August 12, 2013

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Professor Matt Bishop, Computer Science, COE
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Professor Jonathan Eisen, EVE, CBS
Professor Mike Hogarth, Department of Pathology, SOM
Associate Professor Ben Houlton, LAWR, CA\&ES
Professor Ken Joy, Computer Science, COE
Professor Louise Kellogg, Geology, MPS
Professor Kenneth Kizer, Director of the Institute for Population Health Improvement, SOM
Professor Mike Kleeman, Civil and Environmental Engineering, COE
Professor Patrice Koehl, Computer Science, COE (Co-Chair)
Professor Ian Korf, Genome Center, MCB, CBS
Professor Kwan-Liu Ma, Computer Science, COE
Professor and Director Richard Michelmore, Genome Center
Associate Professor Colin Milburn, English, HArCS
Professor Prasad Naik, GSM
Professor Wolfgang Polonik, Statistics, MPS
Associate Professor Kim Shauman, Sociology, DSS
University Librarian MacKenzie Smith, University Library
Professor Tony Tyson, Physics, MPS (Co-Chair)
Professor Bart Weimer, Population Health \& Reproduction, SVM
Associate Professor, Catherine Yang, GSM
Assistant Professor Huaijun Zhou, Animal Science, CA\&ES

## RE: RESPONSE TO THE BIG DATA IMPLEMENTATION REPORT

Dear Colleagues,
I write to respond to the "Big Data Implementation Committee Report" dated February 22, 2013. First, please accept my sincere gratitude for your service on the committee and for the thoughtful and detailed treatment of this tremendously important topic.

The vision for a new Data Science Institute at UC Davis is compelling and timely. The proposed model of an institute seems an appropriate way to support research and education within an interdisciplinary undertaking such as "Big Data." With the sage advice of your
report, we will move forward in the context of our gradually stabilizing but still constrained budget and the 2020 Initiative.

I will begin with recruiting a Founding Director from among current UC Davis faculty to establish the Institute in the 2013-14 academic year and will ask that individual to work with a soon-to-be-appointed Big Data Implementation Committee to identify immediate infrastructure needs and associated cost estimates. The Data Science Institute will be facultyled and should be coordinated with School and College recruitment plans that include faculty with expertise in various aspects of Big Data. Although not yet certain, Big Data appears to be emerging as one theme for faculty hiring that will occur under the 2020 Initiative.
I believe that the logical structure for the Institute within the university is a Center, reporting ultimately to the Provost via University Librarian MacKenzie Smith, who has agreed to serve as convener of the participating deans. Faculty members will be drawn from each School and College, the deans of which in turn will provide financial or in-kind support. Under the new campus budget model, the center will not receive tuition revenue because faculty will not teach under the auspices of the center nor advise majors nor grant degrees. Thus, the funding model for the center will require a partnership between the administration, School or College Deans, as well as indirect cost return revenue from research funding that is attributable to the center, consistent with the allocation formulas of the campus budget model.

While I understand that some central funding will be required for core facilities, I expect that most if not all initial staff support will come from participating schools and colleges. Startup costs for new faculty will remain the responsibility of the hiring dean, in partnership with the Provost as appropriate. (It is likely that I will make specific resources available for positions that are funded in the context of the "themes for faculty hiring" referenced above, though details about this are not finalized yet.) It will be critically important for the Founding Director to develop the budgetary expectations and responsibilities collaboratively with the central campus and schools and colleges to insure that each group is appropriately invested. It will be important to document such arrangements in a memorandum of understanding among the participants.

Research. The initial research focus of the Institute will be dictated by the faculty affiliated with the Institute. The Founding Director will coordinate with the Deans and Department Heads to insure that the Institute's priorities are aligned with the supporting units' needs and that participating faculty members are integrated into the work of their home school or college.

Education. The educational focus of the proposed Institute is one of its most distinguishing features, and the close integration of the Institute with its supporting Schools and Colleges will help insure that its educational mission can be met. A new Designated Emphasis or a Graduate Group seems possible if, in fact, there isn't one already.

Infrastructure. The current UC Davis data center can accommodate many of the initial needs of the Data Science Institute. Even as plans are under way to accommodate future campus data center needs, there are additional facilities available to the Institute to accommodate its
growth (e.g., San Diego Supercomputer Center, Lawrence Livermore National Laboratory, various public and private cloud services). The Founding Director, with the assistance of the Big Data Implementation Committee, will develop more detailed requirements for cyberinfrastructure improvements working together with interim Vice Provost Mohapatra and the new Chief Technology Officer (to be recruited this academic year) to leverage related technology needs across campus, including the Library and the UC Davis Medical Center. Similarly, addressing space needs for the Institute's faculty, students and staff will be part of the Founding Director's responsibilities, again working closely with the partnering deans and administrators.

Again, please accept my sincere thanks for your willingness to serve on this committee.

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c: Council of Deans
Vice Chancellor Lewin
Interim Vice Provost Mohapatra
Faculty Advisor Burtis
Assistant Executive Vice Chancellor Mohr

