

**UNIVERSITY COMMITTEE
ON
ACADEMIC COMPUTING AND COMMUNICATIONS
ANNUAL REPORT 2021-2022**

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 met four times during the academic year. All meetings were conducted via videoconference. This report highlights the committee's activities in 2021-22.

This year, UCACC focused on the aftermath of the Accellion data breach that struck the university last year. Other topics included ongoing data security concerns, software procurement, vendor risk assessment, security requirements imposed by external entities (such as government agencies), and a new financial accounting system that was deployed at UC San Diego and UC Merced and caused much disruption and distress for researchers.

Cybersecurity

Last spring, the Accellion cyberattack impacted UC and over a hundred organizations worldwide. The attack exposed personally identifiable information (PII) of employees and their dependents via UCPath. In response, UC offered free credit monitoring and security alerts through Experian. Many UC faculty and staff found UC's response unsatisfactory. In October, UC Senior Managing Council Hoyt Sze joined the UCACC meeting to provide an overview of UC's response to the cyberattack. After the attack, the UC Board of Regents retained San Francisco-based international law firm Orrick to lead an investigation of the incident; the California Attorney General's office was also involved in the investigation, along with other governmental agencies. Sze informed UCACC that UC is the subject of several lawsuits related to the Accellion data breach and other cybersecurity attacks that occurred last year. Later in the year, Sze shared with UCACC a confidential summary of a full report that was provided to the UC Regents describing Orrick's findings and recommendations. At various points during the year, UCACC members tried to convey the tremendous frustration among faculty around data security efforts, and the need for UC to show that it was working on best practices and appropriate oversight.

Throughout the year, members of UC's Information Technologies Services (ITS) staff kept UCACC apprised of its cybersecurity work, including revising UC's incident response coordination efforts, creating guidelines for best practices when sending mass email messages, and addressing cybersecurity incidents impacting the university. In the winter, hackers exploited a vulnerability in the widely used Log4j logging software. Around the same time, the Kronos workforce management system was the victim of a ransomware attack that resulted in delays of some paychecks at a few of the campuses.

In the fall, UCOP engaged the firm Baker Tilly to conduct a review of data security and a few UCACC members volunteered to be interviewed as part of the review.

In the spring, UCACC learned about the development of unified cybersecurity metrics by UC's Chief Information Security Officers (CISOs). An outcome of the comprehensive TDI (threat detection and identification) audit and a subsequent request from the Board of Regents, the metrics will be based on the requirements of cyber insurance carriers and customized locally. In April, Senior Vice President for UC's Office of Ethics, Compliance and Audit Services Alexander Bustamante and his team joined UCACC to talk about cybersecurity audits and the interest in implementing a formal systemwide risk-assessment process with faculty and administrative input.

UCACC plans to continue to gather more information about security protections for data that UC collects and stores centrally.

Systemwide IT procurement

In December, UC Associate Director for IT Strategic Sourcing Thomas Trappler joined UCACC to talk about the UC-wide IT Strategic Sourcing team and systemwide license negotiations. By negotiating systemwide technology licenses, UC saves money and time that each location would otherwise spend on their own negotiations. There are currently 72 systemwide managed agreements, including, most recently, Amazon Web Services, Charmtech Labs, Google Cloud Platform, Google Workspace, Verizon Wireless, and Zoom. There is no mandatory use requirement for the negotiated technologies, and anyone in the UC community can take advantage of the negotiated terms.

The process for systemwide agreements goes through a systemwide IT Sourcing Committee that identifies needs and determines UC-wide demand. Faculty can propose new technology for a systemwide agreement by contacting their local representative on the committee or submitting a project intake form on the website. UCACC's UC Davis representative Petr Janata volunteered to serve as the committee's liaison to the IT Sourcing Committee for the second half of the year. UCACC members asked for more communication about new licenses, with the result that announcements will be sent to the UCACC analyst to distribute via the committee listserv.

Financial accounting system issues

The Oracle financial software that was the source of many problems for researchers at UC San Diego and UC Merced was not obtained via systemwide procurement. UCACC learned that UCLA spearheaded the effort with an RFP that was then followed by UCSD and UC Merced. The problems with the system included account reporting inaccuracies, delays in hiring, and payment delays resulting in delinquent vendor accounts and financial loss. The UC Merced administration became aware of the problem and promised to address it. UCACC drafted and reviewed a letter to the Academic Council about the software, but did not finalize it during this academic year.

Centrally Collected and Stored Data

As part of UCACC's investigation into security protections for data that UC collects and stores centrally, the committee invited Ola Popoola, the Director for Data Infrastructure, Reporting and Analytics for UCOP's Institutional Research and Academic Planning (IRAP) unit to join its February meeting. Director Popoola provided an overview of IRAP's data environments and data use. UCACC members asked about security, privacy, and accuracy, and learned about the

protocols, data agreements, and divisions of access across the databases in use. IRAP data is used for the UC Information Center (<https://www.universityofcalifornia.edu/infocenter>) and annual Accountability Report (<https://accountability.universityofcalifornia.edu/>).

Research Data

UCACC learned that the Research Data Backup Plan, which was one of the outcomes of last year's Cyber-Risk Working Group, was put on hold by its co-sponsors, UC CIO Van Williams and Vice President for Research & Innovation Theresa Maldonado. The leadership would like to better assess the scope of the project so that sufficient resources can be dedicated. The key recommendations from last year's Cyber-Risk Working Group were to establish location-based research data protection workgroups, develop awareness campaigns for faculty, and provide a scalable back-up service for all UC researchers. UCACC hopes that the plan will be put back into action next year.

ADDITIONAL BUSINESS

Policies: UCOP IT Policy Manager Robert Smith provided regular IT policy updates at UCACC meetings. This year, Presidential Policy BFB-IS-11 Identity and Access Management, was officially rescinded in May. The accompanying Account and Authentication Management Standard (AAMS), which had been part of IS-11, was reconceived as a stand-alone document and updated. UCACC Chair Matt Bishop served on the AAMS workgroup, and other UCACC members were invited to join as well.

IT Assessment: UCACC members participated in an interactive online survey during the April meeting as part of a systemwide assessment of UC's IT function conducted by Deloitte Consulting. The consultants interviewed hundreds of stakeholders across the system. The results of the assessment were sent to UCACC members in June (after the last meeting). CIO Van Williams has convened a Steering Council to determine next steps.

Artificial Intelligence: UCACC members learned about UC's work in Artificial Intelligence oversight, led by the UC Office of Ethics, Compliance and Audit Services. A new Standing UC AI Council will be co-chaired by SVP Alexander Bustamante and the Founding Director of CITRIS Policy Lab at UC Berkeley, Brandie Nonnecke, with a mix of technologists and others with more diverse expertise. It will serve as an advisory body that focuses on communication and ensuring that university leaders are aware of issues. The AI Council will also function as a gateway for procurement.

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 Matt Bishop, 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 (UCOLASC). Chair Bishop served as Senate representative to the Cyber-Risk Governance Committee (CRGC) and the newly constituted UC Presidential Working Group on Artificial Intelligence Standing Council. He also served on the search committee for a new systemwide Chief Information Security Office (CISO) and member of the AAMS workgroup.

UC Davis representative Petr Janata served as liaison to the systemwide IT Sourcing Committee.

ACKNOWLEDGEMENTS

UCACC is grateful for the contributions made by the consultants and guests who attended meetings in 2021-22, including:

- Alexander Bustamante, Senior Vice President and Chief Compliance and Audit Officer
- Matthew Hicks, Systemwide Deputy Audit Officer
- Gregory Loge, Systemwide Cybersecurity Audit Director
- Ola Popoola, Director, Reporting and Analytics, UCOP Institutional Research and Academic Planning
- Monte Ratzlaff, Cyber-Risk Program Manager, UCOP
- Hoyt Sze, Managing Council, UC Legal
- Robert Smith, IT Policy Director, UCOP
- Thomas Trappler Associate Director, IT Strategic Sourcing, UC Procurement Services
- Van Williams, Chief Information Officer and Vice President for Information Technology Services

RESPECTFULLY SUBMITTED,

Matthew Bishop, Chair
Avideh Zakhor (UC Berkeley, fall)
Deirdre Mulligan (UC Berkeley, spring)
Petr Janata (UC Davis)
Nader Bagherzadeh (UC Irvine)
Alex Bui (UCLA)
Emily Jane McTavish (UC Merced)
Manu Sridharan (UC Riverside)
Avi Yagil (UC San Diego)
Jenson Wong (UC San Francisco)
James Frew (UC Santa Barbara)
Peter Alvaro (UC Santa Cruz)
Robert Horwitz, Chair, Academic Senate (*Ex Officio*)
Susan Cochran, Vice Chair, Academic Senate (*Ex Officio*)
Erith Jaffe-Berg, CCGA Vice Chair (*Ex Officio*)
Mary Lynch, UCEP Chair (*Ex Officio*)
John Hildebrand, UCOLASC Vice Chair (*Ex Officio*)
Joanne Miller, Committee Analyst