Mid-Term Report (2015-2016 Academic year)

November 25, 2015

University Research Committee

Chair: Yaniv Bar-Cohen, MD

Members: Marianna Chodorowska-Pilch, Morteza Dehgnhani, Henry Forman, Paula Cannon, Mariantina Gotsis, Stan Louie, Katherine Strunk, Lawrence Palinkas, Joseph Touch, Mahta Mghaddam

The University Research Committee (URC) is addressing three areas of focus this academic year (2015-2016):

1.) Academic computing
   a. This topic was initiated in the 2014-2015 academic year and will be completed this academic year. Last year's URC mostly focused on software resources for research in the USC community, while this year's emphasis has been on data storage and data sharing.
   b. An "Academic Computing" Document summarizes the findings and recommendations of the University Research Committee and is in its final stages (it will be completed in December 2015).
   c. Consulted sources
      i. Douglas Shook, PhD [Chief Information Officer and USC Vice Provost for Information Technology Services (ITS)]
      ii. Candace Borland (Director of ITS web services)
      iii. Joe Cevetello (ITS Assistant CIO)
      iv. Sam Gustman (Associate Dean at USC Libraries, Chief Technology Officer of the Shoah Foundation)
      v. University and USC Hospital Operations Internal Audit Report
      vi. University-wide faculty survey regarding faculty software use and needs
      vii. USC Academic Computing Workshop (May 4, 2015)
   d. Summary of Recommendations:
      i. Unification of academic computing resources
      ii. Better alignment of software purchasing decisions with faculty needs
      iii. Improved information dissemination regarding academic computing at USC
      iv. Dedicated data storage for USC faculty (with emphasis on security standards, reporting requirements and back-up capabilities)
      v. Data sharing capabilities for USC faculty
      vi. Parallel process for software, data storage and data sharing among satellite USC institutions

2.) Reproducibility of research
    a. Reproducibility of research refers to the concern that outcomes and results of research work are not always reproducible when repeated. Assumptions of scientific truth (without validation) can therefore result in significant waste and resource loss during subsequent research based on inaccurate conclusions. Efforts to tackle this issue address the desire for more openness in research protocols and data availability as well as efforts to minimize biases of reporting
    b. This is an area of considerable recent focus by media, funding agencies and academic journals. While there is controversy regarding the true importance of the reproducibility issues to the strength of scientific discovery and validity, a need for improved "openness" of research work and outcomes is generally agreed to be an important goal.
    c. A USC Guidance Document will be developed regarding how to best address reproducibility and openness in research at USC, while ensuring that the university takes an early lead on this issue. Whereby taking a leadership role on this topic can be an area of opportunity for advancing USC's national and international academic reputation, delays in addressing it as an institution may result in outside policies inevitably being imposed on the institution as this issue continues to take center stage publically and politically.
    d. Consideration by the URC of whether a USC Policy Statement should be developed regarding Reproducibility / Openness of Research.

3.) International research and export controls
    a. Export control regulations are U.S. laws that regulate the distribution to foreign nationals and foreign countries of strategically important products, services and information for reasons of foreign policy and national security
    b. An International Collaboration Committee has been created to address issues related to goals and standards for International Collaboration. The committee met in November and will meet again in December and January to generate an International Collaboration Document (under direction of Daniel Shapiro, USCDirector of Research Administration Compliance) for review by the URC prior to submission to the Academic Senate.