

**UNIVERSITY COMMITTEE
ON
ACADEMIC COMPUTING AND COMMUNICATIONS
ANNUAL REPORT 2019-2020**

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

The University Committee on Academic Computing and Communications (UCACC) is charged in Senate Bylaw 155 to represent the Senate in all matters involving the uses and impact of computing and communications technology and advise the President concerning the acquisition, usage and support of computing and communications technology and related policy issues. UCACC held three in-person meetings and one videoconference during the academic year. UCACC's last meeting was impacted by the shutdown of in-person operations due to the Covid-19 pandemic. This report highlights the committee's activities in 2019-20.

CYBERSECURITY

Office of Ethics, Compliance, and Audit Services (ECAS) Senior Vice President Alexander Bustamante updated UCACC on a threat detection and identification (TDI) audit to assess the systemwide implementation of FireEye, including the volume and nature of apprehended threats, the value of a systemwide approach, total cost, and return on investment. As part of the process, Systemwide Cybersecurity Audit Director Greg Loge met with CIOs and CISOs on each campus. UCACC members suggested informing the broader UC community about the oversight and review process, and assuring faculty, in particular, that FireEye data has never been used in disciplinary actions and UCACC has been assured that it will not be used in that way. Faculty have expressed concerns about cybersecurity costs eventually being shifted to campuses, and the appropriate allocation of resources between FireEye and other security and IT needs.

UCACC felt that Office of Ethics, Compliance, and Audit Services (ECAS) was responsive to the committee's request last year for additional information on the audit's scope, purpose, and timeframe.

HEALTH DATA GOVERNANCE

UC's new Chief Health Data Officer Cora Han joined the December UCACC meeting to update the committee on the outcomes of the President's Ad Hoc Task Force on Health Data Governance, which was completed in January 2018. The report issued three foundational recommendations:

1. Pioneer a patient-informed, justice-based model of Health Data use, and demonstrate the need for and benefits of more active data use.
2. Establish a System-level Health Data Office to identify and accelerate projects and partnerships to realize the public benefits of collaborations to analyze Health Data.
3. Develop criteria and a process for evaluating projects and transactions involving access to UC Health Data by outside parties.

In response to the recommendations, UC created the Center for Data-driven Insights and Innovation (CDI2), which oversees the UC Health Data Warehouse. UC must balance its duty to safeguard patient health data with the emerging imperative to collect, analyze, and share data on a large scale. Risk assessments for data security of the warehouse will be ongoing. UCACC

members were interested in data de-identification, validation, and encoding. Members also wanted to know about documentation, whether and how the data was being made available to UC researchers, and how researchers could get more information about the warehouse. UCACC members noted that it was important to be open, transparent, and engaged with patients whose data will be used, and recommended including patient advocates in any oversight structures.

UC DATA MANAGEMENT

At the beginning of the year, John Chodacki and Catherine Nancarrow from UC's California Digital Library joined a UCACC meeting to update the committee about UC's new partnership with Dryad, a curated digital data repository that allows data to be discoverable, reusable, and citable. Dryad is open source and non-profit; it was developed by researchers to host data connected with peer reviewed articles and to be easily embedded in research workflows. Submissions are preserved for the foreseeable future with the backing of UC's Merritt digital preservation repository. Information about the publishing and data management services offered by UC is available via campus library services (in person and online).

FACULTY IT SATISFACTION

An ongoing topic for UCACC has been faculty satisfaction with IT services. In February, UC Santa Cruz member Hamid Sadjadpour told the committee about the UC Santa Cruz Faculty IT Satisfaction Survey that was conducted in 2018 by the campus Office of Institutional Research with significant faculty input. The results of the survey were provided to UCSC's incoming Vice Chancellor for Information Technology to help foster an awareness of the university's responsibility to provide computing and related services. UCACC members discussed the possibility of all campuses conducting IT surveys at the same time with common questions that could be compared and assessed across the system. Four areas were mentioned: instruction, research, business applications, and clinical. The committee also talked about how to establish objectives for IT surveys and to make sure they address local problems, with the understanding that faculty need to feel that their responses will have an impact and that change is possible.

SYSTEMWIDE IT PROCUREMENT

In December and February, UCACC learned about systemwide procurement for IT goods and services. Associate Director for IT Strategic Sourcing Thomas Trappler joined the meeting to talk about the UC IT Strategic Sourcing Center of Excellence. The Center's goals are to reduce cost and risk and improve IT services within UC. There are currently 65 systemwide agreements, including licenses for security tools, telecommunication infrastructure, and electronic signature management systems, as well as printers and copiers. These are not systemwide purchases, but rather agreements that can be used to manage costs throughout UC. The four-person strategic sourcing team partners with campuses to determine priorities. Trappler would like additional faculty input, and suggested that faculty could be part of an evaluation team that is formed to assess each proposed purchase. UCACC members suggested that the committee be consulted when there is a new procurement process underway in order to help determine faculty involvement on a case-by-case basis.

RESEARCH INFORMATION MANAGEMENT SYSTEMS (RIMS)

As a result of a report last year from the chairs of UCACC and UCOLASC (Committee on Library and Scholarly Communications) that was endorsed by the Academic Council, UC Provost Michael Brown convened a Working Group to oversee a systemwide collection of information about Research Information Management Systems (RIMS) and their use at UC. The Working Group has representation from UCACC, UCOLASC, and UCORP. Research

information systems are generally used to assess and promote the research outputs of an institution, and some universities may use them for personnel reviews. UCACC received updates about the Working Group via Interim CIO Mark Cianca and UCACC representative Susan Cochran (UCLA) throughout the year.

CONSULTATION WITH SYSTEMWIDE INFORMATION TECHNOLOGY SERVICES (ITS)

- ***Electronic Information Security Policy (IS-3)***

UCACC completed its review of the nine standards for the new Electronic Information Security Policy (IS-3) last spring. The Information Technology Leadership Council – the CIOs from each location – approved the policy on Oct. 3, 2019. The intention of the policy is to give as much local control to the campuses as possible. The expectation is that CIOs and Chief Information Security Officers will consult widely. UCACC expressed concern about liability and the extra responsibility that falls to faculty, and discussed how to inform faculty about all of the aspects of computer security that they need to know. IT administrators and staff handle many aspects of security via automated or pushed updates and other protections.

- ***Continuity Planning and Disaster Recover Policy (IS-12)***

UCACC Chair Anthony Joseph is one of the sponsors for the revision of UC's Continuity Planning and Disaster Recover Policy (IS-12). UCACC was asked to review the revised IS-12 policy requirements and has been kept informed about the policy development. Implementation will be based on the Gartner model, which will allow UC locations to decide which business functions and units fall within the scope of the policy. The policy uses a risk-based approach with tiered recovery levels (1=low, 5=high). Each location's designated Cyber-risk Responsible Executive (CRE) will be the senior person responsible for key elements and exceptions. The formal approval process will start in the fall.

- ***CMMC (Cybersecurity Capability Maturity Model Certification)***

UCACC received an introduction to new standards for cybersecurity certification from the Department of Defense that will likely have an impact on UC funding. The new classification system will mean that more types of research would need additional security certification. There is a five-year phase-in and UCACC will continue to monitor the situation as UC consults broadly both within the university and with higher education organizations.

ADDITIONAL BUSINESS

Impacts of Covid-19: UCACC's last meeting of the year was April 28, just over a month into the Covid-19 pandemic shutdown. Committee members discussed the issues arising from online-only instruction, including the extra work for instructors and concerns about testing and evaluation. Remote proctoring for exams is particularly fraught, bringing up issues of security, privacy, and academic dishonesty. Appropriate assessment of student learning for online courses will continue to be a major topic. Other issues were around the recording of courses and lectures for asynchronous learning and helping instructors with technology for large classes.

Machine learning and artificial intelligence: As part of an information-gathering process by the Office of Ethics, Compliance, and Audit Services (ECAS), UCACC was asked for input regarding concerns around machine learning and artificial intelligence. UCOP is considering a plan to issue guidance and/or a planning process from the university at the systemwide level.

Electronic Communication User Etiquette: At the suggestion of a UCACC member, the committee began discussing best practices for electronic communication etiquette, with the intention of minimizing the psychological strain of information overload and expectations for work to be done outside of regular hours. The Covid-19 pandemic shutdown brought up additional related issues such as appropriate behavior and acceptable use standards for videoconferences. UCACC members thought that institutional guidelines would be useful.

UCPath: UCACC learned about the UCPath system as it has been rolled out to the campuses. UCPath combines UC's 11 payroll and human resources systems into one centralized system, including hiring, managing, payroll, and benefits. The home office is in Riverside (not on the campus). In making the transition to the new system, there were technological as well as policy issues that continue to be worked out.

Information Technology Leadership Council (ITLC) update: Interim CIO Mark Cianca provided regular updates on the concerns of the IT Leadership Council. In addition, Chair Anthony Joseph participated in ITLC meetings as an ex-officio member. In February, Cianca talked about the concerns of the CIOs in balancing systemwide initiatives with local projects. Decisions made at the systemwide level can have significant work implications for campus IT staff. Other big issues are workforce recruitment and retention in a competitive environment and the ongoing education and training of the IT workforce.

Systemwide and campus updates: UCACC devoted part of each regular meeting to discussing systemwide issues as reported by Academic Senate leadership and reports from campus representatives on individual campus activities and concerns.

REPRESENTATION

UCACC Chair Anthony Joseph, served as a faculty representative to the Information Technology Leadership Council (ITLC) and as an *ex officio* member of the University Committee on Library and Scholarly Communications. Chair Joseph and Vice Chair David Robinowitz served as Senate representatives on the Cyber-Risk Governance Committee (CRGC). UCLA member Susan Cochran served on the Provost's Research Information Management Systems (RIMS) Working Group.

ACKNOWLEDGEMENTS

UCACC is grateful for the contributions made by the consultants and guests who attended meetings in 2019-20, including:

- Alexander Bustamante, Senior Vice President and Chief Compliance and Audit Officer
- Mark Cianca, Interim UC CIO
- John Chodacki, Director, UC Curation Center (CDL)
- Cora Han, Chief Health Data Officer
- Shanda Hunt, Research Compliance Manager
- Greg Loge, Systemwide Cybersecurity Audit Director
- Catherine Nancarrow, UC3 Associate Director (CDL)
- David Rusting, Chief Information Security Officer, UCOP
- Robert Smith, IT Policy Director, UCOP
- Thomas Trappler Associate Director, IT Strategic Sourcing, UC Procurement Services

RESPECTFULLY SUBMITTED,

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