May 13, 2015

CP/EVC Alison Galloway Chancellor's Office

Re: CPB Recommendations on Faculty Recruitment Requests 2015-16

Dear Alison:

The Committee on Planning and Budget has reviewed the divisional Faculty Recruitment requests for 2015-2016, and we have met with each Dean individually. The Call letter to the Deans indicated your intention to restore funding for 16 FTE. Of these, four have been reserved for development of academic programs in Silicon Valley. The twelve remaining positions will be allocated for recruitment in 2015-16, of which four positions will be used to complete cluster hires initiated with the 2014-15 recruitments. We note that based on the Office of Planning & Budget's request summary worksheet, there are currently 36 pending requests, 15 of which would require central funding. This letter includes advice on all these requests.

Our thinking about the FTE requests was guided by principles that you outlined in your letter to the Deans, and those developed by CPB previously. To paraphrase, these principles are:

- new faculty hires should enhance the research profile of the campus, in some cases by allowing us to venture into new areas and in other cases by strengthening existing programs that are essential to our future research mission;
- new faculty hires should enhance growth of graduate programs, either by helping to launch new programs or by maintaining and increasing excellence and enrollment in existing programs;
- new faculty hires should maintain or increase the excellence of existing undergraduate programs; the establishment of new undergraduate programs has lesser priority at this time.

Another key consideration in our FTE recommendation has been equity. Over at least the last decade FTE allocations have attempted to be equitable by placing a roughly equal number of FTEs across the different divisions. Indeed, all divisions are experiencing new challenges and opportunities, and one of the very few ways in which divisions receive vital new resources is through FTE allocations. However, a more expansive interpretation of equity must also take into account the fact that workloads vary widely across departments and divisions, and that the situation of mature divisions such as Humanities and Physical & Biological Sciences (PBSci) is very different from that of Baskin School of Engineering (BSOE), whose growth was stunted by two periods of state economic crisis. Our recommendations attempt to reconcile these different perspectives.

Cluster Hires

The following cluster hires were approved during the 2014-15 recruitment approval cycle:

<u>Coastal Sustainability/Environment:</u> CPB's understanding from your 2014-15 authorization memo is that this cluster was approved, and that "additional FTE will be allocated to this cluster in subsequent years, contingent on submission to the campus of an undergraduate degree program in Environmental Science by spring 2015." We are assuming that that the program proposal will soon be forthcoming, and that the **Ocean Science - Physical Oceanography** hire is likely to be authorized and allocated from centrally-held FTE.

<u>Computer Gaming and Design</u>: The Computational Media department has forwarded MA and Ph.D. program proposals, which satisfy the contingency placed on the two cluster positions for Computer Gaming and Design. These have been earmarked for 2015-16 recruitment as, **Art** – **Experimental Game Design** and **Computational Media** – **Generative Methods**. Additionally, our current understanding is that the *Computational Media* - *LSOE* position associated with a partner hire was authorized using central FTE in this area.

CPB expressed its enthusiasm for the proposed Human Computer Interaction (HCI) cluster during the last cycle, which although not approved for cluster pre-approval status, was invested in with a hire for Psychology – Cognitive. For 2015-16, Social Sciences has requested reauthorization for the Psychology – Cognitive hire which is very highly prioritized (2). While supportive, CPB does not see this hire as de-facto approval of the cluster overall; we recommend that this proposed cluster be revisited during our strategic academic planning discussions in late spring and fall 2015.

Summary of Recommendations

Our recommendations are listed below by Division, in order of decreasing priority. The rationale will be elaborated in subsequent sections of this letter. An asterisk (*) indicates slots that we recommend for central funding, **bold** indicates those slots associated with approved clusters, and *italics* denote LSOE positions. Other positions are divisionally held positions. Numbers in (parentheses) are the Division's priority according to the Planning & Budget worksheet.

Arts

Five Recommended	Theater Arts – African American/African Dance (1)
Two Central (One Cluster)	Art – Industrial Design (2)
	Digital Arts New Media (3)
	*HAVC - Visual Cultures of Digital Media (4)
	Art – Experimental Game Design (C)
	Music Latin American Music (5)
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BSOE	
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Eight Recommended	*Computer Science - Computer Security (5)
	*Computer Science - Computer Security (5) Computer Engineering - Mobile and Pervasive Computing (2)
Eight Recommended	
Eight Recommended	Computer Engineering - Mobile and Pervasive Computing (2)
Eight Recommended	Computer Engineering - Mobile and Pervasive Computing (2) *Computer Science - Data Privacy or TOE (6)
Eight Recommended	Computer Engineering - Mobile and Pervasive Computing (2) *Computer Science - Data Privacy or TOE (6) *Computer Science - Databases (CPB insertion)
Eight Recommended	*Computer Engineering - Mobile and Pervasive Computing (2) *Computer Science - Data Privacy or TOE (6) *Computer Science - Databases (CPB insertion) Computational Media – Generative Methods (3/C)
Eight Recommended	Computer Engineering - Mobile and Pervasive Computing (2) *Computer Science - Data Privacy or TOE (6) *Computer Science - Databases (CPB insertion) Computational Media – Generative Methods (3/C) Computational Media – LSOE (X)

Humanities	
Four Recommended	Literature – Spanish Language Literatures (1)
One Central	*History of Consciousness – Critical and Cultural Theory (2)
	Critical Race and Ethnic Studies (3)
	LAAL – English as a Second Language (4)
PBSci	
Ten Recommended	Science Communication – LSOE (1)
Two Central (One Cluster)	MCD Biology - Molecular Biology (2)
	Mathematics – Algebra (3)
	Physics - Materials/Condensed Matter (5)
	Ocean Sciences - Physical Oceanography (C)
	*EE Biology – LSOE (6)
	Mathematics – Analysis/Geometry (7)
	MCD Biology - Mammalian Genetics (4)
	Chemistry & BioChemistry - Organic Chemistry/Biomedical (8)
	Astronomy & Astrophysics - (9)
	Physics - Materials/Condensed Matter (10)
Social Sciences	
Seven Recommended	Environmental Studies – Watersheds (1)
One Central, One Reauthorized	Anthropology - Biological Anthropology of Human Ecology (3)
	Economics - International Finance (4)
	*Economics - Environmental Economics (5)
	Psychology – Cognitive (C/2)
	Latin American & Latino Studies – Brazilian Studies (6B)
	Politics - Global Environmental and Resource Politics (7)
	Sociology - Inequalities, Social Justice, and STEM (9)

Numbers refer to divisional ranking on Planning & Budget worksheet

Bold denotes cluster position

*Asterisk indicates centrally funded *Italics denotes LSOE positions*

Divisional Hires

Per the Call, "it is the expectation that divisionally-held open provisions and FTE opened by separations will be used to fill the highest priorities of the division[s]." CPB has worked with the Deans to better understand their priorities and, in a few cases, recommends positions at variance with the submitted decanal materials.

Arts

CPB recommends that the first four requests from the Arts be approved: Theater Arts – African American/African Dance, Art – Industrial Design, Digital Arts New Media, and History of Art and Visual Culture – Visual Cultures of Digital Media.

While the Dance position precedes the commencement of Theater Arts' low-residency Dance MFA program, we support the department's programmatic vision. This program combines entrepreneurial thinking with a program we feel will appeal to many mid-career dancers, and we are interested in both its artistic and revenue potential. While CPB does not yet see compelling evidence as to how the proposed Industrial Design position will contribute to graduate growth (and, in particular, how it will integrate with the Arts MFA that has been in the works for a while), we feel it offers considerable integrative opportunities with both design and industrial communities and between science and the arts. Finally, we support the DANM request for an FTE who would serve as long-term Program Director, in hopes that this hire would bring coherence, consistency and a greater ethos of collaboration to this innovative, high-profile program.

CPB is supportive of the HAVC position to be provided central FTE given its transdisciplinary nature and its potential to contribute to the excellence and growth of the graduate programs within the division and beyond. In particular, we note that the HAVC Ph.D. program, although still below the campus average for the number of its students by permanently budgeted faculty FTE, has been steadily growing since it admitted its first cohort in 2010-2011.

Baskin School of Engineering

CPB recommends approval of the following eight positions, though we have re-ranked them: Computer Science - Computer Security, Computer Engineering - Mobile and Pervasive Computing, Computer Science - Data Privacy (the currently pending Target of Excellence Hire for Computer Science), Computer Science - Databases, Computational Media - Generative Methods, Computational Media - LSOE, AMS - Causal Inference, and Technology Management - Information Science and Technology.

Dean Konopelski argued very convincingly that BSOE's situation is not comparable to that of other divisions because of its young age and the fact that it has never been allowed to grow to steady state. Indeed, undergraduate enrollments in BSOE have almost doubled over the last five years, and the trend shows no signs of slowing. The committee is convinced that allowing the division to develop and reach steady-state before the rebenching process is over would be beneficial for the campus as a whole. Not only that, but all the hires that have been proposed in this cycle by the School have a huge potential to contribute to graduate growth and improve the experience of undergraduate students on campus. Hence our FTE recommendation heavily favors BSOE. However, after a helpful discussion with Dean Konopelski and a careful deliberation within the committee, we recommend that the request from the Electrical Engineering (EE) department be given a much lower priority.

CPB is cognizant of the loss of faculty (mostly to external offers) suffered by the EE department over the last couple of years, as well as the relatively high number of graduate students. All other things being equal, this would favorably predispose us to hiring in this department. However, EE also has a surprisingly light undergraduate workload (the second lowest on the campus in terms of students FTE per permanently budgeted FTE). In that regard, the committee notes that the core EE curriculum depends heavily on Computer Science (CS) and Computer Engineering (CE) courses (both at the undergraduate and graduate levels), and that our reading of the external review suggests that the department is trying to cover too many subfields and does not yet have a clear sense of direction. The proposed hire in Bioelectronics would appear to open yet another such subfield, further diluting the strengths of the department. Finally, Dean Konopelski has informed us that there are currently two on-going hires in the EE department (including one LSOE), and there is the potential for an additional target of excellence (TOE) request in the near future. For these reasons, CPB feels that additional growth in EE should be delayed until hiring is completed of a permanent dean, who can provide long-term leadership, and until the potential CS/CS/EE merger is resolved. Even if no such merger occurs, hires in EE will need to be evaluated in the future context of their effect on the combined portfolio of these three departments. Hence, we do not endorse the BSOE Dean's 4th priority, Electrical Engineering – Bioelectronics, which we recommend should be treated as the lowest divisional priority.

CPB also discussed the FTE requests for Computer Science at length and very strongly supports them. Multiple factors make additional hiring in Computer Science a top priority for the campus. These include the recent loss of several faculty to outside offers and to the Computational Media Department, this department's ability to support important campus priorities like graduate growth, and the very large increases in Computer Science course enrollment and incoming proposed majors. Indeed, the per-faculty workloads in this department have increased at an astonishing rate over the last five years and are likely to continue doing so. **Computer Science - Computer Security** is in our view the highest divisional and departmental priority this cycle. CPB also prioritizes the TOE position or (if we are unable to land her) a junior recruitment for the **Computer Science - Data Privacy** position. CPB additionally recommends that another hire be centrally funded and authorized in **Computer Science - Databases** which both supports a critical area for the campus and provides needed flexibility within the division.

The Dean's next priority, and ours, is the **AMS - Causal Inference** position. This position would augment a successful BSOE department with a very high undergraduate workload (the third largest on campus), contribute disproportionately to graduate growth, and boost the Data Science initiative and its ability to expand into Silicon Valley. We strongly support a hire in this area.

Given continued central and divisional support for the Technology Management (TM) Department, CPB sees the need to increase the department faculty to a sustainable level. CPB understands that the **Technology Management – Information Science and Technology** position was authorized with a waiver of recruitment position for a second hire using provision #878. We recognize the possibility of highly positive and productive outcomes of this and another previously authorized search this cycle. However, if both of the on-going hires were to fail, we recommend this hire not be reauthorized and that the status of TM be reconsidered.

Finally, Planning & Budget documents indicate that the *Computational Media – LSOE* partner hire was funded using central FTE at the time of CP/EVC approval. Due to the disposition of the cluster hire slots for 2015-16 recruitment, there was an extra slot which, for reasons of simplicity and expediency, Planning & Budget decided to allocate for this LSOE position. For the record and to avoid setting a bad precedent, however, we want to register here our dissatisfaction with the process.

Humanities

CPB recommends that all four requests from Humanities be approved, including the request for central funding for an FTE in History of Consciousness. The list includes: Literature – Spanish Language Literatures, History of Consciousness – Critical and Cultural Theory, TBD – Critical Race and Ethnic Studies, and LAL – English as a Second Language.

History of Consciousness has traditionally played a central role in building UCSC's reputation for pioneering new fields of research within the humanities and social sciences and has brought great distinction to the campus. Along with the recent TOE recruitment, this position will help reinvigorate the department while contributing to the excellence of graduate programs across the divisions.

Physical & Biological Sciences

CPB recommends approval of the authorizations requested by the Physical & Biological Sciences Division up to and including priority 9: *Science Communication – LSOE*, MCD Biology - Molecular Biology, Mathematics - Algebra, Physics - Materials/Condensed Matter, Ocean Sciences - Physical Oceanography, *EE Biology - LSOE*, Mathematics – Analysis/Geometry, MCD Biology - Mammalian Genetics, Chemistry and Biochemistry – Organic Chemistry/Biomedical, and Astronomy and Astrophysics – Theoretical and Computational Astrophysics.

Dean Koch was clear and convincing about the priorities for this Division, but three comments are nevertheless in order. First, the two slots for the Mathematics Department are surely justified by the Department's workload and by the central role that Mathematics should play in the intellectual life of the campus. However, CPB is concerned about the disconnect with the Applied Mathematics half of Applied Mathematics & Statistics (AMS), in terms of curriculum as well as research. It might be helpful to have two outside members (including an appropriate faculty from AMS) serve on these Mathematics Department searches next year. Furthermore, there should be the expectation that Mathematics Department members will serve on future searches in AMS, and that there will be more cooperation (especially from the Applied Mathematics side) to better serve campus goals. In the long term, we would be interested in exploring mechanisms that would allow the campus to determine what is the right mix of mathematical sciences subdisciplines (pure, applied and statistics) for UCSC, and the best way to allocate workloads across departments that belong to two different divisions.

A second comment concerns the MCDB - Mammalian Biology position, which already has been authorized for a second hire from this year's candidate pool using a divisionally (rather than centrally) held FTE. Should that hire fail this year, CPB would assign a lower priority than Dean Koch to reauthorization. We understand that the workload (both graduate and undergraduate) in MCDB is in some ways comparable to that of similar departments elsewhere, but the number of graduate students is quite low by UCSC standards, suggesting to us that graduate growth would be better served by using the FTE to expand some other department. More generally, although we are supportive of maintaining the size of the department given the large number of majors in their programs, we believe that additional growth in MCDB needs to be conditioned to an improvement in the graduate student to permanently budgeted FTE ratio.

Finally, we should note that we believe that the Division's 10th ranked position, **Physics – Materials/Condensed Matter** is important for the campus, but it is very expensive and can be delayed. In fact, Dean Koch communicated to us during consultation that, even if the hire was approved, he would be unlikely to be able to cover the start-up funds. However, if sufficient funds should somehow become available for the center to fund a 13th new slot next year, CPB would recommend this Physics position. We expect that next year PBSci will garner a larger share of the available central positions than this year.

Social Sciences

CPB recommends approval of the authorizations requested by the Social Sciences Division up to and including priority 8, that is: Environmental Studies – Watersheds, Surface Water, and Agriculture, Psychology - Cognitive - HCI Cluster, Anthropology - Biological Anthropology of Human Ecology, Economics - International Finance, Economics - Environmental Economics, Latin American & Latino Studies – Brazilian Studies, and Politics – Global Environmental and Resource Politics respectively.

We recommend investing one central FTE for this Division. CPB concurs with Dean Kamieniecki that, although the Economics Department and the Social Sciences Division each have higher priorities, the **Environmental Economics** position, supported centrally, will fill a critical gap in the campus' research and teaching portfolio in sustainability. A quantitative social scientist specializing in Natural Resource and Environmental policy analysis was the highest priority for the highest ranked FIGH proposal (now called ASCEND), and would be a major boost to the Coastal Sustainability MS program. Preferably the search committee will include members of the Environmental Sciences Department and/or PBSci affiliates of ASCEND or Coastal Sustainability.

The Division's 9th priority, for Sociology, was not highly prioritized at this time. Although CPB is aware of the high turnover in this area, the current slate of hires (by our count five, including a presidential postdoctoral fellow) seems to be as many as the Department can handle right now. When Sociology adjusts to their new faculty and re-assesses their focus, their priority for new hires will surely increase.

Sincerely,

Daniel Friedman, Chair

Committee on Planning and Budget

cc: VC Delaney
Academic Deans
VPAA Lee
VPDGS Miller
GC Chair Kletzer
AVC Peterson