

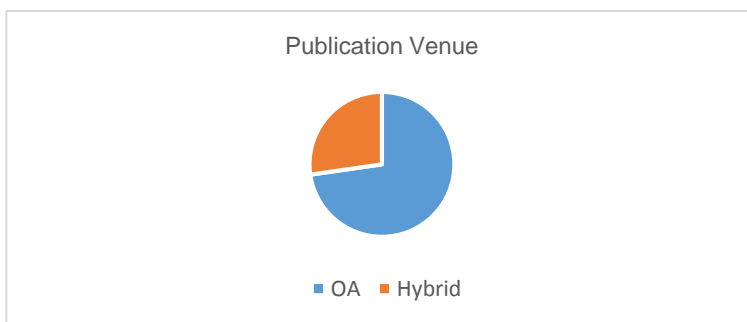
Evaluating the Impact of the University Open Access Publication Fund

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With a goal “to support publication models that enable free, immediate, online distribution of, and access to, scholarly research”¹ the University Open Access Publication fund (UOAP, <http://uwm.edu/libraries/uoap/>) was established at UWM in June 2012. This fund supports the “gold” open access model² by covering partial costs for authors who publish in journals with article processing charges (APC). The program underwrites 50% of APC in fully open access journals and 30% in hybrid, “author’s choice” subscription-based journals, up to \$1,500 per article. Once a manuscript is accepted by a peer-reviewed journal (included in the Directory of Open Access Journals, <https://doaj.org/>) or a subscription journal (indexed by Web of Science), the UWM author may request funding via an online form (<http://uwm.edu/libraries/uoap/request/>), and then after a review by a fund coordinator, receive a money transfer from the library business office to the affiliated department account.

Overall, there has been significant growth of institutional funds in support of open access in North America, from nine universities in 2009 to 51 in 2014³, and approximately 70 universities in 2017⁴⁻⁶. The UOAP fund was launched with \$20,000 of seed money from Indirect Funds made available to the UWM Libraries in the summer of 2012; \$15,000 was allocated for 2014, and thereafter \$10,000 annually starting July 1, 2016.

From the beginning the Libraries chose to support authors publishing in open access as well as hybrid journals so that the authors might take advantage of open access in well-known prestigious (but hybrid) journals. Indeed, the fund was used for articles in such historical periodicals like the *Proceedings of the National Academy of Science of the United States of America* (PNAS, launched in 1915), *Journal of Nursing Education* (Slack, 1962), *Environmental Science and Technology* (ACS, 1967), and *Chemosphere* (Elsevier, 1972). Since its establishment the fund has paid \$58,257 in support of publishing 76 articles - 56 (74%) of those appeared in fully open access journals and 20 (26%) in hybrid journals.



PLOS ONE was by far the most popular journal venue, receiving twelve UWM articles supported by UOAP, followed by five articles in *Scientific Reports*, and two articles in each of *PLOS Genetics*, *AIDS and Behavior*, *Chemosphere*, *Environmental Science and Technology*, *Environmental Toxicology and Chemistry*, and *Journal of Geophysical Research: Oceans*.

In October 2015, *PLOS ONE* increased its APC to \$1,495 (in order to invest into a new submission system), yet this amount looked reasonable compared to the fees charged by *Nature Communications* (\$5,200), *Cell Death and Disease* (\$3,200), or *mSphere* (\$2,300), where the UWM authors chose to publish regardless of their APC or \$1,500 cap by UOAP. Last summer after an original request for funding an article in *Nature Communications*, the UWM authors changed a journal choice to *Nano Letters* (\$4,000 hybrid APC supported at 30% by UOAP) without open access.

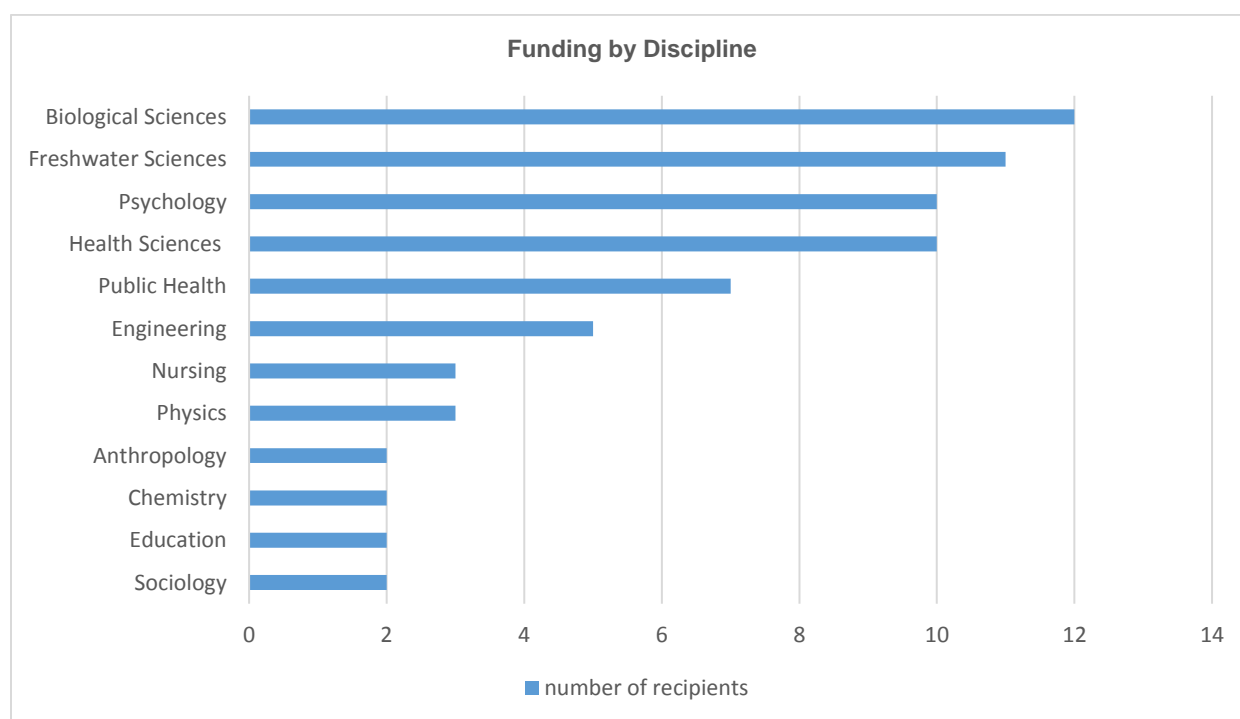
In contrast to these expensive choices for open access, one scholar preferred *F1000Research* that based its charge on word count requesting only \$150 for a short article up to 1,000 words (about 2 pages).

The allocation and the number of articles per year is summarized in the table as follows:

Fiscal year	Amount paid, \$	Number of articles
2013	6,949	8
2014	10,305	16
2015	7,468	11
2016	9,894	14
2017	7,653.23 (9,391)*	11 (13)
2018 (July-January)	15,988	16
Total	58,257	76

*Funds for two articles were originally requested in June 2017, but then returned because of their change from open access. An extra amount was added to assist with a large number of requests in 2018.

Applications for funding were submitted from 23 academic departments and schools at UWM, from Administrative Leadership to the Joseph Zilber School of Public Health. In general, the academics in Natural Sciences and Engineering were most likely to take advantage of this program resulting in 56 articles (74%), compared to those in Social Sciences using funding for 19 articles (25%), and only one scholar in Arts and Humanities for the first time in fall of 2017. Our data correlates well with surveys of the existing attitudes and practices for publishing open access⁷ as well as with those using an institutional fund⁸. A distribution among specific disciplines is shown in the following graph:



After evaluating citation counts of the articles funded by UOAP, we are glad to report their impact on research advancement illustrated by the following two early publications:

1. Pharmaceuticals and personal care products found in the Great Lakes above concentrations of environmental concern

Rebecca Klaper (Freshwater Sciences) and co-authors, *Chemosphere*, 2013

119 times cited in Web of Science: highly cited paper*, cited by 187 in Google Scholar (as of 3/12/18)

<http://www.sciencedirect.com/science/article/pii/S0045653513010412>

*Web of Science label: As of March/April 2017, this highly cited paper received enough citations to place it in the top 1% of the academic field of Environment/Ecology based on a highly cited threshold for the field and publication year.

2. Liana abundance, diversity, and distribution on Barro Colorado Island, Panama

Stefan Schnitzer (Biological Sciences) and co-authors, *PLOS ONE*, 2012

67 times cited in Web of Science, cited by 96 in Google Scholar (as of 3/12/18)

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0052114>

We believe the success of the open access fund also contributed to our developing a practice of rigorous evaluation for the identification of “predatory” publishers (“vanity presses”) who exploit the “author pays” model. Early on, we learned that eliminating a personal name from a published article when the author regretted a choice of the journal was a big deal for a publisher because it involved changing a permanent scholarly record. Subsequently, we provided guidance to the UWM authors in their decisions about questionable journals soliciting publications. In addition to DOAJ, for evaluating journal reputation, we consulted the Open Access Scholarly Publishers Association membership and its criteria (OASPA, <https://oaspa.org/membership/member/>) and “Principles of Transparency and Best Practice in Scholarly Publishing” developed jointly by DOAJ, OASPA, the Committee on Publication Ethics, and the World Association of Medical Editors (<https://publicationethics.org/resources/guidelines-new/principles-transparency-and-best-practice-scholarly-publishing>).

Based on our assessment of UOAP from 2012 to 2016, we have updated guidelines to our authors:

1. Beginning fall 2016 all authors funded by UOAP have been requested to deposit their articles into UWM Digital Commons (<http://dc.uwm.edu/>).
2. Beginning fall 2017 the allocation formula has been revised increasing support to the full amount per article with an APC under \$1,000 and then an additional 50% up to \$1,500 for publishing in a fully open access journal.

The increased support for an article processing charge as well as proactive marketing of the fund via multiple communication channels such as a library blog post (<http://uwm.edu/libraries/2017/11/06/oa-fund/>), provost’s “Monday Updates to Academic Affairs”, library contacts and faculty liaisons at academic departments, “Publish, not Perish” workshop series conducted by representatives from Mary Ann Liebert, Inc. and Springer Nature, tweets and events during the Open Access Week, all in all, have resulted in a higher quantity of funding requests than anticipated since fall of 2017. The fund received a record number of applications and provided almost \$16,000 in support of publishing 16 articles open access from July 2017 to January 2018. The end of the calendar year saw a peak of eight applications during December and winter holiday break with those coming in simultaneously. At that point an additional allocation above \$10,000 was granted so that it was possible to accommodate the concurrent requests. After that we posted a note on the UOAP webpage informing users that the fund had reached the maximum and new funding requests would be accepted after July 1, 2018. In evaluating the impact of the recent revisions we observed the following four new features:

1. All funding requests were for fully open access, not hybrid journals.
2. An author affiliated with the UWM Department of Linguistics (that department has never applied for open access publication funding before 2017) used the support.
3. Fifteen articles (out of sixteen total) were deposited by the authors to our institutional repository.
4. More requests were for publishing in *Scientific Reports* (3 papers) than in *PLOS ONE* (2 papers).

We will be monitoring a number of funding inquiries and comments regarding the current allocation formula by UWM authors. We realize that the “author pays” model has obvious flaws and is not sustainable in the long term, and we welcome feedback from UWM authors on how the UWM Libraries could better support them as new trends emerge in scholarly communication.

Notes:

1. SPARC: Scholarly Publishing and Academic Resources Coalition, "Campus Open Access Funds," available online at <https://sparcopen.org/our-work/oa-funds/> [accessed October 15, 2017].
2. Peter Suber, "Open Access Overview," available online at <https://legacy.earlham.edu/~peters/fos/overview.htm> [accessed October 15, 2017].
3. Greg Tananbaum, "North American Campus-Based Open Access Funds: A Five-Year Progress Report," (Washington, D.C.: SPARC: Scholarly Publishing and Academic Resources Coalition, Fall 2014), available online at <https://sparcopen.org/wp-content/uploads/2016/01/OA-Fund-5-Year-Review.pdf> [accessed October 15, 2017].
4. PLOS, "Open Access Funds," available online at <https://plos.org/open-access-funds/>
5. De Gruyter, "Information for Authors: Funds," available online at <https://www.degruyter.com/page/1097#USA> [accessed October 15, 2017].
6. Peter Suber and Robin Peek, "Open Access Directory: OA Publication Funds," (hosted by the School of Library and Information Science at Simmons College), available online at http://oad.simmons.edu/oadwiki/OA_publication_funds [accessed October 15, 2017].
7. Yimei Zhu, "Who Support Open Access Publishing? Gender, Discipline, Seniority And Other Factors Associated With Academics' OA Practice," *Scientometrics*, 111, no.2 (March 6, 2017): 557–579. doi:<https://doi.org/10.1007/s11192-017-2316-z>
8. Samantha Teplitzky and Margaret Phillips, "Evaluating the Impact of Open Access at Berkeley: Results from the 2015 Survey of Berkeley Research Impact Initiative (BRII) Funding Recipients," *College & Research Libraries*, 77, no. 5, (September 2016): 568-581. doi:<https://doi.org/10.5860/crl.77.5.568>