

## 2020 Update of the University Open Access Publication Fund

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### Shortage of funds

The University Open Access Publication Fund (UOAP, <http://uwm.edu/libraries/uoap/>) has been in existence and managed by the UWM Libraries since 2012. Its highest level of support, for eighteen articles in the total amount of \$20,163, was provided in fiscal year 2019. This record number of articles was made possible by matching funds from the Provost's office. Overall, since its establishment, the fund has paid \$89,031 in support of publishing 104 articles. The allocation and the number of articles per year is summarized in the table, as follows:

Fiscal year	Duration	Amount paid, \$	Number of articles
2013	6/19/12-3/8/13	6,949	8
2014	7/29/13-6/13/14	10,305	16
2015	7/3/14-5/29/15	7,468	11
2016	7/30/15-6/27/16	9,894	14
2017	8/8/16-6/9/17	7,653	11
2018	7/19/17-1/16/18	15,988	16
2019	7/1/18-3/21/19	20,163	18
2020	7/1/19-10/07/19	10,611	10
<b>Total</b>		<b>89,031</b>	<b>104</b>

In this table, the second column "Duration" shows the dates when the initial and the final requests for funding were processed during a fiscal year. In 2012, the first year, the seeding fund of \$20,000 was adequate considering the small number of requests by UWM authors at that time. Since then, interest in publishing open access has increased steadily. For the last three years the program has experienced a significant shortage of funds. For fiscal year 2018, the amount paid is higher than the annual allocation because the previously paid fees for two articles were returned (those articles have not been published as open access) plus a small amount was added by the library to assist with a number of simultaneous requests over a winter holiday break. In 2019, an additional matching fund provided by the campus administration enabled an extension of support until March 21, 2019, still not long enough to reach the end of fiscal year in June 2019. For current year, the fund's annual allocation was reduced to \$10,000, which was enough to support only ten articles until October 7, 2019. That was the shortest duration of financial support availability for UWM authors. The good news is that the University Open Access Publication fund will be sustained for the next fiscal year after July 1, 2020. This is truly generous support by the UWM Libraries, taking into consideration the budget reduction of 6.7% imposed by the University administration for the next fiscal year, in addition to the library's continuing need to review and cancel serial subscriptions in response to the increasing costs by publishers.

## Review of peer institutions

We are fortunate in our campus's commitment to open access publishing. The University of Wisconsin-Milwaukee is the only institution offering such funding in the state. The University of Wisconsin-Madison closed its fund in 2014 after spending its initial \$50,000 seed money.

For comparison of levels of open access initiatives at other universities, we reviewed 15 UWM peeruniversities and found that only three offer such funds: Indiana University-Purdue University Indianapolis, Temple University, and University of Illinois at Chicago. From our survey of their fund coordinators, we learned that only one fund (allocated annually at \$20,000) was supported entirely from the library's budget; and the two other funds included a partial contribution (one at \$15,000) from the library's budget along with money (\$50,000-60,000 total per year) collected from schools, Office of the Vice Chancellor for Academic Affairs, and the Office of the Vice Chancellor for Research. In writing this report (April 2020) we checked back on the status of OA funds at the three peer institutions and discovered that two were not currently active, either exhausted or being evaluated until the next fiscal year.

After our survey of peer institutions in 2018, we added the UWM UOAP to two directories: *Open Access Funds in Action* hosted by SPARC (Scholarly Publishing and Academic Resources Coalition)<sup>1</sup> and *Open Access Directory* hosted by the School of Library and Information Science at Simmons College<sup>2</sup>.

## Recent trends

Since our previous report<sup>3</sup>, the following five trends have been observed during the recent three years:

1. All funding requests were for fully open access journals. The last request for publishing open access in a hybrid subscription-based journal was in August 2016.
2. Authors applied from three new-to-UOAP departments: Biomedical Engineering, Geography, and Mathematics & Natural Sciences at the recently established College of General Studies, UWM at Waukesha. The other applications came from the following colleges and schools: Letters & Science, Engineering & Applied Science, Health Sciences, Nursing, and Freshwater Sciences.
3. Articles were published in a variety of journals - all different venues except for three papers in *PLOS ONE*. Three publishers were chosen more than once, MDPI for five articles (in its journals *Applied Sciences*, *Climate*, *International Journal of Environmental Research and Public Health*, *Nutrients*, and *Sensors*); PLOS for three articles; and BMC (Springer Nature) for three articles.
4. The funding amount for a single article processing charge supported by UOAP since July 1, 2018 was in a range of \$1000 - \$1500 in most cases (20 out of 28 articles). The smallest requested amount was for \$300.
5. All articles funded by UOAP have been deposited by the authors into the UWM institutional repository, Digital Commons (<http://dc.uwm.edu/>).

## Procedural adjustments

There were a couple of recent procedural adjustments for handling requests:

1. Funding requests were considered only after the article had been accepted for a publication in a journal rather than just submitted. This was prompted by two instances of switching venues from open access to behind the paywall access and another case of cascading journals with different amounts of APC and longer than a year publication process. In such cases there is no guarantee for the funds to be available at the time of article acceptance for a publication.
2. Writing letters to the publishers were requested by authors. Since the UOAP amount was not sufficient for the duration of a year, four authors welcomed our written confirmation that the UOAP had been exhausted so that publishers could consider their discount of APC.

## Web of Science records

We analyzed open access publications by UWM authors in Web of Science Core Collection. Our searches were run on 4/24/20 using *Basic Search for Organization-Enhanced* (selected from the *Index*) University of Wisconsin Milwaukee, for timespan 2015-2019. The total count of the results was 6,823, after excluding *meeting abstracts* the count was 6,344, and recorded numbers by individual years (columns 1 & 2 in the table below); and then after filtering by *Open Access*, the count was 2,102 records. That means **33%** of the all UWM publications were open access. Next, we sorted the open access results by individual years and types of OA articles looking specifically at two groups of *Gold* records. *DOAJ Gold* indicates articles published in journals listed on the Directory of Open Access Journals (DOAJ). *Other Gold* indicates open access articles with a Creative Commons license published mostly in hybrid subscription journals with some open access articles. The *DOAJ Gold* has become the only type of articles funded by UOAP recently. The results from Web of Science are summarized in the table below.

Year	UWM records	OA UWM records	OA records, %	DOAJ Gold records	DOAJ Gold records, %	Other Gold records	Other Gold Records, %
2015	1,375	460	33	110	8	45	4
2016	1,322	480	36	114	9	41	3
2017	1,239	422	34	111	9	38	3
2018	1,235	406	33	145	12	25	2
2019	1,173	334	28	139	12	43	4

In our search, we noted that the overall publishing output by UWM has been decreasing continually during the past five years from 1,375 records in 2015 to 1,173 records in 2019. Nevertheless, the percent of the open access articles remained in a close range 33-36% during 2015-18, except for a drop to 28% in 2019. The smaller number in the most recent year may be explained by a 12-month embargo of articles funded by national agencies in the subscription journals. What was useful to see, is the growth of *DOAJ Gold* articles, in the recent two years, 2018-19, in particular. There are no significant changes in *Other Gold* “author choice” publications in the subscription journals. Overall, this analysis showed a much higher output of

DOAJ Gold articles published by UWM authors compared to a small set of similar articles funded by UOAP.

## Publication venues

We used data from Web of Science to learn more about publication venues chosen by UWM authors and whether those include many journals without article processing charges (APC). Prior to that, we looked at the Directory of Open Access Journals (DOAJ), which indicated the high percent of journals without APC, as follows:

- 14,171 journals total (on 1/14/2020)
- 10,329 had no article processing charges
- 3,801 had APC
- 47 had no information about APC

To do our analysis in Web of Science, we narrowed the number of the results for one complete year of 2018, downloaded *Source Titles* into a spreadsheet, and then checked each title in DOAJ for its APC status. We found that only 16 journal titles, which did not have article processing charges, were used by UWM authors. The following list indicates those titles and whether the journal has a Journal Impact Factor (JIF) or included in the Emerging Sources Citation Index (ESCI):

1. ARKIVOC: Archive for Organic Chemistry (JIF 1,253)
2. ASIA Network Exchange - a journal for Asian studies in the liberal arts (ESCI)
3. Environmental Health Perspectives (JIF 7,736)
4. Estudios Irlandeses (ESCI)
5. Interfaces Brasil/Canada (ESCI)
6. International Journal of Concrete Structures and Materials (JIF 2,111)
7. Journal of Library and Information Studies (ESCI)
8. Journal of Patient Centered Research and Reviews (ESCI)
9. Journal of Public and Nonprofit Affairs (ESCI)
10. Living Reviews in Relativity (JIF 27,778)
11. Military Medical Research (ESCI)
12. Online Learning (ESCI)
13. Physics Letters (JIF 4,162)
14. Social Media Society (ESCI)
15. Symmetry, Integrability and Geometry: Methods and Applications (JIF 1,088)
16. Transcultural Studies (ESCI)

Those 16 journals represent a tiny set out of 10,329 journals not charging article publishing fees indexed in the Directory of Open Access Journals. It is useful to know that among those are six journals with high impact factors, such as the three top: *Living Reviews in Relativity* (JIF 27,778), *Environmental Health Perspectives* (JIF 7,736), and *Physics Letters* (JIF 4,162). The exemplary 2018 article on [Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo, and KAGRA](#) published in *Living Reviews in Relativity*, has been highlighted as “Highly Cited Paper” receiving over 200 citations and “Hot Paper” in Web of Science. It is useful to know that such opportunities for publishing open access without extra charges for authors and institutions exist and may be recommended for researchers in some fields. Speaking of reputable publishing venues, we are glad to report a diminishing level

of inquiries about legitimacy of a journal and its publisher. Based on our practice of rigorous evaluations of all requests, we have rejected only one funding request due to its journal not meeting the UOAP guidelines.

### Funding sources

The final step in our analysis of the UWM publications in Web of Science was aimed at estimating how many articles have come out of research not funded by agencies at all. To do so, we repeated a search (on 4/29/2020) for *Organization-Enhanced*: University of Wisconsin Milwaukee, timespan: 2015-19; then refined the results list by *Open Access*, checked both options of *Gold* records in two groups *DOAJ Gold* (624) and *Other Gold* (191) - that resulted in a list of 815 records; next this list was refined by *Document Type* selecting for *Article* (721), *Review* (53), and *Early Access* (3) as these types of articles are eligible for funding by UOAP – that list resulted in 774 records; then it was analyzed by *Funding Agencies*. That analysis displayed the top agencies such as the National Institutes of Health and the National Science Foundation, each supporting hundreds of publications; then it indicated that there are 1669 funding agencies in total and that 172 records (22%) did not contain data in the *Funding* field. The 774 records were then sorted by individual years shown in the table below:

Year	Gold records	Number not funded	% not funded
2015	148	27	18
2016	150	44	29
2017	140	33	24
2018	163	28	17
2019	173	40	23

Seeing these numbers of articles published open access per year gives us a general estimate of a potential need for funding by UOAP, which supported a small number (10) of articles in 2019. Two additional considerations should be mentioned here. One is that the need for funding by UOAP may be greater because not all publications that did include data about funding agencies for the research had part of that grant allocated for publishing open access. Indeed, we heard from a few authors applying for UOAP that their research grants had not covered publications. A second consideration is that the shortage of the UOAP fund may be negligible because the output of the *Gold* publications by UWM authors is much higher than ~160 records per year. The article processing charges may be used from personal or departmental funds, paid by co-authors at collaborating institutions, or waived by publishers for invited papers in special thematic issues, or some other unknown sources<sup>4</sup>.

### Future direction

Looking at the big annual output of the *Gold* OA publications by UWM authors in Web of Science, it is clear that the “author pays APC” model is beyond the current capacity of UOAP. The UWM Libraries’ budget is already strained. We are pleased that UOAP will be sustained for the next fiscal year 2021, but we need to revise the allocation amount per article in order to extend the duration of the fund throughout the year. This means that a part of funding for publications will need to come out of research budgets at schools and colleges.

## References:

1. SPARC: Scholarly Publishing and Academic Resources Coalition, "Campus Open Access Funds," available online at <https://sparcopen.org/our-work/oa-funds/> [accessed April 25, 2020].
2. 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](http://oad.simmons.edu/oadwiki/OA_publication_funds) [accessed April 25, 2020].
3. Svetlana Korolev, "Evaluating the Impact of the University Open Access Publication Fund," available online at [https://dc.uwm.edu/lib\\_staffart/11](https://dc.uwm.edu/lib_staffart/11) [accessed April 25, 2020].
4. Jessica Monaghan, et el, "APC in the Wild: Exploring Funding Streams for an Accelerated Transition to Open Access," a whitepaper at Springer Nature, available online at <https://www.springernature.com/gp/open-research/apcs-in-the-wild> [accessed April 29, 2020].