

May 10, 2021

CP/EVC Lori Kletzer
Chancellor's Office

RE: 2021-22 Faculty FTE Recommendations

Dear Lori,

The Committee on Planning and Budget (CPB) has reviewed the divisional faculty recruitment requests for 2021-22. In preparing its recommendations, CPB reviewed the faculty recruitment call to the academic divisions (dated January 7, 2021), the requests for faculty recruitment submitted by the divisions, and in addition, consulted with each of the divisional deans, all of whom received a set of questions in advance. CPB invited the Chairs of Graduate Council (GC) and the Committee on Educational Policy (CEP) to attend each of the dean consultations. CPB also consulted with the GC and CEP chairs on their perspectives, as chairs of their committees, related to implications for graduate and undergraduate education respectively.

Principles for Review

CPB's approach to the FTE call was to first examine and rank the positions within a division and then to examine the case each division made for central position(s). CPB's deliberations about the FTE requests were guided by the principles outlined in the FTE call letter, as well as by priorities established by CPB. The priorities CPB developed were responsive to a year in which the COVID-19 pandemic placed the University of California system in a state of deep budget uncertainty, and that too after the graduate student wildcat strike raised profound questions, pre-COVID, about the levels of support provided to graduate programs and graduate students. As such, CPB did not focus on how FTE provisions would drive growth per se (e.g., "by supporting significant doctoral growth," or departments with "high growth potential," or new interdisciplinary initiatives), as had been prioritized by CPB in previous years (specifically 2014-15 to 2018-19). Instead, CPB focused on how the proposed FTE positions would stabilize and strengthen existing undergraduate and graduate programs as well as established campus initiatives. However, in focusing on stabilizing and strengthening rather than growing, CPB did not take a conservative approach by recommending the lower number in a range of new FTEs provided in the FTE call, as it had to do in 2018-19 and 2019-20. Given that the Governor has proposed a full restoration of the UC budget, CPB made its recommendation based on the maximum number of new FTEs provided in the FTE call: eight rather than six or seven. Since you indicated a willingness to support eight new positions during one of your consultation visits, CPB also opted not to rank its recommendations for the central positions. However, CPB would be happy to provide rankings should you ultimately decide to authorize fewer than eight new positions. CPB also provided recommendations should you decide to allocate more than the eight new positions.

At a high level, CPB reinforced the fundamental principle that the University of California's educational mission as a research university is to provide a UC quality education, defined broadly as the opportunity for students to work with world class researchers and to therefore gain "closely mentored" research experience in an intellectual and campus environment committed to diversity, equity and inclusion.¹ With the principles of a UC quality education in mind, as well as the principles of stabilizing and strengthening existing programs and initiatives, the specific factors CPB prioritized when evaluating each FTE request

¹ We refer to the [2011 UCEP memo](#) on UC quality education which states that "The quality of education at the University of California is fundamentally derived from two key components: the background and expertise of UC faculty and students and the rich research-based environment inherent in the UC system of ten top-tier public land-grant research institutions."

were: a) improving undergraduate success and experience by addressing impaction and high student-to-faculty ratios; b) supporting programs that are challenged to mount their undergraduate and/or graduate curriculum; c) increasing disciplinary and demographic diversity; d) strengthening graduate education; e) and, where disciplinarily relevant, recognizing positions that might support graduate education through extramural support. CPB was very encouraged by all the deans' commitment to promoting inclusion, equity, and diversity within their FTE proposals. We note, however, significant variance in how each dean conceptualized this issue, with some focusing primarily on demographic diversity and others emphasizing how curricular and intellectual diversity can serve as drivers for equity, inclusion and demographic diversity. CPB considers all to be important, with demographic diversity helping students see themselves in their professors, and curricular and intellectual diversity helping to keep UCSC's research and teaching vital. We encourage the deans to have a rich discussion with each other, and come to some agreement, on a range of approaches suitable to their divisions for how they can promote diversity, equity, and inclusion within their respective units.

CPB also notes that the deans did not necessarily conceptualize the central positions in the same way, with some deprioritizing central positions, figuring that they would assign divisional resources to positions they absolutely needed, and some doing the reverse. CPB agrees with the former approach and suggests that this be considered the explicit practice in your next FTE call.

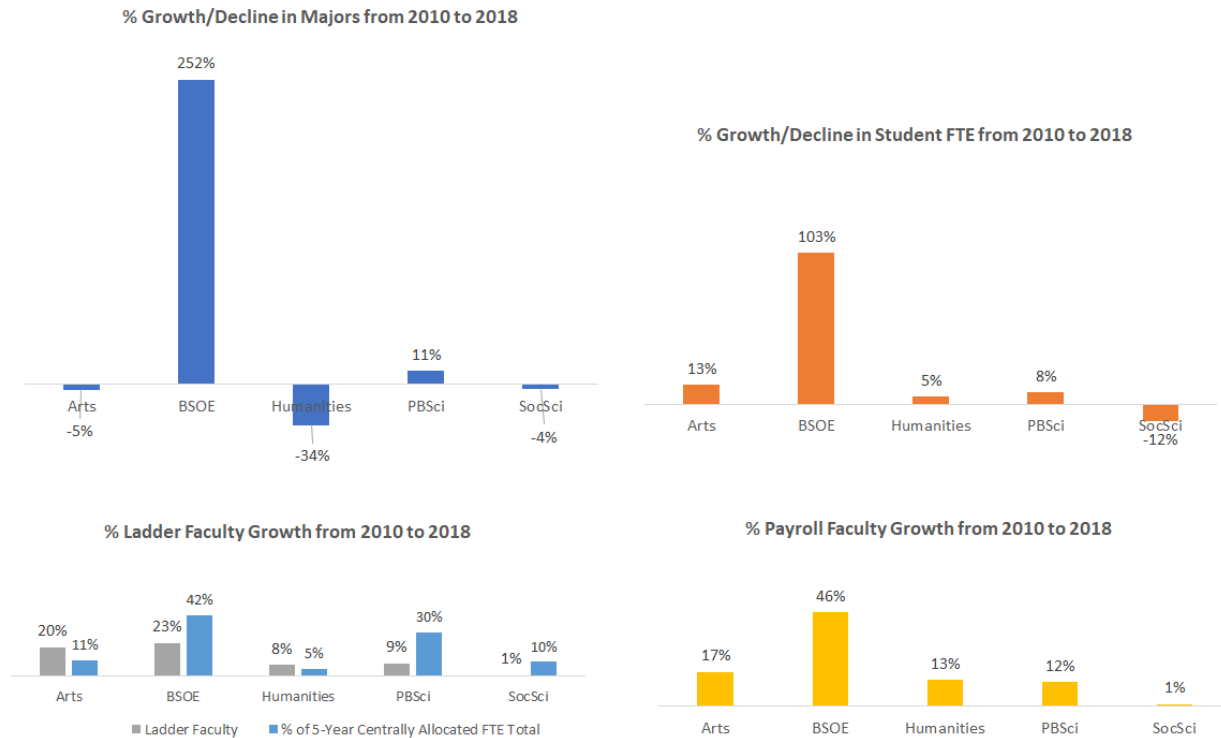
Review Process

CPB received the FTE requests on March 2, 2021. CPB reviewed the submissions over eight meetings, consulting with each Divisional Dean and the CEP and GC chairs. CPB assigned a team to review and facilitate discussion of each division's submissions. After each team presented and the committee discussed, CPB spent two additional sessions to discuss each FTE request in the context of its home division and each Division's case for central position(s). CPB utilized a matrix to examine each FTE request through the factors elaborated above. CPB reviewed and structured in a comparable format data on faculty FTE by department, undergraduate and graduate student-to-faculty workload, undergraduate major by faculty FTE, and department support of graduate students through extramural funding. This data was provided by the Office of Planning and Budget and the Joint Senate-Administration Working Group on Graduate Education (2021).

Summary of Recommendations

The factors CPB considered for recommending the allocation of central positions were: first, to support programs that have experienced substantial student population growth relative to faculty growth so as to help stabilize and strengthen those programs; and second, to support programs that engage with existing campus initiatives.

When it comes to student growth over the years of 2010 to 2018, BSOE has seen an expansion in majors and student FTE by 252% and 103% respectively, but has only seen its ladder and payroll faculty grow by 23% and 46% respectively (see figure 1 below, developed by CPB from data provided by IRAPs). While other divisions have seen some growth in faculty, the number of majors and student FTE have either been in decline (Arts, Humanities, SocSci) or have modestly increased (PBSci).

Figure 1

CPB therefore recommends that the majority of available central positions be allocated to BSOE (5 of the 8 allocated central positions). CPB does not view this as just a market-based argument. Rather, the campus ought to support each program in its mission to mount a UC quality undergraduate and graduate education: having student-to-faculty ratios at the levels found in BSOE, most especially in Computer Science and Engineering (CSE), goes against that spirit: CSE's undergraduate student-to-faculty ratio is 41.4, which is the highest on campus (among departments) and is nearly twice the campus average (see Table 1 in the appendix). This workload imbalance is also found in BSOE with its graduate programs (both at the masters and doctoral level). As seen in Table 3 in the Appendix, BSOE has 6 departments in the top 10 with the highest total graduate FTE to permanent budgeted faculty FTE. These range from Statistics, with the third highest ratio at 7.75 to Applied Math with the ninth highest ratio at 4.48. Sitting between those two departments in the top ten are Computational Media at 7.55; Computer Science and Engineering at 6.48; Biomolecular Engineering at 6.25; and Electrical and Computer Engineering at 5.07.

Though BSOE has driven student enrollment growth at UCSC, CPB underscores that undergraduate student-to-faculty ratios are higher overall at UCSC than at any other UC campus. Moreover, as Table 1 in the Appendix shows, this burden is shared across the campus: UCSC has 20 departments with an undergraduate student-to-faculty ratio of 21 or higher (21 being the campus average), with 5 departments from the Arts; 3 from BSOE, 4 from Hum; 4 from PBSci; and 4 from SocSci. These numbers do not include the divisional programs, such as Arts, Games and Playable Media (AGPM) in the Arts Division, and Critical Race and Ethnic Studies (CRES) in the Humanities Division, which also have some of the highest undergraduate student-to-faculty workloads on campus.

In assessing the allocation of central positions, CPB also supports Divisions that are contributing to campus initiatives for intellectual and disciplinary growth. CPB found that the Arts, Humanities and Social Science Divisions made compelling cases for such programs and therefore recommends that these divisions receive FTE from the center.

Arts: CPB strongly supports a central position for the Arts Division. The division has established its top priorities by assigning divisional FTE to positions proposed for Film and Digital Media, Art + Design: Games and Playable Media (AGPM), and Art. One of those positions, the LPSOE designated for AGPM, is meant to support online teaching efforts *throughout* the division and not just for AGPM. This choice follows from the online education initiative established by former EVC Tromp. CPB recognizes that the division is explicitly meeting a campus priority with a high-priority divisional FTE. Thus we highly recommend the central FTE requested to support Music, which would reward the division's choice while supporting another department with a highly demanding student-to-faculty ratio..

Humanities (Hum): CPB strongly recommends a central position to support the Black Studies minor, which emerged out of long-standing student demand. The Senate recently approved this minor, and given the wide campus commitment to its establishment, should be supported with a central FTE.

Social Sciences (SocSci): CPB strongly supports a central position to support the Global and Community Health (GCH) initiative established last year. CPB notes that the first year of hires resulted in an imbalance of positions in the Physical and Biological Sciences (PBSci) division and therefore recommends an additional central position for the Social Sciences division this year.

Physical and Biological Sciences (PBSci): CPB does not recommend a central position for PBSci this year. CPB did not come to this conclusion easily as PBSci has some of the most distinguished programs on campus, and has two departments in the top ten with student-to-faculty ratios, and four departments at or above the campus average. Additionally, of the eight departments on campus that support graduate students with approximately 40% or more of total funding coming from extramural sources, six come from PBSci². However, CPB found two of the requested positions--Computational Materials (ranked #3 by the dean) and Astrobiology (ranked #4 by the dean)--to be premature in relation to their readiness to launch, and so were deprioritized. Though CPB would enthusiastically endorse centrally allocated positions for both positions, it felt more prudent to do so next year. CPB also argues that PBSci benefited from more central positions last year to support the GCH initiative.

The summary table of central positions that CPB recommends is below.

Table 1

Division	CPB's recommendation for # of Central Positions to be allocated
Arts	1
BSOE	5
Hum	1
PBSci	0
SocSci	1
Total	8

² The Joint Senate-Administration Working Group on Graduate Education Report (2021).

As will be explained below, should you decide to authorize more than 8 new positions, CPB recommends adding the Agroecology/Watershed Ecology (AgTech) in the Social Sciences Division, and the Critical Race and Ethnic Studies (CRES) Indigenous Studies position in the Humanities Division, as they too support campus initiatives.

Moving to CPB's recommendations for all the divisional FTE requests, CPB provides Table 2 below as a summary. These recommendations reflect the consensus of the committee and will be explained in the following section.

Table 2

Division	Proposed by Dean	CPB Recommendations
Arts	1. Film and Digital Media, Indigenous Media, Cultural Sovereignty and Decolonization	Support all four requests
	2. Art, Social Design	
	3. Art+Design: Games & Playable Media, Digital Creativity	
	4. Music, Composer in African/African-American/African-Diasportic Traditions	
BSOE	1. Biomolecular Engineering, Bioengineering/Biotechnology	Support positions 1, 4, 5, 6, 8, 9.
	2. Biomolecular Engineering, Bioengineering/Biotechnology	
	3. Applied Mathematics, Mathematical Machine Learning and Data-driven methods	
	4. Computer Science & Engineering, Computing	
	5. Computer Science & Engineering, Computing	
	6. Computational Media, Computer Game Design	
	7. Electrical & Computer Engineering, Digital Hardware Electronics	
	8. Computer Science & Engineering, Computing	
	9. Applied Mathematics- LSOE	
	10. Biomolecular Engineering, Computational Genomics	
Hum	1. Linguistics, Syntax	Support positions 1, 2, 3, 4, 5, and 7.
	2. History of Consciousness, Open	
	3. Humanities Division-CRES, Black Studies	
	4. Languages & Applied Linguistics, Japanese Applied Linguistics	

	5. History of Consciousness, Open	
	6. Humanities Division-CRES, Indigenous Studies	
	7. Literature/History, Classics LSOE	
PBSci	1. EEB, Evolutionary Biology	Support positions 1, 2, 5
	2. Mathematics, Mathematical Physics	
	3. Chemistry or Physics, Computational Materials	
	4. Chem, EEB, EPS, METX, OS, Astrobio: Origins of Life	
	5. Physics or Astronomy, Active Learning/Intro Physics	
	6. MCD Biology, Neuroscience: Brain Org/Structure or Stem cells	
SocSci	1. Education, Early Literacy	Support positions 1, 2, 4, 5, 6, 7, 8
	2. Education, Educational Policy Studies	
	3. Environmental Studies, Agroecology/Watershed Ecology	
	4. Environmental Studies, Environmental Law and Policy	
	5. Environmental Studies, Ecological Aquaculture	
	6. Latin American & Latino Studies, Migrant Health and Social Justice	
	7. Anthropology, Biological Anthropology of Health and Resilience	
	8. Sociology, Community Engaged Research	

Discussion of Divisional FTE Requests

Arts

The Arts Division requested authorizations to hire three divisionally-funded FTEs and one centrally allocated FTE. CPB supports Interim Dean Warburton's FTE requests--both the positions themselves and their ranking. In each case, the positions requested are identified as pivotal to a department's plans for the future *and* necessary for maintaining its *current* ability to succeed in its mission. Each of the requested positions enables at least one of the following priorities while simultaneously reducing student-to-faculty ratios that, in each affected department, exceed the campus median: (1) reduce student-to-faculty ratio and enable a department to provide equitably for student success; (2) amplify and reinvigorate a department's research profile and ability to attract graduate students; (3) increase diversity while supporting "decolonizing," more inclusive curricula; (4) support divisional and campus online presence and thus greater access for students.

CPB is particularly impressed by the vision of diversity that emerges in the Arts FTE document. According to Interim Dean Warburton, the FTE priorities emerged from conversations held at departmental and programmatic levels and in discussions and consensus achieved with department chairs. Two of the Arts FTE requests (FDM and Music) support research fields that work to decolonize curricula and epistemological paradigms, and explore the experience for peoples underrepresented in the academy. A third (Art), supports the launch of a program explicitly focusing on “social impact design,” which will certainly attract students and produce research tied to social justice. Finally, the fourth (AGPM), in offering and supporting online instruction divisionwide, would increase students’ access to smaller classes and support students for whom online coursework would reduce time to degree. Attention to diversity is thus woven into the FTE request at the level of curricular and research priorities, an approach that will certainly lead to demographically diverse candidate pools and likely attract demographically diverse students.

Requested (and recommended) positions:

- **#1) Film and Digital Media: Indigenous Media, Cultural Sovereignty, and Decolonization (Assistant Professor):** FDM’s steady growth and the loss of two senior faculty have led to a student/faculty ratio of ~35:1 and a pressing need for more upper-division seminars for undergraduates and more mentoring support for MFA and PhD students. The proposed appointment in Indigenous Media will simultaneously increase student access to needed courses, contribute to the graduate program, and support the division’s commitment to addressing diversity, equity, and inclusion organically via urgent intellectual and curricular explorations.
- **#2) Art + Design: Games and Playable Media (Lecturer with Potential Security of Employment):** AGPM has experienced explosive growth and currently has a student/faculty ratio of 88:1--unsustainable in the long term, especially if the program continues to grow. This hire would reduce the student/faculty ratio and student time to degree, enable more time for research, and, critically, support the division’s efforts to provide high quality online instruction.
- **#3) Art: Artist in Social Design (Assistant Professor):** With the launch of a new MFA program, Art faculty are increasing their direct advising and mentoring work even as they anticipate several more retirements following the five of recent years. This new hire will ease the effect of burgeoning enrollments, enable a more sustainable balance of undergraduate and graduate teaching and advising, and, with its unique focus on “social impact design,” amplify the research visibility of the department.
- **#4) Music: Composer in African/African American/African- Diasporic Traditions (Assistant Professor):** Music has fundamentally diversified its curriculum by offering three new concentrations in its BA, in addition to existing MA, Doctoral, and BM degrees. Music has the highest enrollments in the division and is challenged with stabilizing its undergraduate and graduate curricula with three recent retirements, one confirmed retirement at the end of this academic year, and one anticipated retirement at the end of next academic year. This hire will simultaneously support the existing DMA program, which has experienced the bulk of the recent/anticipated retirements (3 of the 5 referred to above), and its new undergraduate concentrations, especially the composition based contemporary practices concentration and the global musics concentration. As such, CPB supports this position--it contributes to equitable teaching and learning by filling a vacated line, supports graduate and undergraduate programs, and contributes to an in-demand path of study.

Because the proposed hire in Music is tied to a request for a central provision, if there is no centrally provided FTE, there will be no hire in Music in 2021-22. Interim Dean Warburton’s rationale for this prioritization is that while all four departments are in urgent need of new faculty, the faculty/student ratios in the top three priorities are higher.

Table 3

Position	CPB Ranking	Dean Ranking	Recommend Central?
Indigenous Media, Cultural Sovereignty and Decolonization	1	1	N/A
Social Design	2	3	N/A
Digital Creativity	3	2	N/A
Composer in African / African-American / African-Diasporic Traditions.	4	4	Yes

Baskin School of Engineering

The Baskin School of Engineering requested authorizations to hire one divisionally-funded FTE and nine centrally allocated FTEs. In assessing the BSOE FTE request, CPB considered issues including: impactation, undergraduate major distribution, student needs, support for graduate education through extramural GSR support, and the overall stability and health of individual departments. CPB recommends that FTE requests in the future should not only address the above issues, but also clarify structural plans (both immediate and future) for the Division.

Below we discuss individual recommendations for FTE allocations. Our rankings differ from the Dean's specifically around issues of impactation and of the extremely varied faculty-to-student ratios among departments within the division.

- **#1) Biomolecular Engineering (BME): Bioengineering/ Biotech:** CPB strongly endorses the BME bioengineering/ biotech position as the top ranked divisional position. It is well justified and divisionally funded as a separation replacement.
- **#2, #3 & #5) Computer Science & Engineering (CSE): Computing:** CPB recommends elevating the ranking of the three CSE "computing" positions from #4, 5, & 8 to #2, 3 and #5. CPB's rationale is: CSE's undergraduate programs are formally impacted, and the department has some of the highest teaching loads on campus at the undergraduate, masters and doctoral levels; and CSE faculty is successful in raising extramural funds to support graduate student education through GSR funding. CPB felt it was important to stabilize and support departments with high enrollment before allocating central positions to departments with lower enrollment.
- **#4) Applied Mathematics (AM): LSOE:** CPB recommends elevating the ranking of **Applied Mathematics LSOE** from #9 to #4. CPB views math as a campus wide challenge and notes the extremely high teaching loads in the Mathematics Department in PBSci. CPB argues that an LSOE in AM will fill an immediate campus need. CPB therefore recommends prioritizing the Math LSOE.
- **#5) CSE: Computing:** See above.
- **#6) Computational Media (CM): LSOE Computer Game Design:** CPB recommends elevating the Computational Media position from #6 to #5. The CM department's instructional workload is at approximately the campus norm, but with more of an emphasis towards the upper-level curriculum. The LSOE would help stabilize the important capstone sequence in the gaming program.

- **#7) Biomolecular Engineering: Bioengineering and Biotech:** CPB recommends deprioritizing this position from #2 to #7, for the following reasons: BME teaching load is roughly *half* of campus average, and a *quarter* of the CSE load; BME, as a stable department, may need FTE less than other departments and programs; GSR/FTE and GSR funding / FTE is not greatly different than other departments with far greater teaching loads; from the FTE request, CPB did not see sufficient arguments to prioritize this position.
- **#8) Electrical Engineering (EE): Digital Hardware Electronics:** CPB moved this position from #7 to #8 because the EE department instructional workload is about half the campus norm. This hire is justifiably a lower priority in comparison to other departments in the division.
- **#9) Biomolecular Engineering, Computational Genomics.** Same rationale as provided above.
- **#10) Applied Mathematics, Mathematical Machine Learning and Data-driven methods.** CPB recommends deprioritizing the ladder rank hire (from #3 to #10) until after the department's viability review is complete.

Table 4

Department	Position	CPB Ranking	Dean Ranking	Recommended Central?
Biomolecular Engineering	Bioengineering/Biotechnology	1	1	N/A
Computer Science & Engineering	Computing	2	4	Yes
Computer Science & Engineering	Computing	3	5	Yes
Applied Mathematics- LSOE	Applied Mathematics	4	9	Yes
Computer Science & Engineering	Computing	5	8	Yes
Computational Media	LSOE Computer Game Design	6	6	Yes
Biomolecular Engineering	Bioengineering/Biotechnology	7	2	No
Electrical & Computer Engineering	Digital Hardware Electronics	8	7	No
Biomolecular Engineering	Computational Genomics	9	10	No
Applied Mathematics	Mathematical Machine Learning and Data-driven methods	10	3	No

Humanities

The Division of Humanities has requested authorizations to hire five divisionally-funded FTEs and two centrally allocated FTEs. As was the case for Interim Arts Dean Warburton, CPB was impressed with Dean Alinder's intellectually expansive approach to diversity. This can be seen in the narrative descriptions not only of positions in CRES, but also of those in HistCon (where Alinder hopes FTE growth will lead to a deepening engagement with global theory and possible research directions in areas such as indigeneity, decoloniality, and Black studies) and even Classics (where possible research and teaching areas for the position include indigeneity, critical perspectives on the use of ancient history in the public sphere, and critical race and ethnic studies, and gender studies). Nonetheless, after the top two rankings, CPB

recommends a slightly different ranking for positions 3 through 6. The rankings and the rationales are as follows:

- **#1) Linguistics: Syntax:** CPB strongly endorses the **Linguistics Syntax** position, which is a request for the reauthorization of a position that supports critical undergraduate and graduate curricular needs. The Linguistics department has a 25.7 UG student-to-faculty ratio which is fourth highest in the Humanities Division and is 1.22 times the campus average. The Linguistics department also has the second highest Doctoral FTE to permanent Budgeted Faculty FTE ratio in the Division (2.68) and raises a higher percentage of extramural funding to support its graduate students than other departments in the division: 11.2% of graduate support in the three years (from 2016-17 to 2018-19) came via extramural funds (the next highest department was Feminist Studies at 5.6%).
- **#2 & #4) History of Consciousness: Open:** CPB strongly endorses Dean Alinder's commitment to rebuilding **History of Consciousness (HistCon)**, and believes that the authorization of two positions is a bare minimum step in that direction. Last year, CPB recommended against a hire in HistCon until after its external review. The external review has taken place, was highly positive, and recommended at least two positions to stabilize the department. Dean Alinder has shown her commitment to rebuilding HistCon by dedicating two divisional positions to HistCon and by providing more staff support. HistCon has the largest Doctoral FTE to permanent Budgeted Faculty FTE ratio (12.8) on campus. These hires would allow HistCon to begin to stabilize its graduate curriculum, possibly have its undergraduate minor restored, and to bring its high doctoral student-to-faculty workload levels down.
- **#3) Language and Applied Linguistics: Japanese Applied Linguistics:** CPB also strongly supports the **Language and Applied Linguistics (LAAL)** position and recommends moving it from the fourth to the third rank. The LAAL position fulfills important student demands and was a highly prioritized position from the Division last year (and one that CPB recommended). LAAL has the second highest total undergraduate to total budgeted faculty FTE ratio in the Division (30.7), and eighth highest on campus, with a ratio that is 1.46 times higher than the campus average.
- **#4) History of Consciousness: Open:** See above.
- **#5) Classics LSOE:** CPB recommends elevating the ranking of the **Classics LSOE** position from #7 to #5 as there was a promise made by the previous Humanities Dean to request an FTE once a separation has been identified. CPB felt this commitment should be honored with Divisional resources. Moreover, the program (which sees a good number of enrollments each year) has seen two senior retirements recently, making this position essential to its stabilization.
- **#6) Humanities Division-CRES: Black Studies:** CPB strongly supports a central position to support the **CRES Black Studies position**. The Black Studies minor was recently approved, and CPB recommends that the commitment be honored with a central position. Moreover, CRES has been instrumental in growing not just student interest in the Humanities but in diversifying its intellectual project to support students across the entire campus who are interested in a wide range of issues related to BIPOC experiences more broadly and Black experiences more specifically, as well as supporting interests of numerous URM students.
- **#7) Humanities Division-CRES: Indigenous Studies:** Though CPB supports the **CRES Indigenous Studies** position (and the growth of Indigenous Studies on campus more broadly), CPB recommends that the Humanities Division wait until the process of CRES's departmentalization request is completed so that it can reassess Divisional needs in CRES, Feminist Studies and other departments that might require FTE support. However, should you approve two more than the original eight central positions, CPB recommends allocating a central FTE for this position.

Table 5

Department	Position	CPB Ranking	Dean Ranking	Recommended Central?
Linguistics	<i>Syntax - Reauthorization</i>	1	1	N/A
History of Consciousness	<i>Open</i>	2	2	N/A
Languages & Applied Linguistics	<i>Japanese Applied Linguistics</i>	3	4	N/A
History of Consciousness	<i>Open</i>	4	5	N/A
Literature/History	<i>Classics LSOE</i>	5	7	N/A
Humanities Division-CRES	<i>Black Studies</i>	6	3	Yes
Humanities Division-CRES	<i>Indigenous Studies</i>	7	6	No ³

Physical and Biological Sciences

The Division of Physical and Biological Sciences (PBSci) has requested authorizations to hire three replacement positions. CPB assumes these requests are for the authorizations of divisionally-funded FTEs. After the top two rankings, CPB recommends a slightly different ranking for positions #3 through #6. The rankings and the rationales are as follows:

- **#1 Ecology and Evolutionary Biology:** CPB agrees that a hire in **Evolutionary Biology** (EEB) is the first priority. EEB is one of the most impacted departments on campus, and this position will assist in alleviating demand among undergraduates for both courses in EEB as well as the EEB major. CPB also agreed that offering this position at the Associate level, would bring necessary leadership, and potentially attract a pool of candidates more likely to make substantive contributions to diversity.
- **#2) Mathematics: Mathematical Physics:** CPB agrees that **Mathematical Physics** should be the second ranked position. Mathematics has the second highest student-to-faculty ratio on campus which, at 38.7 is 1.85 times the campus average. Mathematics also contributes significantly to the curriculum of other units on campus. This position will contribute substantially to alleviating demand for the Math curriculum, and build strong connections with various areas of physics and applications to problems arising in physics.
- **#3) Physics or Astronomy: Active Learning/Intro Physics:** CPB recommends elevating the ranking of the **LPSOE in Active Learning/Intro Physics** from priority #5 to priority #3. Like Mathematics, the undergraduate curriculum in Physics would benefit significantly from additional teaching support, and CPB argues that an LPSOE in Physics would contribute substantially both to mounting the introductory sequence, and also to rethinking Physics pedagogy across the curriculum. Dean Koch suggests this position could be housed in either Astronomy or Physics. CPB recommends this position be housed in Physics since the Astronomy undergraduate student-to-faculty workload ratio is substantially less than in Physics (14 compared to 22.99).
- **#4) Chemistry/Physics, Computational Materials:** CPB moved the **Computational Materials** position down from position #3 to #4. In deliberating this position, CPB acknowledged that it would

³ If CP/EVC Kletzer allocates ten central positions, CPB recommends allocating an FTE for the CRES Indigenous Studies position.

add strength to the planned graduate program in Materials Science & Engineering, and add bandwidth to existing faculty in the area. However, CPB was concerned that this program has been in the making for a few years, and the level of commitment from BSOE in mounting the Materials Science & Engineering graduate program is not clear. CPB would support a central line for this position once the program has been approved on campus, as it would contribute to a proposed new inter-divisional graduate program.

- **#5) Chem, EEB, EPS, METX, OS: Astrobiology-Origins of Life:** CPB recommends moving the **Astrobiology** position from the #4 to #5 position. CPB agrees that a position in Astrobiology would bring research excellence to UCSC in an exciting emerging field, one that is not yet well represented in the UC System. CPB also agrees that a few key hires could leverage significant federal funding and put UCSC on the map in this field. However, CPB remains concerned that this position was not one that emerged out of conversations within departments, and thus remains unclear on where this program would be housed and what department support it would receive. CPB would support a higher ranking for this position in the future with clearer evidence for broad department support.
- **#6 Molecular, Cellular and Developmental (MCD) Biology: Neuroscience: Brain Org/Structure or Stem Cells:** CPB agreed that the position in **Neuroscience** would add key strength in a small but increasingly in demand focus of MCDB, and that this position should remain priority #6.

Table 6

Department	Position	CPB Ranking	Dean Ranking	Recommended Central?
EEB	<i>Evolutionary biology</i>	1	1	N/A
Mathematics	<i>Mathematical Physics</i>	2	2	N/A
Physics (recommend) or Astronomy	<i>Active Learning/Intro Physics</i>	3	5	N/A
Chemistry or Physics	<i>Computational Materials</i>	4	3	No
Chem, EEB, EPS, METX, OS	<i>Astrobio: Origins of Life</i>	5	4	No
MCD Biology	<i>Neuroscience: Brain Org/Structure or Stem Cells</i>	6	6	No

Social Sciences

The Division of Social Sciences has requested authorizations to hire six divisionally-funded FTEs and two centrally allocated FTEs. After the dean's top two rankings, CPB recommends a slightly different ranking. The rankings and the rationales are as follows:

- **#1 and #2) Education: Early Literacy & Educational Policy Studies:** CPB concurred with the dean in the top two ranked positions for the department of Education, a unit that has seen several retirements and separations, has launched a new major, and contributes to campus diversity through the population of students served and their success. The first position is for a position in Early Literacy, and the second is in Educational Policy studies. The second position is also expected to

serve the graduate program, in particular, and help the department enhance the research portfolio and assist in garnering external funding.

- **#2) Education: Educational Policy Studies:** See above.
- **#3) Anthropology: Biological Anthropology of Health and Resilience:** CPB recommends moving the Anthropology request up from position #7 to position #3. CPB concurs with the dean that this is a desperately-needed hire given recent losses in the subfield of biological anthropology, an area that has been successful in providing lab-based learning opportunities for first generation and URM students and also maintains both a separate undergraduate and graduate track. This position would also contribute to the GCH Initiative.
- **#4) Environmental Studies: Environmental Law and Policy:** CPB agrees that Position #4 in **Environmental Law and Policy** will address critical curriculum needs caused by unexpected faculty separations, and is important as well in order to maintain a balance in the department between the natural and social sciences.
- **#5) Environmental Studies: Ecological Aquaculture:** CPB also agrees that position #5 in **Ecological Aquaculture** supports a campus strength in food and water systems research. The experiential learning and research opportunities this position could provide are unique to the campus and CPB recommends authorization this FTE.
- **#6) Sociology: Community Engaged Research:** CPB moved the Sociology LPSOE position in Community-Engaged Research up from position #8 to to position #6 after meeting with the dean, who noted that the position is critical to the administrative home change of Community Studies to Sociology. As well, this position is designed to provide more experiential learning for undergrads, drawing them into research and enhancing student success.
- **#7) Latin American and Latino Studies: Migrant Health and Social Justice (GCH):** CPB strongly supports the **Migrant Health and Social Justice** position in LALS and recommends that the center provide this position as it supports the campus initiative on Global and Community Health established last year. We place this position above the Agroecology ENVS position because it would do the important work of helping to achieve balance between PBSci and SocSci for the GCH Initiative.
- **#8) Environmental Studies: Agroecology/Watershed Ecology (AgTech):** CPB recommends a change in ranking of the **Agroecology** position from #3 to #8 since this is a growth initiative. Should you decide to allocate more than eight new FTE, CPB would recommend allocating a central position for **Agroecology** as this position would help maintain the new Agroecology major and allow collaborative research between SocSci and BSoE. Additionally, this position would support ENV's efforts to garner additional extramural funding, and would strengthen the ENV's doctoral program.

Table 7

Department	Position	CPB Ranking	Dean Ranking	Recommended Central?
Education	<i>Early Literacy</i>	1	1	N/A
Education	<i>Educational Policy Studies</i>	2	2	N/A
Anthropology	<i>Biological Anthropology of Health and Resilience</i>	3	7	N/A
Environmental Studies	<i>Environmental Law and Policy</i>	4	4	N/A
Environmental Studies	<i>Ecological Aquaculture</i>	5	5	N/A
Sociology	<i>Community Engaged Research</i>	6	8	N/A
Latin American & Latino Studies	<i>Migrant Health and Social Justice (GCH)</i>	7	6	Yes
Environmental Studies	<i>Agroecology/Watershed Ecology (AgTech)</i>	8	3	No ⁴

CPB appreciates the opportunity to provide its recommendations on the 2021-22 faculty FTE requests. We hope you find the committee's deliberations helpful, and look forward to further discussion as needed on the recommendations and CPB's review process.

Sincerely,



Dard Neuman, Chair
Committee on Planning and Budget

cc: Academic Deans
Chancellor Larive
iAVC Register
VPAA Lee
iVPDGS Williams
VPDUE Hughey
iVCSAS Baszile
Graduate Council Chair Smith
CEP Chair Larrabee
Senate Chair Brundage
Senate Director Mednick
AVC McClintock

⁴ If CP/EVC Kletzer allocates nine central positions, CPB recommends a central FTE for Agroecology/Watershed Ecology.

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Appendix

Table 1 presents the total undergraduate FTE enrollment to budgeted faculty FTE ratio. The table is ranked from highest to lowest. The last column (total undergraduate (UG) FTE to budgeted faculty FTE ratio index) indicates each department's ratio to the campus average: CSE's index of 197 means that it is 1.97 times higher than the campus average.

Table 1.

Undergraduate FTE and Faculty FTE analysis						
Dept	Division	TotalUGFTE	Total Budgeted Faculty FTE	Total UG FTE to Total Budgeted Faculty FTE Ratio	Campus Ranking	Total UG FTE to Budgeted Faculty FTE Ratio Index
Computer Science and Engineering	BSOE	2129.3	51.5	41.4	1	197
Mathematics	PBSci	942.3	24.3	38.7	2	185
Writing Program	Hum	511.3	13.6	37.5	3	179
Statistics	BSOE	385.7	11.9	32.3	4	154
Theater Arts	Arts	388.5	12.5	31.0	5	148
Psychology	SocSci	867	28.2	30.8	6	147
Languages & Applied Linguistics	Hum	380.4	12.4	30.7	7	146
Philosophy	Hum	270.6	9.3	29.1	8	139
Chemistry and Biochemistry	PBSci	745.2	26.9	27.7	9	132
Art	Arts	298.8	11.4	26.2	10	125
History of Art & Visual Culture	Arts	326.4	12.5	26.2	11	125
Linguistics	Hum	290.4	11.3	25.7	12	122
Economics	SocSci	902.7	35.6	25.4	13	121
Physics	PBSci	596.7	26.0	23.0	14	110
Politics	SocSci	514	22.8	22.6	15	107
Applied Mathematics	BSOE	217.9	10.1	21.5	16	102
Film and Digital Media	Arts	443.6	20.8	21.3	17	102
Music	Arts	481.2	22.7	21.2	18	101

Mol/Cell/Developmental Biology	PBSci	608.7	29.2	20.9	19	99
Sociology	SocSci	398.2	19.3	20.6	20	98
Computational Media	BSOE	350.5	18.4	19.0	21	91
History	Hum	509	27.8	18.3	22	87
Ecology & Evolutionary Biology	PBSci	479.8	27.7	17.3	23	82
Latin American and Latino Studies	SocSci	207.5	12.2	17.0	24	81
Anthropology	SocSci	346.9	21.73	15.96	25	76
Literature	Hum	457.8	29.06	15.75	26	75
Environmental Studies	SocSci	358.8	23.61	15.20	27	72
History of Consciousness	Hum	55.3	3.66	15.11	28	72
Feminist Studies	Hum	150.4	10.37	14.50	29	69
Astronomy and Astrophysics	PBSci	159.9	11.42	14.00	30	67
Earth and Planetary Sciences	PBSci	298.5	21.61	13.81	31	66
Ocean Sciences	PBSci	161.5	12.14	13.30	32	63
Social Sciences General	SocSci	63.4	4.82	13.15	33	63
Electrical and Computer Engineering	BSOE	254	23.26	10.92	34	52
Biomolecular Engineering	BSOE	182.8	16.89	10.82	35	52
Education	SocSci	176.7	18.25	9.68	36	46
Microbiology & Env Toxicology	PBSci	69.5	8.55	8.13	37	39

Table 2. presents the undergraduate major count to budgeted faculty FTE ratio. The table is ranked from highest to lowest. The last two columns provide indices for each department's ratio in relationship to the campus average and within the Division. Psychology has 3.16 times the number of majors as the campus average and 2.32 the divisional average.

Table 2.

Undergraduate FTE and Faculty FTE analysis	Major Counts and Faculty FTE					Index	
Dept	Division	UGDeclaredMajorCount	Total Budgeted Faculty FTE	Total Declared Majors to Total Budgeted Faculty FTE Ratio	Campus Ranking	Cross Divisional Index (total Declared Majors to Total Budgeted Faculty FTE Ratio)	Intra Divisional Index (total Declared Majors to Total Budgeted Faculty FTE Ratio)
Humanities General	Hum	62.5	0.5	125.00	1	973	640
Psychology	SocSci	1143.5	28.15	40.62	2	316	232
Mol/Cell/Developmental Biology	PBSci	1028.1	29.19	35.22	3	274	486
Computer Science and Engineering	BSOE	1685	51.45	32.75	4	255	351
Politics	SocSci	558.1	22.79	24.49	5	191	140
Economics	SocSci	846.3	35.56	23.80	6	185	136
Sociology	SocSci	442.5	19.33	22.89	7	178	131
Art	Arts	240.7	11.42	21.08	8	164	200
Film and Digital Media	Arts	356.2	20.8	17.13	9	133	162
Ecology & Evolutionary Biology	PBSci	418.6	27.73	15.10	10	118	208
Environmental Studies	SocSci	342.3	23.61	14.50	11	113	83
Computational Media	BSOE	233.5	18.4	12.69	12	99	136
Anthropology	SocSci	263.6	21.73	12.13	13	94	69
Philosophy	Hum	107.7	9.29	11.59	14	90	59
Social Sciences General	SocSci	53.5	4.82	11.10	15	86	63
Biomolecular Engineering	BSOE	180.2	16.89	10.67	16	83	114

Literature	Hum	274.6	29.06	9.45	17	74	48
Electrical and Computer Engineering	BSOE	213.4	23.26	9.17	18	71	98
History	Hum	243.4	27.78	8.76	19	68	45
Linguistics	Hum	97	11.32	8.57	20	67	44
Latin American and Latino Studies	SocSci	100.7	12.21	8.25	21	64	47
Physics	PBSci	203.7	25.96	7.85	22	61	108
Earth and Planetary Sciences	PBSci	157.2	21.61	7.27	23	57	100
Mathematics	PBSci	174.3	24.32	7.17	24	56	99
Chemistry and Biochemistry	PBSci	190.2	26.86	7.08	25	55	98
Feminist Studies	Hum	69.7	10.37	6.72	26	52	34
Languages & Applied Linguistics	Hum	70.3	12.39	5.67	27	44	29
Theater Arts	Arts	51.5	12.53	4.11	28	32	39
History of Art & Visual Culture	Arts	46.1	12.48	3.69	29	29	35
Music	Arts	35.5	22.69	1.56	30	12	15
Digital Arts and New Media	Arts		3	0.00	31	0	0
Applied Mathematics	BSOE		10.13	0.00	32	0	0
Statistics	BSOE		11.93	0.00	33	0	0
Baskin Engineering General	BSOE		2.25	0.00	34	0	0
History of Consciousness	Hum		3.66	0.00	35	0	0
Writing Program	Hum		13.63	0.00	36	0	0
Astronomy and Astrophysics	PBSci		11.42	0.00	37	0	0
Microbiology & Env Toxicology	PBSci		8.55	0.00	38	0	0
Ocean Sciences	PBSci		12.14	0.00	39	0	0
Science Communication Program	PBSci		1.05	0.00	40	0	0
Physical and Bio Sciences General	PBSci		2.29	0.00	41	0	0

Education	SocSci		18.25	0.00	42	0	0
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Table 3. presents the Graduate FTE to permanent budgeted faculty FTE ratio at two levels: total grad FTE (including masters students) and doctoral FTE only. The table is ranked from highest to lowest. The last two columns provide indices for the department's ratio in relationship to its divisional average (as graduate teaching workloads differ widely by division). A cross campus comparison is provided with the ranking column.

Table 3.

Graduate FTE and Faculty FTE Analysis					Graduate FTE to Faculty Ratios		Index		
Dept	Division	Total Grad FTE	Total Doc FTE	Permanent Budgeted Faculty FTE	Total Doc FTE to permanent Budgeted Faculty FTE	Total Grad FTE to Permanent Budgeted Faculty FTE	Rank (total Grad FTE to Perm Budgeted Faculty FTE)	Total Doc FTE to permanent Budgeted Faculty FTE Ratio Index (Intradivisional)	Total Grad FTE to Permanent Budgeted Faculty FTE Ratio Index (Intradivisional)
Education	SocSci	160.7	25.4	10.3	2.46	15.56	1	139	456
Science Communication Program	PBSci	11.7	0.1	1.0	0.10	11.70	2	3	260
Statistics	BSOE	59.4	34.2	7.7	4.46	7.75	3	138	135
Computational Media	BSOE	105.7	34.9	14.0	2.49	7.55	4	77	132
History of Consciousness	Hum	23.9	23.4	3.3	7.20	7.35	5	321	309
Computer Science and Engineering	BSOE	250.7	147.0	38.7	3.80	6.48	6	117	113
Biomolecular Engineering	BSOE	87.5	69.8	14.0	4.99	6.25	7	154	109
Electrical and Computer Engineering	BSOE	101.4	57.9	20.0	2.90	5.07	8	89	88
Applied Mathematics	BSOE	39.8	23.5	8.0	2.94	4.98	9	91	87
Ecology & Evolutionary Biology	PBSci	94.1	82.0	22.0	3.73	4.28	10	130	95
Digital Arts and New Media	Arts	12.7	2.3	3.0	0.77	4.23	11	82	244
Astronomy and Astrophysics	PBSci	47.3	46.4	11.2	4.15	4.23	12	145	94

Chemistry and Biochemistry	PBSci	98.9	92.9	24.0	3.87	4.12	13	135	92
Microbiology & Env Toxicology	PBSci	31.9	20.3	8.0	2.54	3.99	14	89	89
Ocean Sciences	PBSci	45.8	35.2	12.0	2.93	3.82	15	102	85
Mol/Cell/Developmental Biology	PBSci	94.9	86.9	25.3	3.43	3.75	16	120	83
Physics	PBSci	77.2	75.7	24.0	3.15	3.22	17	110	72
Mathematics	PBSci	56.5	44.8	18.0	2.49	3.14	18	87	70
Economics	SocSci	85.7	53.2	27.7	1.92	3.10	19	109	91
Linguistics	Hum	29.9	29.5	11.0	2.68	2.72	20	120	114
Earth and Planetary Sciences	PBSci	56.8	47.8	21.0	2.28	2.70	21	79	60
Music	Arts	32.3	23.9	12.6	1.90	2.57	22	202	148
Psychology	SocSci	62.0	60.7	24.3	2.49	2.55	23	141	75
History of Art & Visual Culture	Arts	27.4	26.0	11.0	2.36	2.49	24	251	143
Film and Digital Media	Arts	42.2	27.7	18.3	1.51	2.30	25	161	132
Baskin Engineering General	BSOE	4.2	2.2	2.0	1.10	2.10	26	34	37
Philosophy	Hum	18.9	15.8	9.0	1.76	2.10	27	78	88
Feminist Studies	Hum	20.5	19.8	10.0	1.98	2.05	28	88	86
Literature	Hum	56.9	52.6	28.0	1.88	2.03	29	84	85
Environmental Studies	SocSci	39.5	35.0	20.0	1.75	1.98	30	99	58
Sociology	SocSci	30.7	29.6	16.0	1.85	1.92	31	105	56
Anthropology	SocSci	34.4	33.3	18.0	1.85	1.91	32	105	56
Latin American and Latino Studies	SocSci	17.5	17.1	10.0	1.71	1.75	33	97	51
Politics	SocSci	26.7	25.7	19.0	1.35	1.41	34	76	41
History	Hum	34.1	29.8	26.8	1.11	1.27	35	50	53
Languages & Applied Linguistics	Hum	7.2	6.1	6.0	1.02	1.20	36	45	50
Social Sciences General	SocSci	1.6	1.6	3.0	0.53	0.53	37	30	16

Theater Arts	Arts	5.4	0.3	10.3	0.03	0.52	38	3	30
Writing Program	Hum	1.7	1.5	5.0	0.30	0.34	39	13	14
Art	Arts	0.4	0.1	9.0	0.01	0.04	40	1	3
Arts Games and Playable Media	Arts		0.0	4.0	0.00	0.00	41	0	0
Humanities General	Hum	0.0	0.0	0.0			42	0	0
Physical and Bio Sciences General	PBSci	9.9	0.9	0.0			43	0	0