2013) Partnerships Across Campuses and Throughout Communities: Community Engaged Research in California's Central San Joaquin Valley. In Community Quality-of-Life Indicators: Best Cases VI, Joseph Sirgy, Don Rahtz, and Rhonda Phillips, Eds. Pp. 119-141. Springer

--(2011) The Dynamics of Social Indicator Research for California's Central Valley in Transition. Social Indicator Research (100): 259-271.

AY 2011-2012
Emerging National Memories--A Comparative Study of Social Memory and Nation
PI
$1,244

This funding supported an expansion of my central international work in El Salvador to develop two comparative case studies. This is ongoing research. The following publication is illustrative of the theory and methods that will be applied in the expanded research. Two additional publications are currently under review.

--(2013) Commemorating from the Margins of the Nation: El Salvador 1932, Indigeneity, and Transnational Belonging. *Anthropological Quarterly* 86(4): 965-994

Response #20

AY 2009-2010
Diversity and activity of microbial life in 'miniature seas': marine lakes of Palau as analogs for the present and future oceans
$8,438

Our GRC award allowed us to establish a new collaboration and to collect data that ultimately lead to a large NSF Dimensions of Biodiversity grant ($1.9M total; $1.3M to UC Merced). Along with the intellectual capital produced, this constitutes a 15,000% return on investment for UC Merced.

We conducted fieldwork in Palau in 2010 that provided samples and data for an MS thesis by Matthew Meyerhof; one paper is in preparation from this work, with contributions to several other nascent publications. Along with longstanding work in Palau and collaboration with Julian Sachs at the University of Washington, these data constituted key preliminary data for our NSF Dimensions of Biodiversity proposal that was funded in 2012. These data have also been presented in multiple meetings and at multiple institutions, including the American Society for Limnology and Oceanography meeting, the Goldschmidt conference, the Ecological Society for America, Columbia University, and Woods Hole Oceanographic Institution.

Response #21

AY 2010-2011
A Comparative Study of Persianate Historiography
PI
$4,854

AY 2011-2012
PI
Ottoman Chronicles and Persianate Historiography
$4,480

Being awarded these two grants has impacted my research in a number of ways. After publishing a couple of very preliminary articles on comparative historiography, I received invitations this semester to present papers at two very prestigious gatherings: an Ottoman-Safavid workshop at Indiana University in October 2014 and a paper at a Safavid-Mughal conference at Cambridge University in December 2014. For the Indiana presentation I made made direct use of the material that I gathered in Istanbul under the AY 2011-12 GRC grant and for the Cambridge University seminar I used the material I collected in the UK under the AY 2010-11 GRC grant. I will make further presentations using material that I gathered under both grants in January 2015 at the Center for the Humanities at UC Merced, and in February 2015 at Stanford University. My ongoing research and these presentations will lead to publications in the form of articles and a book project on which I am currently working. I cannot overemphasize the importance of having received these grants. Each of these invitations that I have received has led to meeting distinguished colleagues working on related topics, the possibility of further collaborations even in topics beyond my current project, and more recognition for UC Merced.

Response #22

AY 2008-2009
Travel Funds for PhD Students to Disseminate Research Findings
PI
$1,900

These funds supported my graduate students to present their research at relevant scientific conferences, which allowed them to interact with fellow immunologists and stem cell biologists and build their scientific professional network.

AY 2012-2013
Investigating the Effects of Bone Disease on Immune Cell Development and Response
PI
$4,676.00

These funds have been used to obtain preliminary data for new grant proposals to support a longer term project. Undergraduate researchers have been the main technical staff for this project, and the funds have been leveraged with other small awards to perform a wider-study. The data will be included in proposals, poster presentations and manuscripts to be submitted in 2015.

Response #23

AY 2008-2009
California on the Breadlines: Paul Taylor, Dorothea Lange, and the Making of a New Deal Narrative
PI
$1,265

Sharing work in progress, meeting with scholar in the field of Great Depression studies, and working at the Bancroft Library in Berkeley, which holds Paul Taylor's papers, and the Oakland Museum in Oakland, which houses the Dorothea Lange collection, all resulted from this grant. The final outcome was a monograph, published by University of California Press in 2010 and which has received critical acclaim.

AY 2009-2010
Costuming Class: Women, Fashion, and Social Position in Films and Literature of the Great Depression
AY 2009-10
PI
$2,500

The two weeks I spent viewing silent and 30s era films at the Library of Congress was possible because of this and a second grant. From this time, my teaching and research has expanded. In spring 2015 I will offer a course on fashion and fiction. I published and article based on research conducted during this time in an anthology, Blue Collar Pop Culture. And my second book, in progress, benefits from the images I viewed during this time.

Response #24

AY
2012---2013
Title: “Tuning Material Properties for Energy and Nanotechnology Applications”
$4,710

GRC funds allowed expenses for support of graduate research assistance, research supplies, travel for research purposes, recharge fees, and dissemination of research findings. This award has positively impacted my research as it allowed the completion of specialized experimental and simulation studies, which have resulted in: a) preparation and submission of manuscripts for peer---reviewed journals (i.e. 1 submitted, 1 in progress); b) broad dissemination of research results in presentations at national and international conferences; c) the pursuit of external funding (e.g. UCB COINS subaward 2013: funded, NSF CAREER 2014 and NSF DMS 2014: pending); d) support of graduate students; and e) consolidation of new collaborations with Prof. Julie Schoenung at UC Davis and Prof. Renata Simao at the Federal University of Rio de Janeiro, Brazil. As funding levels for internal grants are presently limited while faculty numbers have increased steadily, it will be imperative that campus efforts to increase funding for these faculty---driven research grants are successful. These grants often serve as seed funding and are effective means for completion of projects or establishing interdisciplinary projects. Due to the highly competitive funding landscape, such internal funds are pivotal for maintaining continuity of projects and allowing initiation of new projects. Increased and varied internal funding (e.g. 1 or 2 years) would also significantly enhance and encourage faculty---lead innovative research grants, while training (or retaining) highly skilled graduate assistants and delivering publications.

Response #25

The monies that I received as part of my COR grant have been used primarily to hire undergraduate research assistants to code quantitative data on United Nations General Assembly agenda setting processes.

Although we have not yet published a peer-reviewed article using the data, we have presented the research in several venues, including the Program on Law and Economics at the University of Hamburg (Germany), the Department of Political Science at the University of Southern California, the Department of Political Science at Michigan State University, and the Annual Meeting of the International Studies Association (Toronto).

In August 2014, we also applied for National Science Foundation funding (Political Science) to extend our data collection and theoretical inquiry.

In the coming year, we plan to submit for peer-review several articles that will employ the quantitative data funded by the COR grant.

The COR grant has been instrumental in allowing us to conduct our research. I'd be more than happy to answer any additional questions you may have about the importance of the funding to our work.

Response #26

AY 2012-2013
Real-time Functional Neural Circuit Mapping in Behaving Fruit Flies
PI
$4,710

This grant supported building a piece of equipment critical for a new project. The equipment allows us to undertake sophisticated experiments that turn on or off specific neurons in the brains of fruit flies while they are performing behavioral tasks. My graduate student Dan Landayan used this equipment to map out neurons that control food seeking motivation, a behavioral process that is critical to understand for biomedical and psychological purposes. Dan gave two well-received talks about this research, one at a regional neuroscience retreat, and one at the national SACNAS conference, both in the fall of 2014. We recently submitted a manuscript for peer review and I am submitting a new research grant to the NIH, both based in part on Dan's work and facilitated by the seed grant. The work made possible for this grant also supported my successful competition for the Hellman Fellowship. We are very grateful for the support of the UC Merced campus.

Response #27

AY 2013-2014
Human Rights & Literature, UC Merced and The Institute for World Literature, Harvard University
PI
$4,567.04

Several graduate students at UC Merced work in the area of literature, and it is imperative that the University work to position these students for excellence in an already impacted academic job market and in the field of literary studies. How will UC Merced's literature program and graduate students distinguish themselves and achieve excellence on par with other top tier research universities? As one direct response, the UC Merced Literature program is now affiliated with the Institute for World Literature at Harvard University, an affiliation made possible by a $4,567.04 grant from the UCM Academic Senate Committee on Research. This intellectual collaboration greatly enhances the visibility of the UC Merced literature program, and creates global publishing, presentation and networking opportunities for UC Merced faculty and graduate students. The affiliation provides space for at least two UC Merced graduate students and/or faculty to attend the annual Institute of World Literature summer school. This year's session will take place at the University of Portugal; UC Merced faculty and graduate students will have the opportunity to interact with leading scholars of world literature from universities across the planet. Placing UC Merced within the terrain of world literatures research and teaching is necessary to meet the demands of scholarly excellence placed on UC Merced faculty and to expose graduate students to the most rigorous environments of the profession. On a personal note, the affiliation has already made an impact on my research program and teaching. I recently published an article, "Human Rights and World Literature: Creating a Cosmopolitan Community of Individuals," that outlines certain positions in the field of literature and humanitarianism. I will use the Institute of World Literature network to expand upon these ideas and build support for my forthcoming book on Human Rights and Literature After 1945.

Response #28

AY 2008-2009
Backscattering from Roughened Metallic/Polystyrene Interface as a Novel Platform for Plasmonics and Biosensor Applications
$3,609

This grant was used to develop an experimental set-up for quantifying back-scattering from metallic thin films. The set-up remains up and running in my lab, is a useful tool not only for measurements still, but is handy for training undergraduate researchers. From the research perspective, the results we obtained have resulted in 2 publications, both in very high impact journals:
1. Tunable Nanowrinkles on Shape Memory Polymer Sheets. Chi-Cheng Fu, Anthony Grimes, Maureen Long, Christopher G. L. Ferri, Brent D. Rich, Somnath Ghosh, Sayantani Ghosh, Luke P. Lee, Ajay Gopinathan, and Michelle Khine, Advanced Materials 21, 4472 (2009).
2. Plasmon-induced enhancement of intra-ensemble FRET in quantum dots on wrinkled thin films. C. G. L. Ferri, R. H. Inman, B. Rich, A. Gopinathan, M. Khine, and S. Ghosh, Opt. Mater. Exp., 3, 383 (2013).

AY 2009-2010
Scalable Quantum Network based on photon-mediated entanglement of electron spins in a 2D lattice of coupled semiconductor microcavities
PI
$5,000

The grant was used to purchase supplies for this project. This project was otherwise not funded by any other sources, and over summer we finished off the measurements with the GRC grant. The results were published in another high profile journal for applied physics.
Polarization based control of optical hysteresis in coupled GaAs microdisks. S. N, Ghosh, B. B. Buckley, C. G. L. Ferri, X. Li, F. M. Mendoza, Y. K. Verma, N. Samarth, D. D. Awschalom, and S. Ghosh, Appl. Phys. Lett. 97, 011106, (2010).

AY 2011-2012
Thermally Directed Assembly of Metallic Nanostructures in Liquid Crystal Matrices for Switchable Plasmonic Waveguides
$10,000

This grant led to a most successful collaboration that persists till today. It has been used to purchase materials and supplies for the proposed work, and has resulted in many excellent publications. Two of the graduate students who lead the projects, Georgiy Shcherbatyuk and Andrea Rodarte have since graduated, Georgiy is an Assistant Professor in Benedictine college, Kansas, and Andrea is a postdoctoral researcher in UC San Diego.
*1. Spectral and polarization modulation of quantum dot emission in a one-dimensional liquid crystal photonic cavity. A. L. Rodarte, C. Gray, L. S. Hirst and S. Ghosh, Phys. Rev. B **85**, 035430 (2012).*
2. Directed assembly and in situ manipulation of semiconductor quantum dots in liquid crystal

matrices. A. L. Rodarte, C. G. L. Ferri, C. Gray, L. S. Hirst, S. Ghosh, SPIE Proceedings, 8279, 8279H (2012).
3. Dynamics of spontaneous emission of quantum dots in a one-dimensional cholesteric liquid crystal photonic cavity. Andrea L. Rodarte, Georgiy V. Shcherbatyuk, Laurel Shcherbatyuk, Linda S. Hirst and Sayantani Ghosh, RSC Adv.,2, 12759 (2012)
4. Quantum dot/liquid crystal composite materials: Self-assembly driven by liquid crystal phase transition templating. Andrea Rodarte, Ron Pandolfi, Sayantani Ghosh and Linda S. Hirst, J. Mater. Chem. C, 2013,1, 5527-5532.

AY 2012-2013
Ligand-Templated Quantum-Dot Liquid Crystal Hybrid Materials
$14,146.00

This collaboration is still ongoing as well. The initial results obtained as part of the GRC grant has resulted in two publications so far, and have been the basis of federal grants we have submitted recently.
1. Tuning Quantum Dot organization in liquid crystal for Robust Photonics Applications. A.L. Rodarte, Z.S. Nuno, B.H. Cao, R. J. Pandolfi, M. Quint, S. Ghosh, J. Hein and L.S. Hirst, CHEM PHYS CHEM, 15, 1413–1421, (2014).
2. Self-assembled nanoparticle micro-shells templated by liquid crystal sorting. A. L. Rodarte, Andrea; B. H. Cao; H. Panesar, R. Pandolfi, M. T. Quint, L. Edwards, S. Ghosh, J. Hein, and L. S. Hirst (accepted. Soft Matter).

Response #29

AY 2013-2014

Sensitivity of northern California small mammals to past climate, habitat, and biotic change
PI
$4,757.34

I was awarded a COR grant during AY 2014-2015 to support my research on "Sensitivity of northern California small mammals to past climate, habitat, and biotic change". This grant helped fund a graduate student and has accelerated the pace of training in my lab. Most of the funds went to support ES graduate student Eric Williams for one month over the summer. During that month (August 2014), Eric took part in a prestigious and competitive one-week workshop at the Center for Macroecology, Evolution, and Climate in Denmark titled "Modelling species distributions under climate change". This workshop rapidly trained him in state of the art species distribution modeling. Since his return, Eric has been applying his new skills to the first chapter of his PhD thesis. Further, he will be presenting his results at the Biennial Meeting of the International Biogeography Society in January 2015, where he will discuss how climate velocity and species dispersal ability are related to distributional shifts shown by North American mammals over the past 21,000 years. This project will result in a paper, co-authored by Eric and myself as a co-author, to be submitted in 2015.

Response #30

AY 2009-2010
Agenda Setting and Unanimous Consent Agreements in the U.S. Senate
PI
$4,996

Regarding my AY09-10 Grant, it supported the collection of final data sets needed to complete my book (which was a critical final piece of my Tenure case), Agenda Setting in the U.S. Senate, published in 2011 Cambridge University Press (widely considered the top book publisher in Political Science). Specifically, the funding helped pay undergraduate Research Assistants to code data on which bills are scheduled in on the floor of the U.S. Senate by unanimous consent, which was then used in two key chapters in the book.

Response #31

AY 2012-2013
West of Jim Crow
PI
$4,710

Research conducted with funding from this grant has contributed to the first accepted publication for this new, long-term research project (in *California Legal History* Winter 2015), and presentations at two national conferences (The Western History Association and The American Society for Legal History). This grant has supported two student researchers who gained valuable experience conducting archival historical research, one of whom is applying to graduate school and will have a stronger application because of his experience.

Response #32

AY 2010-2011, The Synthesis of Single Case Designs: Relevant Methodological Characteristics, Autocorrelation, and the d-statistic
PI, $4,700

AY 2011-2012, Advanced Modeling of Single Case Designs and Autocorrelation: Hierarchical Meta-Analysis and Generalized Models
PI, $2,058

Direct Impact:

1. The funding was used entirely to reimburse two graduate students (Kristynn Sullivan, Jonathan Boyajian) for travel expenses to attend the annual conferences of the:

   Society for Research Synthesis Methodology, Ottawa Canada, June 2010.
   American Psychological Association, Washington DC, August 2011.

   Society for Research Synthesis Methodology, Aix-en-Provence, June 2012.

2. The two students (*) presented their research at the APA conference:

   *Boyajian, J.G., Shadish, W.R., & *Sullivan, K.J. (2011, August). A Meta-Analysis of the Autocorrelation in Single Case Designs. American Psychological Association, Washington, D.C.

   *Sullivan, K.J. & Shadish, W.R. (2011, August). The Synthesis of Single Case Designs: Relevant Methodological Characteristics and the d-statistic. American Psychological Association, Washington, D.C.

3. In addition, the following two publications occurred during the two years of GRC support and were partly a result of that support:

   Shadish, W.R. & *Sullivan, K.J. (2011). Characteristics of single-case designs used to assess intervention effects in 2008. *Behavior Research Methods, 43*, 971-980. DOI 10.3758/s13428-011-0111-y. ERIC #ED530280.

*Boyajian, J.G., & Shadish, W.R. (2011). Abstract: A Meta-Analysis of the Autocorrelation in Single Case Designs. *Multivariate Behavioral Research, 46*, 1009

4. During this time period, we used some of the research conducted under these GRC grants as part of a grant application to the Institute of Education Sciences (IES). The grant was not funded, but is currently resubmitted as a three-year grant for $899,884.

5. This funding also allowed the graduate students to meet and collaborate with scholars at other universities, including in person at conferences listed above and elsewhere. These include David Rindskopf (CUNY-The Graduate Center), Larry Hedges (Northwestern University), James Pustejovsky (University of Texas, Austin), and Peter Steiner (University of Wisconsin-Madison). The students are coauthors on either publications or papers with these scholars.

Indirect Impact on Subsequent Presentations and Publications

In addition, the research these students were doing for these two grants has appeared in both publications and conference papers in the several years since they finished this work. Of course, other funding also helped support these papers and publications, but the GRC funding encouraged them to continue their work over time.

Conference Papers:

*Boyajian, J.G., & Shadish, W.R. *A Meta-Analysis of the Autocorrelation in Single Case Designs*. Presented at the Society for Multivariate Research, Norman, OK. (October 2011)

Shadish, W.R., Rindskopf, D.M., & *Sullivan, K.J. (2012, October). *Bayesian estimates of autocorrelations for single-case designs.* Society for Multivariate Experimental Psychology, Vancouver, British Columbia, Canada.

Shadish, W.R., Rindskopf, D.M., & *Sullivan, K.J. (2012, October). *Bayesian estimates of autocorrelations for single-case designs.* Society for Multivariate Experimental Psychology, Vancouver, British Columbia, Canada.

*Boyajian, J. G., Shadish, W. R. & Depaoli, S. (2013, April). *A Bayesian Approach to Making Inferences about Autocorrelation in Single Case Designs*. American Educational Research Association, San Francisco, California

*Sullivan, K.J., & Shadish, W.R. (2012, October). *Modeling single-case designs with generalized additive models*. Society for Multivariate Experimental Psychology, Vancouver, British Columbia, Canada.

Shadish, W.R., & *Sullivan, K.J. (2013, March). *Using generalized additive models to analyze single-case designs*. Society for Research on Educational Effectiveness, Washington, D.C.

*Sullivan, K.J. & Shadish, W.R. (2013, March). *Modeling Longitudinal Data with Generalized Additive Models: Applications to Single-Case Designs*. Society for Research on Educational Effectiveness, Washington, D.C.

*Boyajian, J., & Shadish, W. R. (2015, April). *Bayesian modeling of autocorrelation in single case experimental designs: A simulation study*. American Educational Research Association, Chicago, IL.

Publications:

Shadish, W.R., Rindskopf, D.M., Hedges, L.V. & *Sullivan, K.J. (2013). Bayesian estimates of autocorrelations in single-case designs. *Behavior Research Methods, 45*, 813-821. DOI 10.3758/s13428-012-0282-1

Shadish, W.R., Hedges, L. V., Pustejovsky, J. E., *Boyajian, J. G., *Sullivan, K. J., Andrade, A., & Barrientos, J. L. (2014). A *d*-statistic for single-case designs that is equivalent to the usual between-groups *d*-statistic. *Neuropsychological Rehabilitation, 24*, 528-553. http://dx.doi.org/10.1080/09602011.2013.819021

*Sullivan, K. J., & Shadish, W. R. (2013). Abstract: Modeling single-case designs with generalized additive models. *Multivariate Behavioral Research, 48*, 173. DOI: 10.1080/00273171.2013.752269

Shadish, W. R., Zuur, A. F., & *Sullivan, K. J. (2014). Using generalized additive (mixed) models to analyze single case designs. *Journal of School Psychology, 52*, 149-178

*Sullivan, K.J., Shadish, W.R., & Steiner, P.M. (in press). Analyzing longitudinal data with generalized additive models: Applications to single-case designs. *Psychological Methods*. Advance online publication. http://dx.doi.org/10.1037/met0000020

Shadish, W.R., Hedges, L.V., Pustejovsky, J., Rindskopf, D.M., *Boyajian, J.G. & *Sullivan, K.J. (2014). Analyzing single-case designs: *d*, *G*, multilevel models, Bayesian estimators, generalized additive models, and the hopes and fears of researchers about analyses. In T. R. Kratochwill & J. R. Levin (Eds.), *Single-Case Intervention Research: Methodological and Statistical Advances* (pp. 247-281). Washington, D.C.: American Psychological Association.

Summary

Because the amount of funding provided by GRC is typically small, that funding has limited opportunity to have a major impact. My own sense is that its primary contribution is to the development of graduate student researchers, one of many forms of encouragement that the university provides them to become professional researchers.

Response #33

AY 2008-2009:
Computational Prediction of Eukaryotic tRNA Identity Determinants: a Graduate Training Grant to Develop Software and Foster International Experimental Collaboration
PI
$3,200

This grant supported a Swedish masters student in my lab. Ingemar Ohlsson, who is now a PhD student at Northern Illinois University. Work from this grant led to ideas in our successful INSPIRE proposal to the NSF

AY 2009-2010:
FAST: (Fast Analysis of Sequences Toolbox): a new Bioinformatics Training and Research Paradigm at UC Merced
PI
$3,360

This grant supported UC Merced undergraduate Raymond Lee in developing an installer for our FAST project for UNIX-style sequence bioinformatics. This support led to my use of FAST in my Bioinformatics course, as a group project in collaborative open source software development last year. A manuscript acknowledging my award from GRC will be submitted soon with UC Merced graduate and undergraduate co-authors to Frontiers in Genetics.

Response #34

AY 2012-2013

Ligand-Templated Quantum-Dot Liquid Crystal Hybrid Materials

$14,146.00

This funding was absolutely essential in keeping our project alive! I cannot underestimate how much we were able to make out of this money. We have been trying to obtain funding for this collaboration for a few years now from NSF without luck, its just incredibly competitive nowadays. The funds funded chemicals and laboratory supplies and as a direct result of this grant (the only source of funding in most of 2013-2014) we published three good papers that have been receiving a lot of attention in the international community.

"Self-assembled nanoparticle micro-shells templated by liquid crystal sorting"A. R. Rodarte, B.H. Cao, H. Panesar, R.J. Pandolfi, M. Quint, L. Edwards, S. Ghosh, J.E. Hein and L.S. Hirst, Soft Matter, 10.1039/C4SM02326A (2015)

"Tuning quantum dot organization in liquid crystal for robust photonics applications"
A.L. Rodarte, Z.S. Nuno, B.H. Cao, R. J. Pandolfi, M. Quint, S. Ghosh, J. Hein and L.S. Hirst, CHEM PHYS CHEM, Volume 15, Issue 7, pages 1413–1421, (2014)

"Quantum dot/liquid crystal composite materials: Self-assembly driven by liquid crystal phase transition templating"
A. Rodarte, R. Pandolfi, S.Ghosh and L.S. Hirst, J. MATER. CHEM. C. 1, 5527-5532 (2013).

This year we also submitted a patent application from the project: U.S. Provisional Application No. 62/096,504 for

"Three-dimensional Sructures of Mesogenic Ligand-functionalized Nanoparticles and Methods of Making and Using the Same"

Numerous students in all of our labs received training in chemical synthesis, materials characterization etc. (Rodarte, Quint, Nuno, Pandolfi – Physics grad students), (Cao, Panesar, Edwards – Nat Sci undergrads)

Presentations:

I have given four invited talks on the project directly related to the funded project including one in the UK.

Hirst, L. S., "Nanoparticle/liquid crystal hybrid materials," Manchester University, dept of physics, Manchester, UK. (June 2014).

Hirst, L. S., Big Energy series at RASEI/CU/NREL, "Quantum dots and liquid crystals: applications in solar concentrators and other hybrid devices.," University of colorado, Boulder, Boulder, CO. (April 2014).

Hirst, L. S., MRSEC workshop on liquid crystals and particles, "Designing materials by liquid crystal/nanoparticle co-assembly," University of Pennsylvania, University of Pennsylvania, Philadelphia, USA. (December 2013).

Hirst, L. S., University of Illinois, Urbana Champain, Materials Seminar Series, "Liquid Crystal/Quantum dot hybrid materials," University of Illinois, Urbana Champain. Materials Science and Engineering Colloquium. (November 2013).

I am invited to give three more on the subject this year at Virginia Tech, UC Davis and Pacifichem 2015 in Hawaii.

My student also gave a talk during the funding period.

Rodarte, A. L. (Presenter & Author), Hirst, L. S. (Author), Ghosh, S. (Author), American Physical Society March meeting, "Liquid Crystal Phase Transitions and Defects to Sort and Soft-Assemble Microstructures," American Physical Society. (March 2014).

Andrea graduated with her PhD this summer and is now a postdoc at UCSD. Her final year's work was funded by this grant.

AY 2011-2012

Thermally Directed Assembly of Metallic Nanostructures in Liquid Crystal Matrices for Switchable Plasmonic Waveguides

$10,000

This project was also not funded by any other means, grad students Quint and Nuno worked on the project and two undergrads in mine and Sai Ghosh's lab (Delgardo, Cisneros).

A paper was submitted recently

"All optical switching of nematic liquid crystal films driven by localized surface plasmons" M.T. Quint, S. Delgado, Z.S. Nuno, L.S. Hirst and S. Ghosh, submitted (2015)

Grad student Quint has also given two presentations on the project.

Quint, M. (Presenter & Author), Cisneros, F. (Author), Delgardo, S. (Author), Rodarte, A. (Author), Nuno, Z. (Author), Hirst, L. S. (Author), Ghosh, S. (Author), Nanohub symposium, "Organic Molecular Orientational Control via Localized Surface Plasmons," University of Illinois Urbana Champaign. Poster. (April 2014).

Quint, M. (Presenter & Author), Hirst, L. S. (Author), Ghosh, S. (Author), American Physical Society March meeting, "Liquid Crystalline Orientational Control via the Electric Field of Localized Surface Plasmons," American Physical Society, Denver. Oral presentation. (March 2014).