UNIVERSITY OF CALIFORNIA **ACADEMIC SENATE**

UNIVERSITY COMMITTEE ON ACADEMIC COMPUTING AND COMMUNICATIONS

Monday, Nov. 6, 2017

Meeting Participants: Christine Borgman (Chair, UCLA), Maryann Martone (Vice Chair, UCSD), Anthony Joseph (UCB), Michael Kleeman (UCD), Russell Detwiler (UCI, via video), Lisa Raphals (UCR), Alex C. Snoeren (UCSD Alternate), David Robinowitz (UCSF), Jianwen Su (UCSB), Brant Roberston (UCSC, via video), Abraham Youhana (Undergraduate Student Representative, UCB), Shane White (Academic Council Chair), Robert May (Academic Council Vice Chair), Onyebuchi Arah (CCGA representative, via video), Tom Andriola (UC Chief Information Officer), David Rusting (Chief Information Security Officer), Ellen Osmundson (ILTI Project Director, via video), Mary-Ellen Kreher (ILTI Director of Course Design and Development), Adam Hochman (ILTI Assistant Director of Technology Development), Joanne Miller (Committee Analyst)

Meeting Minutes

I. Chair's welcome, introductions, agenda review, committee priorities

Christine Borgman, UCACC Chair
Maryann Martone, UCACC Vice Chair

UCACC Chair Christine Borgman gave a brief introduction to the committee and its evolution into the primary faculty committee that consults with the UC administration on matters of information technology policy. Ideally the committee is comprised of a mix of faculty from across the disciplines who have interests and concerns in academic computing and communications. The committee focuses on advising, consulting, and helping to set directions for UC's IT decision-making.

UCACC priorities for 2017-18 include advocating for increased faculty involvement in IT governance on the campuses, exploring ownership of research data, stewardship and governance of research and operational data, and information security.

II. IT Governance

Christine Borgman, UCACC Chair

Committee members discussed the draft memo "UCACC recommendations to Academic Senate on IT Governance at the campus level" that was included in the agenda packet. The memo was drafted by Christine Borgman in spring, 2017, as Vice Chair of UCACC, as a basis for addressing effective campus-level IT governance across UC. UCLA's structure is presented as an exemplar, following their presentation at the February meeting.

Suggestions for improving the effectiveness of the memo included removing many of the references to UCLA to make it more universal and to offer generalized best practices. Members suggested that the memo include an appendix containing a brief description of IT governance structure at each campus. Members agreed to gather this information from their campuses.

After it is finalized, the memo will be sent to Academic Council Chair Shane White for distribution to divisional Senate Chairs.

Action: Edits should be sent to committee analyst Joanne Miller (Joanne.Miller@ucop.edu).

Action: All members should send a paragraph about IT governance structures at their campus to Joanne.Miller@ucop.edu by December 4, 2017.

III. Data Governance

Christine Borgman, UCACC Chair
Tom Andriola, UC Chief Information Officer

1. UC Health Data – update

UCACC requested an update from Tom Andriola on the Ad Hoc Task Force on Health Data Governance that was convened by President Napolitano in spring, 2017. The Task Force's report has been sent to the President and UCACC will be updated on the outcomes at our next meeting in February, 2018.

As background, CIO Andriola reported that UC receives inquiries on a monthly basis regarding use of data for third-party collaboration. Current contractual agreements range in scope from an individual faculty member to a department to a campus. Examples include UCSF's agreement with GE for algorithm development and UCSD's work with IBM on mammography imaging. UC sees not only commercialization opportunities and revenue potential in making contractual agreements with outside vendors and organizations, but also scientific advancement and improvements in health outcomes. UC medical centers are currently attempting to obtain approval from existing patients for past data collected. A 90-minute video explains how the data will be used and has been helpful in getting buy-in from patients.

UC has strong privacy protections in general, and does not monitor electronic data or communications (with narrow exceptions). There is a distinction between information privacy, which is more narrowly-drawn, and the broader notion of academic freedom that provides for some privacy protection in working with students and in labs. Laws on usage of data may be enacted soon, as data becomes more ubiquitous. It is incumbent on the UC community to make sure policies and recommendations are responsibly implemented.

Members asked about exclusivity and aligning agreements with UC's values and mission. These inquiries from third parties provide a good opportunity for various stakeholders at UC to come together and think about the issues involved to define the variables. Even the definition of "health care data" may be unclear. Committee members wondered about potential accretion of similar policies in other areas of data collection where it may not be appropriate, and wanted to see patient representation in any stakeholder/advisory group. Members also suggested that the university establish a standard process for third parties to work with UC.

UCACC has addressed data governance issues since its inception, and reviewed and endorsed two UC reports, the UCOP Privacy and Information Security Initiative and the UCLA Data Governance Task Force [1,2]. These span information and autonomy privacy, governance of research and operational data, including learning analytics. A related issue raised in 2015-16, to be explored in 2017-18, is ownership of research data. Some members requested that UC should take a position on open data, and the committee will explore.

2. *"Personally identifiable information" (PII)*

In the 2016-17 UCACC meetings, CIO Tom Andriola and Chief Information Security Officer David Rusting raised concerns about how well faculty are able to protect data in the legal category of Personally Identifiable Information. In spring, 2017, UCACC (Borgman, Vice Chair, and David Kay, Chair) made a presentation to the UC Cyber Risk Governance Committee about best practices for Privacy by Design that would improve handling of PII for the university as a whole.

Committee members discussed "personally identifiable information" in the context of systems that are designed with consideration for responsible data management and security. Campuses have myriad and diverse systems that make universal training difficult, and additional end-user training has limited outcomes. CIO Andriola wants faculty to understand risks more fully and to pursue joint discussions with faculty colleagues and administrators about responsible computer and digital device use. He feels that these need to be campus efforts, possibly led by divisional Senate IT committees, and should not be driven from OP.

Committee members noted that producing responsible cybercitizens was an important part of preparing students for life in a data-driven society, and an area in which UC has leadership opportunities.

IV. Consultation with the Senate Leadership

Shane White, Academic Council Chair
Robert May, Academic Council Vice Chair

Academic Council Chair Shane White and Vice Chair Robert May joined the meeting to discuss current issues facing the Senate:

AB 97 – The State is withholding $50 million in funds from UC until specific criteria are met. Freshman-to-transfer ratios and UC's response to the recent State audit, which is due in April, are part of the criteria. The legislature is also requiring UCOP to redirect $15 million in systemwide funds to campuses for undergraduate enrollment growth. An estimated 10-11% of UC's budget comes from the State, although much other funding is leveraged from State funds.

The Academic Senate sent principles to guide options for redirecting systemwide funds [3] to President Napolitano. Chair White noted that the Provost's office has suffered many cutbacks in the past few years.

Chair White reported that a new audit by the State will look at UC's settlements in sexual violence and sexual harassment claims cases.

Retiree health -- Per prior agreement, UC is obligated to fund at least 70% of the cost of premiums of retiree health. Some in the UC administration want to remove the 70% floor. The item was going to go directly to the Regents, but instead, upon the recommendation of the Academic Senate, President Napolitano will convene a task for a thorough investigation of the issue within the context of overall financial liability.

Transfer Pathways – Provost Brown is convening a comprehensive task force to look at transfer pathways and transfer to freshman ratios throughout the system.

SB201 – A new bill signed by the Governor allows for unionization of graduate student researchers. A vote is taking place on all campuses, and all faculty should have received guidance. UC is officially neutral on the vote, as required by the process. Faculty and administrators cannot be seen to prejudice the outcome of the election.

Committee members asked whether there would be salary parity across campuses, and whether it would be possible to collect systemwide Research Assistant pay rates and to anticipate and inform students about what might happen. Faculty expressed worry that unionization would harm STEM departments since they will have a harder time getting PhD students if salaries are lower. Chair White noted that discontent from GSRs seemed to arise not from monetary concerns but rather from issues around mentoring and the mentor-mentee relationship. Some students from underrepresented minority groups don't feel welcomed. Some campuses provide resources and assistance around inclusion and diversity, but students may not be aware of what's available.

V. Consultation with UCOP's Information Technology Services

Tom Andriola, UC Chief Information Officer
David Rusting, Chief Information Security Officer

Systemwide Electronic Information Security Policy (IS-3) Revision – update

The revised Electronic Information Security policy consolidates three outdated policies into one. The new policy attempts to:

- Take a risk-based approach, so that plans are created based on risk factors.
- Use well-known approaches and standards.
- Balance protection with autonomy.

The policy is purposefully general, which also means that it may be somewhat vague and unclear. For example, the position of "unit head" in the policy may be defined by an individual campus or department.

Three documents included in the UCACC agenda background packet were created in response to comments from Academic Senate:

- Brief: What the policy is
- Guide: What the policy means to faculty
- FAQ: Answers direct questions received in the first review

The majority of the policy's content is unchanged since the systemwide review that took place in May - July, although key sections that impact faculty have been revised. CISO Rusting reported that the administration has signed off on the policy, but some faculty are still not ready to do so. In the policy, individual faculty and departments have to work with campus administrators to collaboratively mitigate risk. Faculty are not expected to take on risk assessment independently. Campus Information Security Officers (CISOs) and Cyber Risk Executives (CREs) have broad authority for implementation of the policy and ensuring that local campus policies are aligned.

Members responded by reporting the extensive concerns about the IS-3 revisions that were raised in the 26-page Senate response. [4] In the cover memo, Academic Council Chair James Chalfant said that the "Academic Senate cannot support the current version of the policy due to a number of significant concerns about its clarity, length, accessibility to a general readership of faculty end-users, and its potential compliance implications for faculty. Senate reviewers agree that the policy requires a thorough revision."

UCACC members reiterated the expectation that a subsequent revision of the IS-3 policy would be submitted to the Senate for review. At this meeting, members discussed their concerns with both the policy and the supplementary material provided. Several members thought that the policy would necessitate a significant amount of documentation and suggested that UCOP supply campuses with models or templates or supporting documentation that could be customized. Members also noted that a single "information proprietor" on each campus doesn't always work very well, and suggested that it could be a governance body instead of an individual. They also expressed concern about the "faculty in their daily roles…" section of a supporting document that reads like a check list and suggested instead that it should be more along the lines of "each campus should take steps to…"

Committee members understood that there is no additional funding available to help implement the policy, but campuses may be able to make adjustments by shifting budget priorities.

Committee members also wanted know whether the policy was a strict mandate. It reads as if the **risk assessment** or **risk treatment plan** is required, and that should be made more explicit. CIO Andriola said that security hacking attempts are made on UC health data and personally identifiable information happen every day, and the overall goal is to reduce UC's cyber-risk.

UCACC had several comments on the policy and supplementary material, to be addressed in the next revision of the IS-3 policy and supporting materials. These comments are in addition to those in the Chalfant memo.

1. Checklists should be used only for strict requirements, as readers will treat them accordingly. Some of the elements of the checklist did not appear to be requirements, as they were contradicted by information appearing later in the policy.
2. In place of a checklist, use principles and criteria.
3. Distinguish between campus and individual responsibilities.
4. Include more realistic, non-extreme examples. (E.g., a researcher managing a laboratory.)
5. Include recognition of ownership and control of devices.
6. Clarify that campuses are to make their own determination of which departments/schools should be grouped and have certain restrictions.

Action: Committee members should send any additional comments on the policy to committee analyst Joanne Miller (Joanne.Miller@ucop.edu) to compile into a group response.

Action: UCACC will inform the Academic Council Chair that UCACC members expected a revised version of the Electronic Information Security Policy for review before being finalized, and that the committee has further suggestions for revision of the policy. UCACC will consult with Chair White about how to proceed.

Cybersecurity – faculty and campus concerns, including multifactor authentication

UCACC requested an update on cybersecurity issues and technical deployments. CIO Andriola and CISO Rusting reported that Campus Chief Information Security Officers and CIOs meet via conference call every two weeks and in-person once per month. Breaches most commonly result from improper deployment of patches and compromised credentials. The latter can be addressed with the use of multi-factor authentication (MFA), which some campuses are now employing. Given the variant methods of implementing these technologies, and the probable range of user responses, UCACC requested a report on campus experiences with the rollout of MFA, to be presented at the February meeting.

At UC Berkeley, faculty supported two new IT initiatives: network segmentation and multi-factor authentication. Multifactor authentication can be inconvenient, in particular for international travel, but there are workarounds such as back-up passwords, fobs, etc. All campuses should be using their IT governance structure to discuss costs and priorities for information technology moving forward.

Action: Tom Andriola and David Rusting to report on campus experiences with MFA rollouts at the February UCACC meeting.

Action: UCACC members should be prepared to report on Senate involvement in MFA rollout through their campus IT governance structures.

CRGC update

The Cyber-Risk Governance Committee was formed in 2015, after the UCLA health data breach. It is a systemwide-level committee with representation from a "cyber-risk responsible executive" (CRE) from each UC location. In some cases the CRE is a provost, in others a CIO or faculty member. UC Berkeley UCACC member Anthony Joseph is UC Berkeley's CRE. The committee meets four times per year to share best practices, provide updates, and consult with outside advisors. The Chair and Vice Chair of UCACC, as well as a third representative from the Academic Senate, serve as ex-officio members of UCACC.

VI. Member/campus issues

UCSB: There is no dedicated faculty committee on IT, and the faculty would like more involvement in IT decision-making. The UCSB Academic Senate's Council on Research and Instructional Resources is the closest Senate committee.

UC Davis: The campus experienced a major IT failure recently when the course management and registration systems failed. Disaster recovery plans are now suspect. The campus would like to see much more transparency about FireEye data, including how data are archived. The campus needs to rebuild trust between the faculty and administration after an incident that called for the handover of the Academic Senate Chair's email messages during an investigation.

UCSC: Santa Cruz is focusing on research computing, modernization, cloud computing, and IT support in general. A search for CIO (the Vice Chancellor for Information Technology) is under way. UCSC has a very engaged communication structure between faculty and administration on IT issues. The Vice Chancellor for IT regularly meets with the faculty Committee on Information Technology.

UC Riverside: The campus is involved in a nationwide effort to back up climate change databases. They are interested in using open source software instead of Microsoft products. Security issues have arisen with the system used for promotions and tenure at UCR (which is not used at other campuses).

CCGA: The CCGA representative to UCACC will be focusing on how the committees might work together and think about how UCACC issues might impact new self-supporting programs, hybrid programs and others.

UCOLASC: Vice Chair Maryann Martone provide a brief report from the latest meeting of the Senate's University Committee on Libraries and Scholarly Communication (UCOLASC). The committee discussed an open access initiative from the Max Planck Institute to transform scholarly journals to open access by 2020 ("Open Access 2020"). Various OA models are being explored, and one of the more interesting implications for libraries is that they are no longer building journal collections but rather providing access points.

VII. Innovative Learning Technology Initiative (ILTI) update

Mary-Ellen Kreher, Director, Course Design and Development
Adam Hochman, Assistant Director of Technology Development
Ellen Osmundson, Project Director (via video)

ILTI Director Kreher gave a slide presentation to orient the committee members to the current issues faced by ILTI, including barriers to systemwide enrollment due to UC policies and registrar standards. The Senate's University Committee on Educational Policy (UCEP) had recommended at the end of last year that ILTI consult with UCACC on a technological issue regarding communication between registration systems. UCACC members were not convinced that UCACC is the right committee to advise on registration policies, but are willing to hear more from ILTI on cross-campus enrollment issues as needed. UCACC is also willing to provide a representative from the committee to the Cross-Campus Enrollment System Change Control Advisory Board or to receive periodic updates from Director Kreher, who is a consultant to UCACC.

Meeting adjourned: 3:55pm.
Meeting minutes drafted by: Joanne Miller, UCACC committee analyst
Attest: Christine Borgman, UCACC Chair

References

1. 2013. UCOP Privacy and Information Security Initiative. Retrieved November 18, 2016 from http://ucop.edu/privacy-initiative/
2. 2016. Data Governance Task Force: Final report and recommendations. Retrieved November 18, 2016 from http://evc.ucla.edu/reports/DGTF-report.pdf
3. 2017. Memo from Academic Council to President Napolitano Re: Response to the Budget Act of 2017: Principles to guide options for redirecting systemwide funds. Retrieved November 27, 2017 from http://senate.universityofcalifornia.edu/_files/reports/SW-JN-Principles-%20Redirecting-Funds-to-Enrollment.pdf
4. 2017. Memo from Academic Council to Vice Provost Susan Carlson Re: Revised Presidential Policy on Electronic Information Security. Retrieved November 27, 2017 from http://senate.universityofcalifornia.edu/_files/reports/JC-SC-Electronic-Info-Security.pdf