

University Senate Annual Committee Report Academic Year 2019-2020

Section I

Name of Committee: Research and Creative Activities Committee (RCAC)

Submitted by: James Lyons

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Membership Roster: Jesenia Pizarro-Terrill, David Sailor, Joan McGregor, Pauline Davies, Huaiyu Chen, Bradley Greger, Deepak, Chhabra, Hugh Barnaby, James Lyons (chair)

Overview Narrative:

The following summarizes committee work accomplished throughout this past year: This report summarizes the progress made by the RCAC for the academic year 2019-2020. The RCAC had three open RFCs, inherited from 2018-2019. No new RFCs were open this academic year. Our analysis of each RFC is described in the appropriate sections below. We met once in-person in November 2019, and for a 2nd time in April 2020 via Zoom. Both meetings were highly productive. In summary, we recommend that the high-performance computing (HPC) RFC be closed. We recommend a specific course of action for establishing an open access publishing fund at ASU (eventually). And we recommend additional study of the RFC requesting a policy for use of data sourced from 'dark web' sites in ASU research.

Section II

Request for Consultations and/or topics reviewed by the committee and outcomes (topics reviewed by the committee decided not to act/review should be listed here with, no action taken):

RFC 111 – High-performance computing (HPC) needs of the faculty. This RFC originated in 2016 with the intent of producing a survey to address the scope HPC needs of the faculty. Since that time, KED has incorporated HPC into its computing core facility. This has resolved most of the issues that the broader campus was experiencing, namely unfair queueing and very long run times for smaller computer jobs. After an informal email survey of HPC users in the School of Earth & Space Exploration (SESE), a couple of heavy users reported that they were adversely affected by the new queueing rules put in place since HPC became a core facility. This, of course, is a situation where the 'needs of the many outweigh the needs of the

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few', and we must consider the new rules instituted by KED have served their purpose. One HPC user within SESE has needs that exceed the capability of the HPC clusters at ASU, and therefore he is pursuing other off-campus computing options. This same user raised the interesting question of whether HPC could be more closely connected to Computer Science at ASU. This is a question worthy of further consideration, but, in the committee's opinion, exceeds the scope of the present RFC. Given the overall success of creating a centralized computing core facility that includes HPC, we recommend that this RFC be closed.

Section III

Request for Consultations and/or topics that were not started or remain unfinished and need to be carried over to the next academic year.

RFC 147 – This RFC was created to explore options for financial support of open-access publishing at ASU. Open access publishing is highly desirable as a means to make published work as widely accessible as possible. Publishing in open access journals can greatly increase the visibility of authors, an especially valuable benefit for junior faculty members in a wide range of fields. Open access journals usually have additional fees beyond the normal publishing charges. These fees generally range from a few hundred to as much as a few thousand dollars, with the latter charged by Nature Publishing Group. ASU is supportive of open access publishing and presently has a hybrid policy for authors whose work is funded by agencies that require open access publishing. In such cases ASU provides the means the guarantee open access of the relevant published work. This is a good policy, but what we seek here is a more general open publishing fund, applicable to everyone, especially researchers in fields not presently covered by the ASU hybrid policy. We do not want this to be a financial burden to the Provost's office. In this spirit, we recommend the following course of action.

A successful open access publishing fund needs to have an annual budget of somewhere in the range of 30K to 50K dollars per year. Assuming an average open access fee of \$500 per paper, this would correspond to a maximum of 60 to 100 papers per year, a modest but still useful number for a faculty as large and diverse as that at ASU. To sustain this budget, we recommend the establishment of an open access investment fund. This fund could, in principle, be seeded by university donors and benefactors. If we imagine, for the moment, a non-deflationary future, then a fund seeded with 1 to 2 million dollars would be adequate for this purpose. We further propose that this be a named fund to recognize the valuable contribution made to furthering research at ASU. The named fund would be cited in all publications supported by the fund, but the donors would, of course, not be responsible for the content of any publication. We have not yet contacted the ASU Foundation about this idea, but we recommend that this be done in the near future. The ASU Foundation has the knowledge to target appropriate donors.

Is there demand for an open access fund at ASU? Yes. Communications from faculty and researchers at ASU over the past several years both to myself and to Anali Perry, the

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Scholarly Communication librarian at ASU, have made it abundantly clear that there is a need for such a fund. In the past year I have received email from Professor David Siroky in the School of Politics and Global Studies and from Professor Marco Janssen in the School of Sustainability expressing vigorous support for an open access fund. Since 2016, Anali Perry has received requests from 66 individuals at ASU on the topic of the availability of open access publishing support. These 66 individuals include graduate students, postdocs, research faculty, and all levels of tenured and tenure track faculty. Their schools and departments span the diversity of ASU, ranging from Biodesign, SESE, Psychology, and SMS, to the College of Health Solutions, the Sanford School of Social and Family Dynamics, the College of Integrative Sciences and Arts, the School of Human Evolution and Social Change, and the Mary Lou Fulton Teachers College. An open access publishing fund will serve the publishing needs of the entire university.

Do open access publishing funds exist at other universities? Again, yes, but not uniformly. The University of Colorado at Boulder has one; UCLA does not. The University of Arizona has one, but redefined it during the past two years because the original formulation was not fiscally sustainable. What we recommend here is a fund that will be self-sustaining, and not a drain on the University's resources. We believe this scenario is best achieved with a donor-supported fund, which may be a named fund.

Would we need to vet requests of support for open access publishing? Most likely, yes. The purpose of the open access fund is to support scholarly work in reputable journals. It is not to support predatory publishers. There are existing lists of predatory publishers, e.g., Beall's list of predatory journals and publishers, that can be used to avoid supporting predatory publication. We could also use a size-independent impact factor as a selection criterion. We would not recommend the use of an impact factor or similar metrics that are functions of the size of the publishing community in a given field, as this would create a bias against smaller journals and publishers. We propose to use a size-independent metric of a journal impact and prestige, such as the SJR indicator. (SJR is an acronym for SCImago Journal Rank). We have not considered a specific SJR cutoff value, but once such a fund is established, it may be necessary to do so.

We will not address the administration of an open access investment fund. We have not yet been in communication with the ASU Foundation about how to target possible donors. We would recommend Anali Perry to chair the committee that oversees the selection of journals and publishers eligible for support from the fund.

RFC 149 – The ethics of using data acquired through dark-web sources (any hacked or illegally procured data) in research activities at ASU. This RFC originated with the Provost's office in 2018. This RFC was prompted by a case at ASU of a junior faculty member attempting to use hacked corporate data in their research. The decision was made within ASU to not allow publications using these data. Situations such as this will surely arise again at ASU and at other universities. The question is how to assess the use of hacked data by members of the ASU community. The short answer, we believe, is the establishment of a review committee to handle such situations on a case-by-case basis, and to develop some policy guidelines to assess whether a given situation runs afoul of the policy

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However, establishing a blanket policy for the use of hacked data is likely to be difficult and perhaps not possible. A good example is provided by the academic response to the use of WikiLeaks data, in particular the use of the U.S. diplomatic cables released by WikiLeaks. Professor David Siroky in Political Science provided our committee with links to several articles on how political scientists view the use of WikiLeaks cables in their research and, especially, publications. Within these articles, published between 2011 and 2016, the range of opinions covered the gamut from ‘this is a great opportunity and these data must be used’ (paraphrasing) to ‘the use of these data is a reprehensible act’ (again paraphrasing). There was not a consensus opinion even among the political scientists, who are highly knowledgeable about the information contained in the WikiLeaks cables.

Our own discussions within the RCAC on this topic also revealed a range of opinions, and a dependence on the type of hacked data potentially being utilized. In part, this reflects the diversity of our backgrounds. A journalist may view the use of hacked data differently than would someone in criminology. But it also reflects the different data hacking scenarios. Data hacked from a corporate source has the potential to contain personal information. Data hacked from diplomatic sources is less personal but of a greater national and international relevance. In all cases, we agreed that personal information cannot be released, although there are certainly cases in which the release of personal data could reveal illegal activity. To handle the wide range of possible scenarios, and given the infrequent occurrence (at least at the present time) of hacked data scenarios in the ASU community, we recommend the formation of a review committee to address these cases as they arise. This review committee, and/or future RCA committees, should begin the process of defining a policy for how to treat the use of hacked data by ASU researchers. In opinion of the present RCAC, the policy guidelines will necessarily depend on the type of data that was hacked, and on the intended use for the data. Accommodating these possibilities will require the development of a multi-faceted policy.

Section IV

Recommendations to the Senate or Final Comments

We recommend that RFC 111 (HPC needs) be closed. KED has instituted equitable changes in queueing and other topics of concern for HPC that, by all accounts, are working well.

We recommend a path for moving forward with a self-sustaining open access publishing fund (RFC 147). There is broad support for such a fund across campus. We suggest that a philanthropically-seeded fund is the best method for ensuring self-sustainability, together with oversight from the Library.

We recommend the establishment of a review committee to handle ‘dark web’ (RFC 149) data issues as they arise. Because there are many nuances to such situations, the RCAC concluded that a case-by case approach was best.

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