COMMITTEE ON ACADEMIC PLANNING & RESOURCE ALLOCATION (CAPRA)

Monday, April 14, 2014 3:30 – 5:00 pm KL 362

Documents found at <u>UCMCROPS/CAPRA1314/Resources</u>

AGENDA

- I. Chair's Report Anne Kelley
 - A. Update from special Division Council meeting on April 10 Jan Wallander
 - B. Update from UCPB meeting on April 1
- II. Consent Calendar
 - A. Approval of the agenda
- III. Status of FTE Call and Strategic Focusing Initiative Anne Kelley Discussion: Update on FTE lines.
- IV. Campus Review Items
 - A. Proposed Research Units Policies Pg. 1-16
 Background: The Committee on Research drafted a set of comprehensive policies on the establishment and review of research units on campus.
 Action requested: CAPRA to analyze the space and resource implications of the proposed policies on research units. Comments are due to the Senate Chair by Friday, April 18.
 - B. Revised Mechanical Engineering (ME) graduate proposal Pg. 17-19

 CAPRA reviewed and discussed the original proposal in fall semester and responded with comments. ME has revised its proposal. Committees are asked to review the revised proposal.

Action requested: CAPRA to review the revised proposal by Monday, April 21. Revised proposal is available at UCMCROPS/CAPRA1314/Resources/Review Items – Campus/ME CCGA Proposal/Revised Spring 2014

C. Revised Sociology graduate proposal

Pg. 20-21

CAPRA reviewed and discussed the original proposal in fall semester and responded with comments. Sociology has revised its proposal. Committees are asked to review the revised proposal.

Action requested: CAPRA to review the revised proposal by Friday, April 18. Revised proposal is available at UCMCROPS/CAPRA1314/Resources/Review Items – Campus/Sociology CCGA Proposal/Revised Spring 2014

D. Molecular Cell Biology graduate proposal

Pg. 22

CAPRA reviewers were assigned prior to this meeting.

Action requested: CAPRA to review the proposal by Monday, April 21. Proposal is available at UCMCROPS/CAPRA1314/Resources/Review Items – Campus/MCB CCGA Proposal

E. Revised EECS graduate proposal

Pg. 23-24

CAPRA reviewed and discussed the original proposal in fall semester and responded with comments. EECS has revised its proposal. Committees are asked to review the revised proposal.

Action requested: CAPRA to review the revised proposal by Friday, April 25. Revised proposal is available at UCMCROPS/CAPRA1314/Resources/Review Items – Campus/EECS Proposal/Revised Spring 2014

V. Other Business

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SANTA BARBARA • SANTA CRUZ

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

February 5, 2014

To: Ignacio López-Calvo, Chair, Division Council

From: Ruth Mostern, Chair, Committee on Research (COR)

Re: Review Process for Research Units

The Senate and the Office of Research have repeatedly noted that there is currently no Senate review process for any research unit on campus. This is significant as the Senate has never been involved in decisions that ultimately pertain to funding for any campus research units. In the spirit of shared governance, the Office of Research has requested improved Senate guidance. COR, in consultation with the Vice Chancellor for Research, Sam Traina, has identified this as a top priority and has prepared a complete set of recommendations about evaluating current research units and approving future research units on campus.

These documents are based on the *Policies and Procedures for Centralized Research Units (CRU)* (approved by GRC on May 20, 2009), the *Compendium: University Review Processes for Academic Programs, Academic Units, & Research Units* (January 2011); and the UCOP *Administrative Policies and Procedures Concerning Organizing Research Units* (effective January 1, 2000). These documents are also based on documents which prior Graduate & Research Councils drafted in past years, but which never went through a full Senate review process. COR hopes that this formal review process will now occur.

This complete set of materials for evaluation and approval of research units consists of four documents: (1) a table outlining different types of research units on campus (multi-campus, organized, centralized research units and core facilities), (2) a flow chart of the processes that proposals for establishing a research unit must go through for campus approval, (3) the review criteria for evaluating such proposals, and (4) the criteria for five-year reviews for existing research units.

With the exception of the fourth document, the review criteria we have proposed are intended for centers and institutes seeking approval for the first time. Starting next year, any persisting or long-term

research unit entity seeking funds from the Office of Research should go through this approval process prior to seeking resources from the Office of Research. We do not include in these documents procedures for research entities that are informal, very short-term groups, or groups within one school that are not requesting funding from the Office of Research. As a separate matter, existing research units must go through a 5-year review, with the year of review starting from the date of inception of the unit.

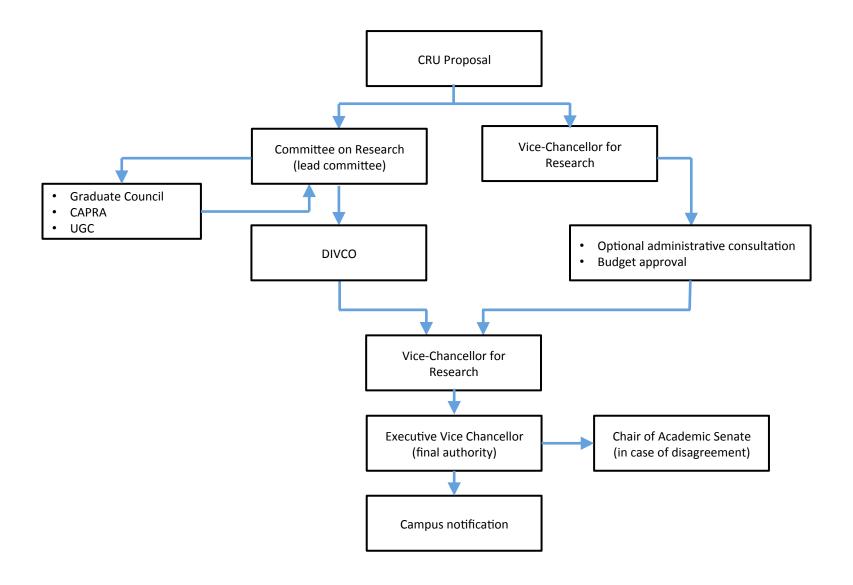
We hope that Division Council acts on these documents in a timely way and transmits a final version to the Provost and VCR for their review. If this is accomplished by the end of this semester, we hope to notify Senate faculty that research units are expected to go through the processes that are outlined in these documents, starting next year, before seeking funding from the Office of Research.

cc: COR Members
DivCo Members
Senate Office

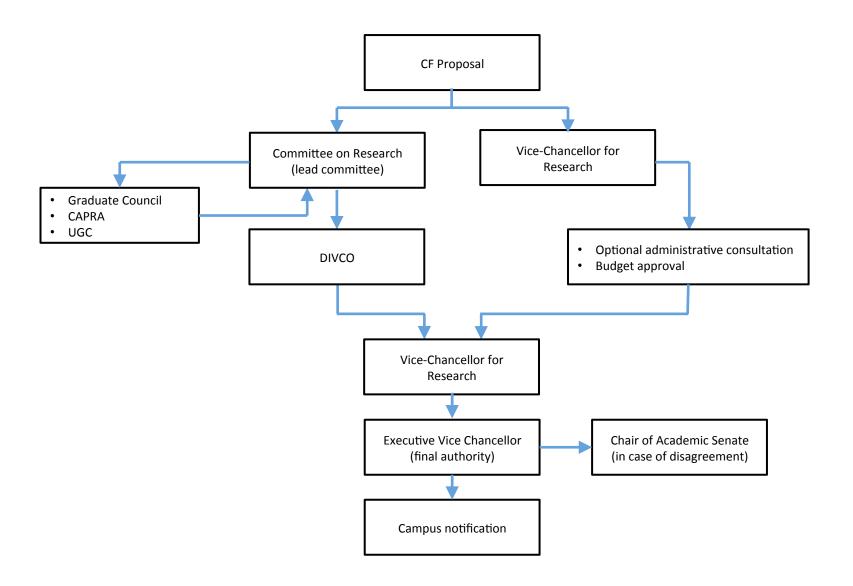
	CRU	Core Facility (CF)	ORU	MRU
Designations	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station	Institute, Laboratory, Center, Station
Lines of Responsibility	CRU responsible to Vice Chancellor for Research (VCR) for administration, budget,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

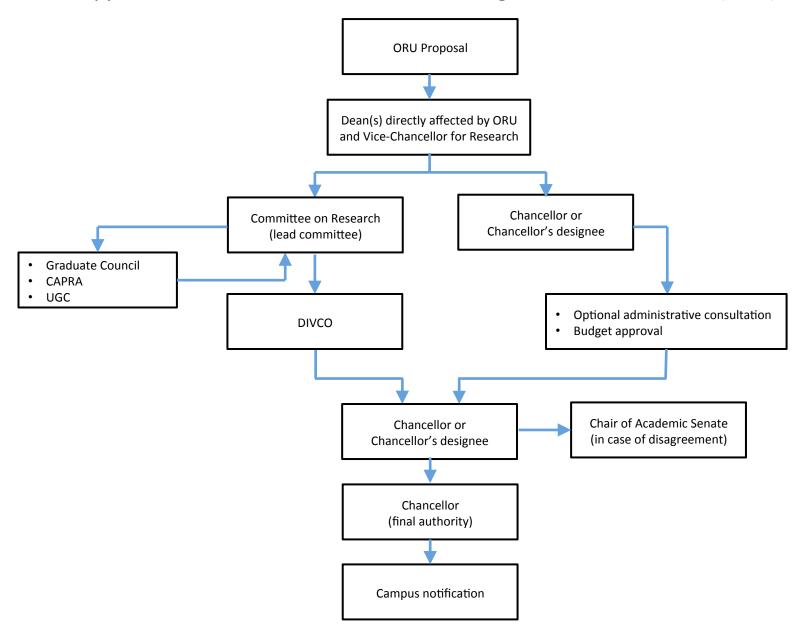
Approval Process for Establishment of a Centralized Research Unit (CRU)



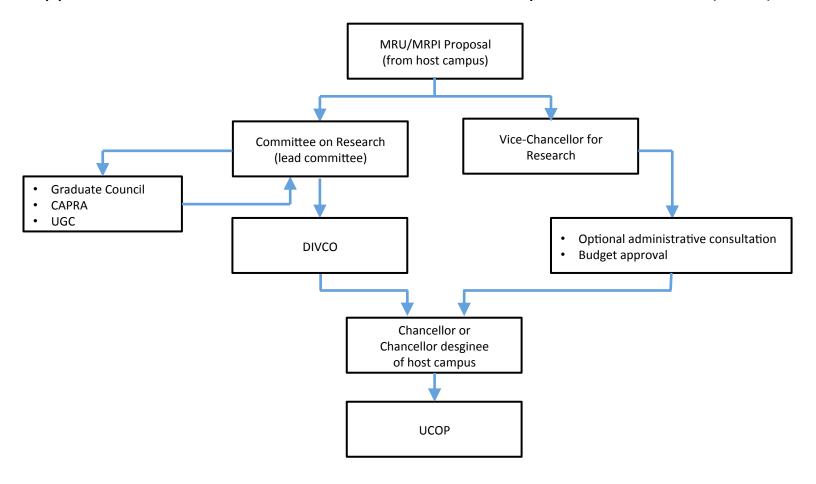
Approval Process for Establishment of a Core Facility (CF)



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



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



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

Five-Year Review Criteria for Centralized Research Units

Centralized Research Units (CRU) reviews must address 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. Future plans
- 5. 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

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. Future plans
- 5. 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

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. Future plans
- 5. 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

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. Future plans
- 5. 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

CAPRA REVIEWER 1

CAPRA review of Mechanical Engineering graduate group proposal

As CAPRA is charged with evaluating the potential impacts of new programs on academic planning, budget, and resource allocations, this review is focused on those issues.

Mechanical Engineering and Applied Mechanics (MEAM) is currently an emphasis area under the umbrella Individual Graduate Program, offering both M.S. and Ph.D. degrees. The faculty now seek approval of Mechanical Engineering as a full-fledged graduate group. The proposal seems to have been written to ignore the existence of the IGP emphasis area as much as possible. For example, section 1.3 states "The Mechanical Engineering Program is currently hiring 3 additional faculty members for the academic year 2014-2015. Because these faculty members require an immediate home for their graduate students, the initiation of a graduate program is vital to the growth of the mechanical engineering program." While recognizing that there are advantages to becoming a full-fledged graduate group, why couldn't these students enroll in the MEAM emphasis of the IGP?

As of Fall 2013, the program had 8 core faculty with one more coming in January 2014, 8 affiliated faculty with primary homes in other graduate groups, and 22 graduate students, 19 of those in the Ph.D. program. It is stated that UCM's program strives to maximize its impact by focusing on niche areas that distinguish it from programs at other UC campuses, but will offer courses in all of the major areas of mechanical engineering. The listed research focus areas (Nonlinear Dynamics and Control, Fractional Order Dynamical Systems, Unmanned Aerial Vehicles, Biomechanics, Tribology, Combustion, Radiative Heat Transfer, Unsteady Aeroelasticity, Waste-to-Energy Conversion, and Solar Energy) seem rather scattered. The proposal has ambitious growth projections, with a five-year plan to reach 15 core and 12 affiliated faculty, with 60 Ph.D. and 17 M.S. graduate students. It is not clearly stated whether the new faculty will be hired into other areas within mechanical engineering or be used to further strengthen the current research focus areas. Much of the justification for growing the mechanical engineering faculty appears to be the student demand for the undergraduate program. While it seems clear that the teaching load for the current faculty is large and is likely to grow unless more faculty are hired, that is not a very good justification for establishing a new graduate program; the undergraduate teaching needs could be met in part by Unit 18 or permanent lecturers.

The proposal notes a number of needs for significant additional resources to support the proposed program. These include five new graduate teaching labs (section 6.4), at least 9240 sq. ft. of new lab and office space over the next five years, an electronics shop with a dedicated full-time lab technician (section 6.5), and a full-time graduate advisor (section 6.6). It is also stated in Section 7 that graduate student support from TA positions is likely to be greatly reduced as other graduate programs develop, and that much greater support from fellowships and for nonresident tuition will be needed to support the program. While agreeing that all of this support would be good to have in an ideal world, it seems unlikely to be achieved.

Mechanical Engineering is one of the core disciplines of engineering and there can't be many comprehensive research universities in the U.S. that lack graduate programs in this field. This, together with the strong student demand at both the undergraduate and graduate levels, makes a strong argument for UC Merced to develop a separate graduate program in this discipline. However, the proposed growth trajectory requires faculty FTE and facilities that may not be forthcoming for this program in competition with other growing programs for limited resources. I would like to see a proposal that recognizes resource limitations and outlines a "plan B" to develop an excellent and distinctive program in a less resource-intensive manner.

CAPRA REVIEWER 2 (CAPRA review of the Mechanical Engineering graduate group)

The purpose of this review is to evaluate the potential impact of new Mechanical Engineering (ME) program on academic planning, budget and resource allocations. Currently, the program has 8 core faculty members (one more core faculty will be joining in January 2014), 8 affiliated faculty members, and 22 graduate students (19 in the Ph.D. program and 3 M.S. degree students). The proposal outlines a very ambitious growth plan for the program: By Fall 2017, the program plans to grow to 15 core faculty and 12 affiliated faculty, 60 Ph.D. students, and 17 M.S. students. The proposal does not clearly state in what areas the new faculty will be hired and what will be the strategy to select the research areas of the new hires. The primary justification for a growth in the ME faculty seems to be the argument that the teaching load for the current faculty is already large and an increase in the undergraduate program will put an undue teaching demand on the faculty unless more faculty are hired. An argument for a growth in the faculty size should be based on research, not on teaching needs. Moreover, the undergraduate teaching needs could be handled by lecturers.

The projected growth in the faculty and Ph.D./MS students will require significant additional resources to support the proposed program over the next five years in terms of new teaching labs, additional office space, and personnel (like a full-time lab technician for the electronic shop and a full-time graduate students advisor). Some of these labs can be very capital intensive. The proposal states a much greater reliance on fellowships and nonresident tuition to support graduate students because support from TA positions is likely to be reduced. Given the trajectory of fellowship growth on the campus, this goal seems far from reach.

The proposal states that the ME program distinguishes itself from those at other UC campuses by focusing on niche areas, but the listed research areas (e.g., Biomechanics, Combustion, Fractional Order Dynamical Systems, Nonlinear Dynamics and Control, Radiative Heat Transfer, Solar Energy, Tribology, Unmanned Aerial Vehicles, Unsteady Aeroelasticity, and Waste-to-Energy Conversion) don't give this impression and the program seems to lack a focus.

To summarize, Mechanical Engineering is an important discipline of engineering and UC Merced should have a strong ME program. However, the resource requirements (faculty FTE, other personnel, fellowships, and facilities) of the proposed growth trajectory of the ME program seem unrealistic as this program competes with other growing programs for limited resources that the University has to offer. My recommendation is that the proposal be revised so that the proposed growth trajectory of the program considers the resource limitations on the campus.

CAPRA REVIEWER 1

Sociology CCGA Proposal

Overall this is a strong, well-reasoned proposal for a well-needed graduate program that will fit in well at UC Merced. Distinct strengths of the program include a focus on social inequality, including along race, class, and gender lines, and/or in social institutions such as education and the political system. The program proposes three defined areas of specialization – social inequality, political sociology, and social institutions— where it already has nationally recognized faculty experts. This mix of strengths is argued to be unique in the UC system. Building a sociology doctoral program along these lines will match efforts in other disciplines to advance as one of UC Merced's signature research themes to understand and reduce the inequalities displayed in the populations of the San Joaquin Valley.

More specific to the concerns of CAPRA, the program as proposed does not appear to make large or unreasonable resource demands. This is further supported by the SSHA Dean's assessment. More specifically:

Faculty: The faculty in Sociology will, once the current searches are filled, be sufficient to start the doctoral program in 2014. Moreover, the proposed growth appear reasonable within expected growth of faculty in SSHA and likely distribution to Sociology. The Dean agrees.

Space and Other Resources: Sociology research does not generally require additional or distinct space, nor unique equipment. It appears the needed space, largely to house graduate students and provide one computer lab, can be met through existing and already planned buildings. The Dean agrees.

Graduate Student Support: It appears likely that the expected graduate student numbers can easily be supported with TAships, given the large and growing enrollment in Sociology UG courses.

Staff Support: With the growth of doctoral programs, as well as enrollment in each existing and proposed program, in SSHA, including in Sociology, additional staff is needed to support them. The current staff in SSHA assigned to graduate program support is already inadequate. The Dean states the intention aggressively to grow the staff for graduate program support, which will be imperative.

Assessment

The only resource concern that is apparent is the quite low projected number of graduate students that will be enrolled in the Sociology doctoral program given the projected faculty. The proposal states as the aim less than 2 graduates students per faculty. This is despite assertions that Graduate training in Sociology remains popular throughout the UC System. Given the need at UC Merced to grow graduate student enrollment to 10% by 2020, and to increase the awarding of PhDs, all approved programs will need to contribute substantially more than this program projects. Or is there some unique argument that research training in Sociology is so demanding on faculty that they can only supervise two graduate students at any one time? This reviewer has not other concerns about the Sociology doctoral program proposal regarding academic personnel and resource issues

Review of proposal by the Sociology Bylaw 55 unit to establish a graduate program at UC Merced November 21, 2013

Overall impression: The Sociology unit at UC Merced is expanding at a reasonable rate, such that it seems highly appropriate for them to have a fully functioning graduate program in their discipline. The faculty focuses on problems of equality (or lack of it) from several different perspectives. They also have engaged professors from other units in the SSHA to partner with them in the training of graduate students. Their plan for how to train students was very interesting to me in the way that they chose the Second Year Paper as a defining work that allowed the faculty to assess how well the students are doing in their research. Also, the program integrates graduate students into the teaching rotation, something important for this relatively small group to be able to take advantage of given the large number of courses that Sociology teaches.

<u>Resources</u>: The Unit will need to continue hiring ladder-rank Professors at the rate in which they have been doing for the past several years. This rate should present no problems for them to accomplish their goals.

The Sociology unit requires little in the way of space, just some shared graduate student office space along with a computer laboratory. Given the popularity of this field on the campus, their requests are easily justified.

My one question is how graduate students will be funded to attend conferences, which is an activity that the faculty at UC Merced is very active in. Given the sizes of the grants by Sociology faculty, I don't see how their extramural grants would support student travel. It is an important aspect of graduate training to provide students with the opportunity, and the resources, to attend conferences in their discipline.

<u>Summary</u>: The proposal is well-written, clear, and seems a likely path for furthering the graduate student population at UC Merced. I am very much in favor of its coming to fruition.

REVIEWER 1

CAPRA review of MCB graduate group proposal

At present, students who wish to carry out graduate work in molecular and cell biology have three principal choices for a graduate program: Quantitative and Systems Biology (QSB), Biological Engineering and Small-Scale Technologies (BEST), or Chemistry and Chemical Biology (CCB). QSB contains probably all of the faculty with research interests in these areas, but it is an extremely broad program whose new leadership is trying to focus it more narrowly on systems biology. BEST is primarily a bioengineering group and CCB is suitable only for students with a very biochemical focus. There does not currently exist any graduate group that provides an appropriate home for research and education with a molecular and cell biology focus. When Bylaw 55 units were formed in the School of Natural Sciences, the majority of the faculty with these interests joined together to form the MCB bylaw unit, but no corresponding graduate group was formed. This proposal aims to correct that.

This proposal effectively corresponds to splitting the current QSB group into MCB and the remainder of QSB, although many of the faculty will retain dual membership. The initial membership of MCB is expected to be 16 faculty (six of them tenured), already much larger than many (most?) of our graduate groups. Although this group is smaller than ideal as are nearly all of our graduate groups, it is certainly large enough to stand alone as a graduate group and there are already enough faculty to offer the necessary courses. As the dean's letter indicates, the greater concern is the remaining QSB group, which will be left with a core faculty of 10, only one of whom is currently tenured. This is certainly not ideal, but I do not think that it makes sense to keep these two groups together for administrative purposes when their emphases have clearly diverged.

From an academic planning point of view, creating a graduate group that is aligned with the Bylaw 55 unit and with the research interests of those faculty makes a great deal of sense. From a resource point of view, this move should have a small although nonzero impact. The Graduate Division will have to provide stipend support for another graduate group chair and the Registrar's office will have to keep track of enrollments and requirements for another set of degree programs. The SNS dean currently provides funds to each of his graduate groups for seminars, recruiting, and other graduate program expenses, and creation of a new group will require either additional funds or a reduction in the funding to each group. While both QSB and MCB will continue to need additional faculty lines, research space, and research infrastructure, these needs appear independent of the administrative structure of their graduate programs. Accordingly, I am in favor of approving this new program.

CAPRA Reviewer 1

EECS program at UC Merced has experienced a healthy growth of graduate students and faculty from 2008 to 2013. The projected growth of the program in 2018-19 academic year includes 14 masters students, 75 Ph.D. students and 15 ladder rank faculty, leading to a 5:1 student to faculty ratio. This is in-line with the SoE 2020 strategic plan.

The CCGA proposal states the need for adequate space, does not specify the detailed need for space to accommodate the projected growth.

The discussions on various means to provide financial support to graduate students are appropriate. These include TA, fellowship from the university, their research grants and their plan to obtain training grants from federal agencies.

EECS program is seriously lacking in content of EE in terms of both course offerings and faculty composition. In the proposed growth path, the EE aspect is still scarce, including the equipment development part of the proposal.

CAPRA Reviewer 2

CAPRA review of Electrical Engineering and Computer Science graduate group proposal

As CAPRA is charged with evaluating the potential impacts of new programs on academic planning, budget, and resource allocations, this review is focused on those issues.

Electrical Engineering and Computer Science has existed by that name as an emphasis area under the umbrella Individual Graduate Program since 2007, offering both M.S. and Ph.D. degrees. The program already boasts 12 Ph.D. and 5 M.S. graduates. This program now seeks approval as a full-fledged graduate group.

As of Fall 2013, the program had 11 core faculty and 33 graduate students, 29 of those in the Ph.D. program. There are two major broad emphasis areas in the current program, intelligent systems and distributed systems and data management, and future plans call for further building these three areas, not introducing additional areas. The proposal discusses growing at a rate of 1-2 faculty per year in the near future and growing the graduate population from 33 to 89 by AY 18-19, with a somewhat larger proportion of M.S. students. These appear to be ambitious goals, although significant growth in the number of graduate student per faculty member appears to be supportable based on student demand for the program, the success of the faculty at winning research grants, and the demand for TAs to support the large undergraduate Computer Science major. The proposal is not very specific on how much additional research space and equipment will be needed to support the planned growth in faculty and students. In any case, it does not appear that significant faculty growth is needed for the program to flourish. The current faculty are able to offer the minimum number of graduate courses required, although of course it would be better for more courses to be offered more often, and because the program has chosen to focus on growing just a couple of research areas, it can achieve strength with a relatively small number of faculty.

My conclusion is that conversion of the EECS graduate program from an emphasis area under the IGP to a full-fledged graduate program would not, in itself, have a significant impact on academic planning, budget, and resource allocations, and that the proposal should move forward.