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Chair of the Assembly of the Academic Senate Faculty Representative to the Regents University of California 1111 Franklin Street, 12th Floor Oakland, California 94607-5200

October 27, 2021

### MICHAEL T. BROWN PROVOST AND EXECUTIVE VICE PRESIDENT UNIVERSITY OF CALIFORNIA

# **Re:** Approval of Pre-Proposal for UCB College of Computing, Data Science, and Society

Dear Michael:

Robert Horwitz

Telephone: (510) 987-0887

Email:robert.horwitz@ucop.edu

In accordance with the *Universitywide Review Processes For Academic Programs, Units, and Research Units* (the "Compendium"), the Academic Senate solicited input from the Coordinating Committee on Graduate Affairs (CCGA), the University Committee on Planning and Budget (UCPB), and the University Committee on Educational Policy (UCEP), regarding the UC Berkeley pre-proposal to establish a College of Computing, Data Science, and Society (CDSS).

The Senate's three Compendium committees agree that UCB's pre-proposal is worthy of continued development, but they have also identified several significant concerns that should be addressed in the full proposal. The committees' reviews are attached. We look forward to reviewing the full proposal in the future.

Please do not hesitate to contact me if you have additional questions.

Sincerely,

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Robert Horwitz, Chair Academic Council

Cc: Provost Brown UCB Division Chair Cohen UCB Senate Director Banaria Chief of Staff Peterson IRAP Analyst Procello Academic Council Executive Director Baxter

Encl.

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#### COORDINATING COMMITTEE ON GRADUATE AFFAIRS (CCGA) Andrea Kasko, Chair akasko@g.ucla.edu

ACADEMIC SENATE University of California 1111 Franklin Street, 12<sup>th</sup> Floor Oakland, California 94607-5200

October 20, 2021

#### **ROBERT HORWITZ, ACADEMIC COUNCIL CHAIR**

Dear Chair Horwitz,

On October 6, CCGA met and discussed the proposal from the Berkeley campus for a new college of Computing, Data Science, and Society.

CCGA agrees that the proposed college presents an innovative approach that is very integrative of computing, data science and society. However, in reviewing and discussing the responses at the UCB campus, and taking into consideration the opinions of members in the room, CCGA has some strong concerns.

The Academic Senate Divisional Council (DIVCO) calls for greater consultations within the campus and greater transparency. CCGA agrees that there should be more consultations with faculty in general, especially with the EECS faculty. In addition, the pre-proposal provides no information about the view of the I-School faculty. More consultation with this important group of stakeholders is needed.

The committee feels that more attention needs to be given to structural issues pertaining to the joint administration of EECS by CDSS and COE. Per the materials submitted with the preproposal, "the proposal would have EECS jointly administered by CDSS and COE. Thus, the two colleges would substantially overlap." CAPRA would like more clarification of how the joint administration would actually function, and CCGA agrees.

CCGA is particularly concerned about the graduate enterprise and the functioning of graduate students within this joint administration. UCB Grad Council shares these concerns about the ways joint administration impacts graduate programs in particular.

Finally, the campus needs to provide clarification regarding the functioning of the Data Commons. As CAPRA points out, the pre-proposal does not describe the educational role of the Commons at either the undergraduate or graduate levels. CCGA would also like more explanation of the role of I-School in the new college. I-School is a key element in the integrative approach of the new college, and it will serve as the place for addressing questions related to society and information technology. However, as CAPRA points out, the pre-proposal does not offer information from the I-School faculty about this embedded approach.

The report more fully reflecting the committee's deliberations is attached. Please do not hesitate to contact me if you have any questions or need additional information.

Sincerely,

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Andrea Kasko CCGA Chair

cc:

Susan Cochran, Academic Council Vice Chair
CCGA Members
Hilary Baxter, Academic Senate Executive Director
Michael LaBriola, Academic Senate Assistant Director
Chris Procello, Academic Planning and Research Analyst
Lisa García Bedolla, UCB Dean of the Graduate Division
Jocelyn Surla Banaria, UCB Senate Executive Director
Sumei Quiggle, UCB Senate Associate Director

Response to UCB Preproposal

On October 6, 2021 the CCGA discussed the pre-proposal for the new College of Computing, Data Science and Society on the UC Berkeley campus. The CCGA agrees that the proposed college presents an innovative approach that is very integrative of computing, data science and society. Conceptually, this approach places the teaching of tools and methods alongside an understanding of the ethical and social implications of these innovations, as Chancellor Christ underscores in her letter. Furthermore, the new college emphasizes inclusivity and diversity, highlighting racial justice as fundamental to the college in ways that are importantly innovative and exciting. The proposed college has the potential to build on its already stellar undergraduate and graduate programs and lead the way for other educational institutions as a model.

Nevertheless, in reviewing and discussing the responses at the UCB campus, and taking into consideration the opinions of members in the room, CCGA has some strong concerns. We hope the proposers will address these areas raised by us as well as the UCB stakeholders on the campus itself before the proposal moves to a final proposal stage.

The following are main areas of concern raised in the documentation provided to CCGA, and CCGA shares these concerns:

#### More consultation and transparency with stakeholders is needed.

The Academic Senate Divisional Council (DIVCO) calls for greater consultations within the campus and greater transparency. CCGA agrees that there should be more consultations with faculty in general, especially with the EECS faculty. Notably, the Academic Senate report flags that not all EECS faculty input was considered. In addition, UCB's Graduate Council report details that some members did not support this new college.

In addition, the pre-proposal provides no information about the view of the I-School faculty. More consultation with this important group of stakeholders is needed.

The UCB Academic Senate flags the need to consult with more stakeholders across campus in general. Since the new college is integrative and interdisciplinary in its orientation, a wider consultation with Arts and Humanities departments, and especially, the Art Practice and Film and Media would be helpful in ensuring that the "society" portion of the proposed college reflects input from faculty stakeholders from a variety of related fields.

#### Structural issues in joint administration

CCGA is concerned about a number of structural issues pertaining to the joint administration of EECS by CDSS and COE.

The Academic Senate Committee on Academic Planning and Resource Allocation (CAPRA) emphasized that "EECS is at the heart of the CDSS plan. It currently accounts for two-thirds of the faculty who would be part of CDSS. EECS also contains roughly 40% of the College of Engineering (COE)'s current faculty. The proposal would have EECS jointly administered by

CDSS and COE. Thus, the two colleges would substantially overlap." CAPRA would like more clarification of how the joint administration would actually function, and CCGA agrees.

CCGA is particularly concerned about the graduate enterprise and the functioning of graduate students within this joint administration. UCB Grad Council shares these concerns about the ways joint administration impacts graduate programs in particular. CCGA is concerned that it may be easier for faculty and students to "fall between the cracks" in the joint administration structure, with a lack of clarity as to which administrative unit will take responsibility for providing and overseeing funding and administrative support needs for the graduate enterprise. More clarification for the jurisdiction of COE and the new, proposed college is needed to avoid conflicts pertaining to resources. More clarification should be offered about ways of addressing planned faculty FTEs and TA-ships, as well as funding and mentorship of the graduate students. A clearer method of resolving conflicts and issues that may result from the shared administration should be considered at the planning stage.

Furthermore, DIVCO raised issues about "the potential for duplicative administrative efforts" in this joint administration. CCGA agrees with this.

The Committee on Diversity, Equity and Campus Climate (DECC) also wants more clarification on the dual administration of EECS and how that would impact diversity, equity and inclusivity concerns related to the evaluation for faculty and merit, promotion cases.

#### More clarification is needed regarding the Data Commons

Another area of concern relates to the functioning of the Data Commons. As CAPRA points out, the pre-proposal does not describe the educational role of the Commons at either the undergraduate or graduate levels. More detail about the educational program through the Commons is needed.

### More clarification is needed regarding the I-School

CCGA would like more clarification of the role of I-School in the new college. I-School is a key element in the integrative approach of the new college, and it will serve as the place for addressing questions related to society and information technology. However, as CAPRA points out, the pre-proposal does not offer information from the I-School faculty about this embedded approach.

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UNIVERSITY COMMITTEE ON EDUCATIONAL POLICY (UCEP) Mary Lynch, Chair Mary.Lynch@ucsf.edu Assembly of the Academic Senate 1111 Franklin Street, 12<sup>th</sup> Floor Oakland, CA 94607-5200 Phone: (510) 987-9466

October 11, 2021

#### ROBERT HORWITZ, CHAIR ACADEMIC COUNCIL

# RE: UC BERKELEY PRE-PROPOSAL TO ESTABLISH A COLLEGE OF COMPUTING, DATA SCIENCE, AND SOCIETY

Dear Robert,

The University of California Education Policy Committee (UCEP) of the Academic Senate voted to endorse UC Berkeley's Pre-Proposal to Establish a College of Computing, Data Science, and Society (CDSS) at our meeting on October 4<sup>th</sup>, with several strong concerns that would need to be addressed before a successful final proposal could be foreseen.

UCEP used the four criteria stipulated in the Compendium to evaluate proposals in assessing the preproposal: academic rigor, need, fit, and financial sustainability. We hope that a final proposal explicitly addresses all four of these areas. The pre-proposal best addressed rigor and student demand, which we consider part of need.

*Academic rigor*. The academic rigor of the program was clear from the rank of the constituent academic units and the description of the tracks of study. The <u>National Academy of Sciences</u> has made it clear that Data Sciences itself is an important area for scholarly endeavor in teaching and research. Programs in this discipline are already established at top universities nationwide and UC Berkeley has a top-ranked program.

*Need.* The need for enhanced and expanded programming in the realm of disciplines known as Computing, Data Science, and Society at UC Berkeley is clear. The pre-proposal demonstrated need insofar as student demand for coursework and degree programs in Computer Science and Data Sciences is skyrocketing. However, as pointed out by the Divisional Council, the need to convert the current Division into a College was not established. In fact, the question of why this conversion is needed was left almost wholly unaddressed. Closing this gap would be essential to garner UCEP endorsement of a final proposal.

*Fit.* Much of the skyrocketing student demand is among students who would not be majors in CDSS disciplines and so outside of the new College structure. *Crucially, there was no attention in the preproposal related to how the new College would expand service courses to serve non-CDSS and non-STEM*  *majors*. Two of the component academic units that would comprise a new College have impacted majors, elevating this point.

UCEP appreciated the idea of branding a UC Berkeley College of CDSS as uniquely positioned to solve social problems drawing on the established strengths of the campus. Much more concrete detail would be needed to make this case in a pre-proposal. UCEP echoes the Undergraduate Council's calls for additional input from students and related programs that might contribute to this special mission of a new College. As the Divisional Council noted, unresolved issues related to the joint governance and duties of the EECS department were a serious weakness in the proposal. UCEP was disappointed not to see greater attention given to both Admissions processes (as discussed by the Undergraduate Council) and to presenting explicit programs and plans to support the designers' aspirations for the new College to support Diversity, Equity, and Inclusion. UCEP agreed with the Committee on Diversity, Equity, and Campus Climate that this portion of the pre-proposal was vague. What are the demographics of students served by component academic units. How will a new College strive to attract and serve a diverse student body?

The pre-proposal naturally might raise fears that the new College has little intention of bringing data sciences to the rest of campus, but rather absorbing all other disciplines within CDSS. What exactly are the bounds of the mission of the new College?

*Financial sustainability*. Here, we reiterate the concerns voiced by the Divisional Council that a case for financial sustainability has not been made. If resources are to be drawn from elsewhere on campus, that should be made transparent to enable fully-informed deliberations.

UCEP appreciates the opportunity to comment on this matter. Please contact me if you have any questions.

Sincerely,

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Mary Lynch, Chair UCEP

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UNIVERSITY COMMITTEE ON PLANNING AND BUDGET (UCPB) Kathleen McGarry, Chair mcgarry@econ.ucla.edu Assembly of the Academic Senate 1111 Franklin Street, 12<sup>th</sup> Floor Oakland, CA 94607-5200 Phone: (510) 987-9466 Fax: (510) 763-0309

October 15, 2021

# **ROBERT HORWITZ, CHAIR ACADEMIC COUNCIL**

# RE: Proposed College of Computing, Data Science and Society at UC Berkeley

Dear Robert,

UCPB has reviewed UC Berkeley's Proposal for The College of Computing, Data Science and Society. Our lead reviewer's report is attached.

As the report notes, the proposed college would house important disciplines in which Berkeley displays great strength.

Members raised some questions about the justification for moving from the current division framework to a college, and the challenges involved in creating a college out of an interdisciplinary program that is comprised of faculty and students from across campus.

The proposal would also benefit from fine-tuning. One committee member noted that some of the hyperlinks in the proposal need updating and they ought to be reviewed for accuracy.

There was concern that the proposed administrative structure does not clearly present methods for managing potential conflicts between the two administering Colleges, CDSS and Engineering. Similarly, it is not clear what new departments would arise from the creation of the Data Commons.

Finally, the revenue-neutral expectation for the College is predicated on support from philanthropic funds. The only contingency plan that is in place should this funding not materialize, is to restrict the size of the Data Commons itself. Additional contingency planning would strengthen the proposal.

In general, UCPB is satisfied that the pre-proposal merits approval and looks forward to a revised proposal.

Thank you for your consideration.

Sincerely,

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Kathleen McGarry, Chair UCPB

Encl.

cc: CCGA Analyst Harms UCPB

# UCPB comments on Pre-proposal for a new College of Computing, Data Science and Society at UC Berkeley

Commenters at the campus level uniformly endorsed the importance of the disciplines encompassed by this proposal, the existing strength of the Berkeley campus in those disciplines, and the genuine need for strong connections and interactions with a range of other disciplines. Concerns were expressed about the justification for creating a College, some specifics of the proposed administrative structure, and the financial viability of the unit. The Preproposal has been revised in response to those comments, but concerns remain. Of course, this is still a Preproposal, with considerable detail to be added as it develops. These comments are offered in the spirit of improving the Preproposal, not derailing it.

### 1) Justification for creating a College.

It is important to recognize that this is not a proposal to create an entirely new unit but to convert an existing one from a Division to a College. It is not clear what problem that change is intended to solve, or what advantages a College would offer. In some respects, a College seems a poor fit in the sense that this is clearly intended to be a strongly interdisciplinary effort engaging faculty and students across the university. At a minimum, there should be more explicit reflection on the potential choices for administrative structure and their comparative advantages and disadvantages.

### 2) Specific features of the proposed administrative structure.

As UCB's CAPRA noted, the proposed administrative structure is unusual in at least two major respects. First, it would have EECS, by far the largest unit within the proposed college, jointly administered by two colleges, CDSS and Engineering. We understand the desire not to split EECS, which is an extraordinarily deep and broad department. However, the preproposal does not adequately explain how potential conflicts between the two colleges would be resolved, or how resources would be shared or divided. Second, the preproposal calls for creation of a Data Commons, envisioned as an incubator of new departments, but also as a department in its own right. It is unclear what teaching the Data Commons would offer, or how new departments would be identified and spun off.

# 3) Financial viability.

The pre-proposal emphasizes that the proposed College is expected to be revenue-neutral with respect to the existing Division. Yet the Division itself currently faces the need to aggressively fundraise for the Gateway building project, and to support expansion of the Data Commons. The financial scenario modeling is limited and the only contingency plan, should anticipated philanthropic funds fail to materialize, is to keep the Data Commons small. Additional contingency planning, with more detail on what would be built out in what order as funds materialize, would be desirable.