December 20, 2013

AIMÉE DORR, PROVOST  
STEVEN BECKWITH, VICE PRESIDENT,  
RESEARCH & GRADUATE STUDIES  
UNIVERSITY OF CALIFORNIA

Re: CITRIS Review

Dear Aimée and Steve:

The Academic Council discussed the external review of CITRIS in the spring of 2011, but no subsequent action was taken. Last spring, UCORP resubmitted its comments on the review, along with comments on the reviews of CalIT2 and CNSI. Because some divisions were not consulted by their administrations and also wanted an opportunity to comment on UCORP’s assessment, we extended the comment period to the fall. Council received letters from all of the campuses involved in CITRIS and asked me to forward them to you, along with UCORP’s comments, for the record. I anticipate that Council will discuss the other two Cal ISI reviews at its meeting in late January. We look forward to working with you to develop a more streamlined process for future reviews.

Please do not hesitate to contact me with any questions.

Sincerely,

Bill Jacob, Chair  
Academic Council

Cc: Academic Council  
Martha Winnacker, Senate Executive Director
May 4, 2012

ROBERT ANDERSON, CHAIR
ACADEMIC COUNCIL

RE: Academic Review of the Center for Information Technology Research in the Interest of Society (CITRIS), a California Institute for Science and Innovation (Cal ISI)

Dear Bob,

The University Committee on Research Policy (UCORP) has met and discussed the academic review of the Center for Information Technology Research in the Interest of Society (CITRIS), one of the four California Institutes for Science and Innovation (Cal ISIs). The committee sends comments both on the CITRIS review particularly, as well as the Cal ISIs generally.

CITRIS Review Protocol:
UCORP finds the review charge given to the external committee to be improved, compared to previous Cal ISI review protocols, but again voices its concern about the multi-year time frame. The committee agrees that the questions the external reviewers were asked were well-formulated and generally requested an appropriate level of detail from the director. (UCORP notes that CITRIS and the reviewers both experienced difficulty in assessing the efficacy of new technologies, but we understand the dilemma.) However, UCORP observes that the information provided to the external reviewers did not enable them to answer the questions as robustly as we would have liked, and as with previous Cal ISI reviews, we note that quantitative metrics are still largely absent – no doubt partly because the directors were asked to provide narrative essays (Appx F, Item II. Outcomes Assessment). On the other hand, specific research productivity measures, such as publications in industry leading journals, patents generated, and doctoral dissertations would be helpful to illustrate the academic quality of the research conducted.

CITRIS Review Recommendations:
UCORP finds the recommendations generated to be appropriate, but slightly underdeveloped. For example, the committee discussed at length the embedded recommendation to increase the impact of CITRIS research on the product plans of existing companies. This, in turn, would require CITRIS research to be more heavily influenced by industrial partners (p 7). UCORP questions whether UC research facilities should be so directly in the service of private industry. UCORP also questions whether UC research should focus on improving existing (commercial) products to the extent that the reviewers seem to be advocating in their response to the protocol questions in Section IV, Success of Partnerships with Industry (Appx E, p 2); the proposed Industry Advisory Board, for example, seems to reverse the flow of information (see
below). Perhaps a more appropriate focus for CITRIS would be the development of new technologies, products, and processes.

Similarly, the call for better benchmarking (recommendation 2, p 9) suggests an existential crisis at CITRIS, if not at each of the Cal ISIs. Although the committee considered larger questions relating to standard-setting in new and emerging fields of research, that CITRIS, now a decade old, has yet to identify meaningful market comparators and standards is a cause for concern to many. Given the expertise of the external review committee, their reticence to proactively provide suggestions was perplexing.

Several members found the calls for greater funding in the absence of correspondingly greater programmatic specificity unsupportable, or supportable only on a conditional, time-limited basis (bridge funding only). For example, the specific recommendation to develop a systemwide information technology lab (recommendation 1, pp 8-9) fails to include guidance to leverage extant UC facilities, instead looking exclusively to private industry.

The necessity of convening an external advisory board (recommendation 3, p 9) needs greater explication. Who would be invited to sit on the board, and what type of recommendations would it issue? Would its focus be academic quality or industry marketability? We encourage thoughtfulness regarding transparency and accountability.

UCORP supports the diversity and inclusion recommendation (p 9), and we encourage active monitoring of implementation efforts.

**CITRIS Review Process:**

Overall, UCORP found the CITRIS review process well done. As suggested above, though, the committee encourages both the director and the reviewers to contextualize their comments in relevant industry modalities. It is unclear whether the reported statistics and documents are comparatively good or poor without contextualization.

Similarly, UCORP encourages greater strategic thinking by both the director and the reviewers: Direct state funding for CITRIS has ceased, but the plan moving forward seems to be business as usual. Critical and comparative analyses of the merits of “sunsetting” CITRIS, of putting it on a glide path to self-sufficiency, or of institutionalizing a centralized funding symbiosis were not found. Some asserted that the continuation of CITRIS was taken as a given by all review participants, and thus the process was defanged and the outcomes prescribed (or at least predictable).

**Cal ISI Review Process:**

UCORP encourages greater contextualization of Cal ISI reports. As noted above, Cal ISI reviews should detail the loci and nature of alignments with industry research standards, preferences, and business models, in order to illustrate the value added by each ISI to its industry. This suggestion does not mean that industry should set the Cal ISI research agenda, but rather that a mutually beneficial relationship should be created and maintained. Such ties could enable not just scientific and academic advancement in the discipline, but also career development and vocational preparation for students, as well as the generation of post-graduation employment data to supplement researcher start-up data.

This strategic planning and reporting must occur independently of market directions and dicta, though. So long as the ISIs operate with UCs imprimatur, they must first advance the UC mission of teaching, research, and service to the people of the state of California. Potentially unprofitable but socially
responsible practices and processes should be supported, and a place for pure science must be reserved, even beyond the general campus.

The strategic planning process must also occur within the scope of UC’s overall research portfolio. Currently, UCORP is engaged with the Office of Research and Graduate Studies and the Vice Chancellors for Research to develop systemwide research investment principles, policies, and assessment metrics; the Cal ISIs should be brought under that larger umbrella and evaluated with the same rigor and frequency.

UCORP finds the Cal ISI review process to be unworkably slow. The anticipated timeline was 18 months (Appx E, p 4), but even that deadline could not be met; this is unacceptable.

**Cal ISI Budget and Accountability Processes:**

UCORP finds the Cal ISI budget and accountability processes wanting. Many members noted that the now defunded Discovery Grant program successfully accomplished many of the same goals the Cal ISIs seek to achieve, and suggested that many best practices could be gleaned from a comparative analysis of both programs. Members also encourage greater reporting on the leveraging of the UCOP/central investment in such systemwide research programs.

We reiterate our concern at the external committees lament that they received insufficient information to evaluate meaningfully budget and planning processes. Without that information, accountability is difficult to determine, as indeed is success or failure.

As noted, UCORP is actively engaged with the Office of Research and Graduate Studies in developing systemwide guidelines for the administration and scope of the University’s research portfolio, and we will bring these issues to light in that venue, as well as those submitted by our sister committees. We also note that UCORPs present comments reflect those of previous UCORPs.

Please feel free to contact us if you have any questions or concerns.

Sincerely,

John Crawford, Chair
UCORP

cc: UCORP
Martha Winnacker, Executive Director, Systemwide Academic Senate
November 15, 2013

ACADEMIC COUNCIL CHAIR JACOB

Re: 2010 CITRIS Report

Thank you for the opportunity to comment on the 2010 Center for Information Technology in the Interest of Society (CITRIS) report. Two standing committees Faculty Welfare, Diversity, and Academic Freedom (FWDAF) and the Committee on Research (COR) provided no comments or objections to the report but wanted to express their support.

The Faculty Welfare, Diversity, and Academic Freedom committee expressed its strong support of Recommendations #3 (External Advisory Board) and #4 (Diversity/Inclusion) in the Report to the Provost (December 15, 2012) following the 2010 Academic Review of CITRIS. Furthermore, they would urge the CITRIS advisory board (AB) to not only be constituted by diverse disciplines, but also strongly recommend that this AB include gender, race and ethnic diversity as well. Similarly the Committee on Research wished to reaffirm its enthusiasm and support for CITRIS and its benefit to the UC Merced research agenda.

Sincerely,

Ignacio López-Calvo, Chair
Division Council

cc: Systemwide Executive Director Winnacker
Division Council
Senate Office
October 28, 2013

To: Ignacio López-Calvo, Chair, Division Council

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

Re: Systemwide Request to Review 2010 CITRIS Report

COR appreciates the opportunity to opine on the 2010 CITRIS report. COR has no comments on the report but the committee wishes to reaffirm its enthusiasm and support for CITRIS and its benefit to the UC Merced research agenda.

cc: COR Members
DivCo Members
Senate Office
October 17, 2013

To: Ignacio López-Calvo, Chair, Division Council

From: Rudy Ortiz, Chair, Committee on Faculty Welfare, Diversity, and Academic Freedom (FWDAF)

Re: Systemwide Request to Review 2010 CITRIS Report

The FWDAF committee would like to take the opportunity to express its strong support of Recommendations #3 (External Advisory Board) and #4 (Diversity/Inclusion) in the Report to the Provost (December 15, 2010) following the 2010 Academic Review of CITRIS. Furthermore, we would urge the CITRIS advisory board (AB) to not only be constituted by diverse disciplines, but also strongly recommend that this AB include gender, race and ethnic diversity as well.

cc: FWDAF Members
DivCo Members
Senate Office
CHANCELLOR BIRGENEAU

Subject: 2010 academic review of the Center for Information Technology Research in the Interest of Society (CITRIS)

Dear Chancellor Birgeneau,

The Berkeley Division of the Academic Senate was asked to provide the commentary on the recent academic review of CITRIS for inclusion in the campus response. Given the relatively short turnaround time, we did not conduct a full Senate review. Instead we sought informal comments from the committees on Academic Planning and Resource Allocation (CAPRA), Research (COR), and Status of Women and Ethnic Minorities (SWEM). Divisional Council (DIVCO) also discussed the review in its meeting on September 12, 2011.

In general, we found the review to be positive. The discussion in DIVCO mirrored COR’s comments:

This 2010 Academic Review of CITRIS reflects the excitement that has developed with the CITRIS effort in a relatively short time. It is clear CITRIS has succeeded both as an “orchestrator of research” but also as an avenue for realizing applications in areas such as energy and environment, intelligent infrastructure, and health informatics. Important connections to other research units and departments have been established at each of the participating campuses and are serving to facilitate new programs as well as invigorate existing ones.

The report does point to some growing pains, particularly in working out obligations of CITRIS researchers to other reporting units, especially academic departments. Suggestions for the future include more integration among research themes as well as among campus partners, growth of infrastructure, appropriate benchmarking of progress, and the creation and effective use of an advisory board.
Although the report was generally favorable, one significant concern came to the fore for DIVCO and the reporting committees – CITRIS’s record with respect to women and underrepresented minority scholars in its participating faculty. The review committee noted that “during its review, only one of the faculty members presenting research was female, and none appeared to be African American, Chicano or Hispanic.” We underscore and strongly support the review committee’s recommendation on diversity and inclusion. As SWEM observed:

We are concerned about the apparent devaluation of non-engineering areas of scholarship in the make-up of CITRIS’s leadership and teaching components, and suggest that it is partly responsible for the lack of diversity. There may be more women and underrepresented minority scholars in non-engineering disciplines who conduct research on the social context and consequences of IT and its cultural ramifications. We urge CITRIS to welcome more faculty from such disciplines to join it. When such faculty are encouraged to share in the leadership of the center and the design of CITRIS’s program, this may well lead to an increase in the gender and cultural diversity of the Center. Such diversity can only increase the reach and enhance the impact of CITRIS’s activities.

Sincerely,

Bob Jacobsen
Chair, Berkeley Division of the Academic Senate
Professor, Physics

Cc: Elizabeth Deakin and Alexis Bell, Co-chairs, Committee on Academic Planning and Resource Allocation
George Roderick, Chair, Committee on Research
Pheng Cheah, Chair, Committee on the Status of Women and Ethnic Minorities
Mei-Mei Hong, Executive Assistant, Office of the Chancellor
Diane Sprouse, Senate Analyst, committees on Academic Planning and Resource Allocation, and Research
Anita Ross, Senate Analyst, Committee on the Status of Women and Ethnic Minorities
February 17, 2011

Chancellor George Blumenthal
Chancellor’s Office

RE: Academic Senate Review of CITRIS External Review

Dear Chancellor Blumenthal,

The Santa Cruz Division of the Academic Senate has discussed the Academic Review Report of the Center for Information Technology Research in the Interest of Society (CITRIS). Our overarching sense, based on the strongly positive tone of the Review (we were not presented with the Self-Study), is that CITRIS has formulated a largely successful enterprise with significant impact on multiple UC’s, as well as on industry. On the Santa Cruz campus, CITRIS fits the descriptor in the report of a “facilitator, accelerator and enabler” for research initiatives that can leverage the space, (modest local) funding, and unique facilities of the institute.

Two issues have surfaced from our Santa Cruz perspective:

1. Diversity

Three of our Senate committees (Committee on Affirmative Action and Diversity, Committee on Academic Personnel, and Graduate Council) echo the concerns about diversity raised in the Academic Review Report. The Report pays thoughtful attention to the effect of issues of diversity on the ability of CITRIS to have an impact on the communities it serves and the multidisciplinary partnerships and collaborations it is involved in. The Review Committee notes the lack of diverse representation, including low participation by non-engineering faculty as well as those from underrepresented groups, and provides helpful suggestions for ameliorating this situation, both in terms of personnel and in terms of the areas/disciplines represented by the leadership of the Center. We want to highlight the concerns and the potential solutions.

2. Cost-benefit

Past Cal ISI’s reviews (such as QB3) specifically charged the Review Panel with discussing how the ISI had made a difference to California, and whether that difference was commensurate with the State’s investment. The collection of such information is critical for future justifications for funding for this enterprise (particularly in a time of budgetary constriction within California). We infer from the discussion at the end of the Report of the lack of, and need for; comparative benchmarking that such information was not present in the Self-Study. Hence, we urge CITRIS to document both its...
operation in relation to comparison institutions (such as they are) and provide bounds on its cost-benefit ratio. The production of start-ups and industrial utilization of the nanofabrication laboratory appears to be useful beginnings in this latter arena, but keeping close tabs on items as diverse as the impacts of the CITRIS seed funding program and the role of CITRIS in improving or augmenting medical care through its linkages with UCDMC are likely to provide a quick and powerful means for justifying continued (and perhaps augmented) funding for this enterprise.

Thank you for the opportunity to comment on the CITRIS review.

Sincerely,

Susan Gillman, Chair
Academic Senate
Santa Cruz Division

cc: CAP Chair, Dana Takagi
CAAD Chair, Carla Freccero
CCT Chair, Joel Primack
CPB Chair, Brent Haddad
GC Chair, Sue Carter
COR Chair, Quentin Williams