

OAK Fund Annual Report:
2016-2017

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2016-2017 Report Summary

The Open Access to Knowledge (OAK) Fund at Texas A&M underwrites publication charges for scholarly journal articles, book chapters, and monographs published in open access publications in order to support and encourage the shift to publishing Texas A&M's research that is free of subscription barriers. The OAK Fund distributed funds to 194 faculty in support of publication fees for 76 articles for a total amount of funding distributed of \$75,448 in the 2016-2017 academic year.

We received a number of communications from TAMU faculty concerning ineligible coauthors. We have two recommendations to address these concerns:

- Amend the OAK Fund eligibility rules to allow for support of graduate student authors.
- Amend the OAK Fund eligibility rules to allow for support of non-TAMU coauthors when a TAMU author is the lead author on the paper as evidence by authorship sequence or corresponding author.

What are the Goals of the Program?

The Open Access to Knowledge (OAK) Fund at Texas A&M underwrites publication charges for scholarly journal articles, book chapters, and monographs published in open access publications. The OAK Fund was established in 2013 to help fulfill Texas A&M University's commitment to the Compact for Open-Access Publishing Equity (<http://www.oacompact.org/>).

The goals of the OAK Fund at Texas A&M University are to support and encourage:

- (1) Texas A&M faculty and research staff that want to publish in open-access venues but who do not have other sources of funding to cover open access publication charges.
- (2) Innovative scholarly publishing that takes advantage of the opportunities of distribution and open access presented by digital and networking technologies; and
- (3) Increased access to Texas A&M research and scholarship.

The Texas A&M Libraries and the Vice President for Research committed \$50,000 and \$35,000, respectively to fund Open Access publications for the 2016-2017 academic years. This document reports on the outcomes for the 2016-2017 academic year of the OAK Fund program.

How is the Program Managed?

Eligibility

Any current member of the faculty or full-time research staff at Texas A&M University and the Texas A&M Health Sciences Center are eligible to apply to the OAK Fund, including researchers at the Galveston or Qatar campuses or affiliated State Agencies who hold joint appointments at Texas A&M University. OAK funds apply to Open Access publication charges fees for peer-reviewed articles and book chapters or scholarly monographs published in journals or monographs that provide free online access to all peer-reviewed articles they publish. Manuscripts published in

journals or monographs with a hybrid open-access model or delayed open-access model are not eligible for support from the OAK Fund.

Application review Process

The Office of Scholarly Communications (OSC) in the Sterling C. Evans Library administers the OAK Fund. OSC has advertised the program through campus-wide emails, a website, and presentations to various groups around campus. The OAK Fund application review process is as follows:

1. The application and eligibility for funding can be found at http://library.tamu.edu/services/scholarly_communication/oakfund.html.
2. Author(s) status verified against campus LDAP database. Publication OA and peer review status are verified using: Directory of Open Access Journals, Ulrich's Periodicals Directory, or Open Access Scholarly Publishers Association member list. Publication fees checked against fee schedule on publisher's website.
3. If eligibility criteria met, Project Manager calculates individual author allocation based on total OA fee divided by number of eligible TAMU authors. Cumulative allocations to authors are tracked. Each author can request a maximum of \$3000 per annum.
4. If the application is approved and ready for payment, an acceptance letter is sent to applicant and TAMU co-authors with directions for payment/reimbursement via Library Business Office.
5. If application declined, an explanatory letter is sent detailing reasons and, where necessary, pointers to relevant resources provided in support of successful future application.
6. The article is archived in the faculty publications collection in Oak Trust, Texas A&M's institutional repository.

What are the Program Outcomes?

What was funded?

The OAK Fund distributed funds to 194 faculty in support of publication fees for 76 articles for a total amount of funding distributed of \$75,448 in the 2016-2017 academic year. Awards averaged \$1006 per application (Table 1).

Table 1. OAK Fund awards, 2016-2017.

Award Characteristics	Amount
2016-2017 Applications	99 (2 pending)
2013-2015 Applications Funded	75
Average Award Amount	\$1006
Highest Award	\$2490
Lowest Award	\$67

OAK Funds were distributed to faculty from 51 departments or organizations in 13 different colleges/Research organizations and five campuses: TAMU, TAMUG, the Health Sciences Center, the Texas Transportation Institute and the TAMU Agrilife Research (Table 2). Note: There are more awards when listing by college because many papers had coauthors from different colleges.

The distribution of OAK Funds to different organizations has increased since the first year of the fund, illustrating increased faculty awareness of the funding and a greater movement towards interest in open access publishing across all disciplines. This resulted in an even distribution of the awards by College.

Table 2. Number of authors funded by the OAK Fund by college, 2016-2017.

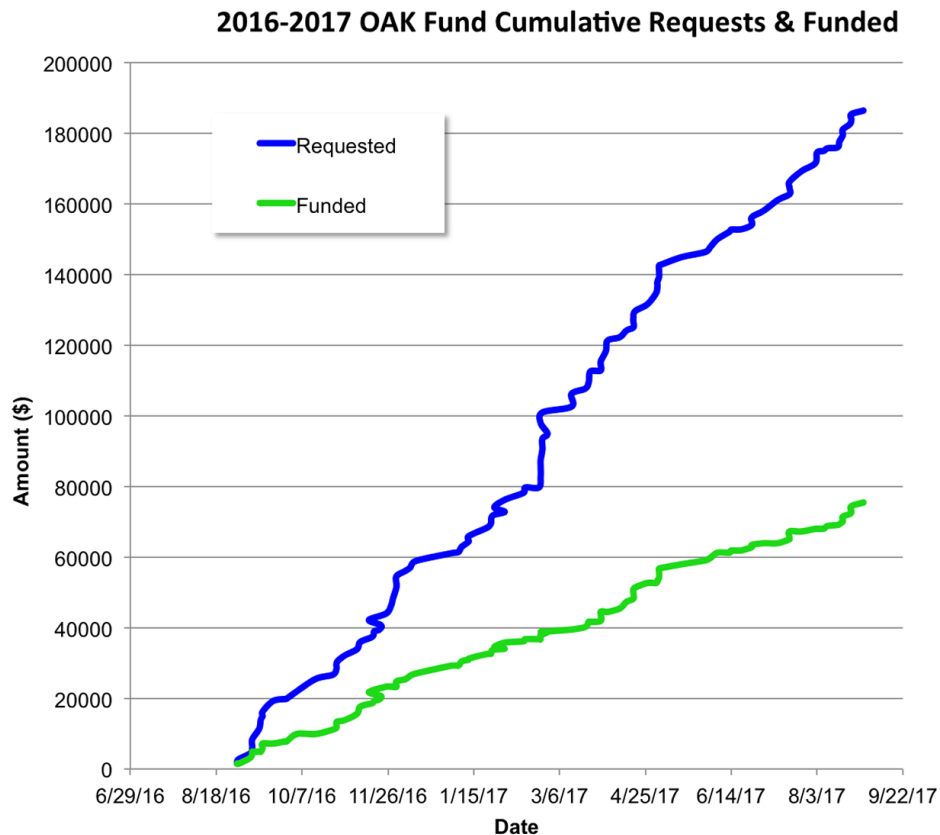
College	Number of Awards
Ag & Life Sciences	47
Architecture	7
Education	17
Engineering	23
Geosciences	10
Liberal Arts	7
Medicine	15
School of Public Health	7
Science	2
Vet. Med. & Biomed. Sci	56
Health Sciences Center	2
TAMU Agrilife Res	3
Texas Transportation Inst	1

Who was funded?

Requested funds continued to exceed amount funded, as has been found in previous years (Fig. 1). This was mainly due to two reasons. First, thirty applications were denied because they did not meet the fund’s guidelines. Most of the declined awards requested support to cover publication fees for hybrid Open Access journals that also charge subscriptions. Second, many requests cannot be fully funded under existing funding rules because the manuscripts were authored by both eligible and ineligible authors. Ineligible authors included forty-seven TAMU graduate students and many coauthors from other institutions.

We received a number of communications from TAMU faculty concerning ineligible coauthors. We have two recommendations to address these concerns outlined below.

Figure 1. OAK Fund cumulative requests and awards, 2016-2017.



The first issue raised by faculty was over the ineligibility of graduate student authors. The emails below are pretty typical of faculty interest in allowing graduate student authors to be eligible for OAK Funds.

I am so glad to hear that you have been requesting approval to fund graduate students. And I hope it gets approved.

Teresa Wilcox, Ph.D.

Faculty | Department of Psychology

Question about the graduate student author support--- is this for publications on which the student's faculty advisor is NOT a senior author on the publication? In that case, the advisor is normally considered the lead author and "responsible" for publication fees (at least in the science/STEM world). Does this happen very often, where students publish independently of their advisor?

The flip side of that question: virtually all of my lab's publications over the last 15 years have had a trainee as first author, I am the last/senior author. In those cases, would those papers be considered as authored by a graduate student and perhaps NOT eligible for OAK funds currently because of status of the first author?

Thanks, Sue B

Susan A. Bloomfield, Ph.D. | Associate Dean for Research

Professor and Director of Bone Biology Laboratory | Dept. of Health & Kinesiology

In 2015-2016, we tried a pilot project to fund a limited number of graduate student authors with funding from Dr. Butler-Purry and OGAPS. 9 articles were funded in a range of disciplines, with all articles being published in high quality journals. The Graduate and Professional Student Council reached out this year requesting that the OAK Fund eligibility rules be amended so graduate students are eligible.

Dr. Butler-Purry asked the library to survey the graduate student authors funded through the pilot. The complete survey results are included in the appendix. The survey indicated that the graduate students sought funding both because they believed in open access as the right thing to do as well as thinking that publishing in an open access venue was good for their career. Interestingly, it appears that some graduate students took the initiative to seek our funding on their own. This indicates that funding graduate student may be a pathway to introduce their advisors to open access publishing.

Recommended Action: Amend the OAK Fund eligibility rules to allow for support of graduate student authors.

The second issue raised by faculty was the ineligibility of coauthors at other institutions when the TAMU author considered Texas A&M as the lead research group. Here is an example email we got from a Geoscience professor:

However, I disagree with funding only a fraction of the costs based on # of co-authors. I see it as the lead authors responsibility to direct the publication, which would include the decision to go open access. When I thought I could receive funding, I alerted my co-authors and they were all very excited about the prospect, but none had funds to offer. I understand the push to get people to publish in open access, but this seems like an unnecessary restriction that would cause me to shy away or prevent me from publishing in an open access journal without other funds available.

Ryan C. Ewing, Associate Professor
Geology & Geophysics

Using Web of Science data, we can see that in 2016 more than 60% of all TAMU-authored included coauthors from other institutions (Table 3). The percentage of open access papers authored by TAMU authors that included coauthors from other institutions is nearly 75% of all papers published in 2016.

Table 3. Percentage of TAMU-authored papers with coauthors from other institutions, 2016 using Web of Science data.

Coauthorship on TAMU Papers	2016
Papers-No Coauthor from Other Institution (#)	2862
Papers-All (#)	7562
Papers - No Coauthor from Other Institution (%)	37.8
OA Papers-No Coauthor from Other Institution (#)	205
OA Papers-All (#)	809
OA Papers - No Coauthor from Other Institution (%)	25.3

The issue that using OAK Funds to support the author publication charges (APC) for papers with ineligible authors is complicated as we are supplying some of the funds required for the APC and the lead author has to find other funding to support the rest of the APC. It is likely that most TAMU authors will not find the work worth the small amount of funding we are supply, reducing our ability to support their experimentation in new forms of publishing.

Suggested Action: Amend the OAK Fund eligibility rules to allow for support of non-TAMU coauthors when a TAMU author is the lead author on the paper as evidence by authorship sequence or corresponding author.

Increased Access to High Quality Texas A&M Research and Scholarship through Open Access

Research being published Open Access (OA) through support from the Open Access to Knowledge (OAK) Fund is reasonably distributed across academic disciplines. What is interesting is that the open access journals being chosen to publish research supported by the OAK Fund are generally in high quality journals, as measured by the quartile ranking from the journal citations reports (Table 4).

Sixty seven percent (67%) of the articles supported the OAK Fund were published in four, high quality journals including Nature, BioMedCentral, and PLOS One. PLOS One, by far, is the major publishing avenue used by TAMU scholars to publish their work OA. This likely reflects the quality of the journal as well as the rapid development of its scholarly reputation.

Publishing as OA appears to have a significant positive impact on citation rates¹. This relationship appears to be significant for research published in OA journals in many scientific and social science fields as well as scholarship made available through repositories that are routinely used by the disciplinary communities, such as ArXiv in the physics community. This impact is evident for some of the disciplines of OAK Fund-supported publications (Table 5).

The impact of OA publishing on citation rates is thought to be due to two reasons: OA articles are freely available to more scholars and/or available earlier than those available through print media. As an example, the Research Information Network, a British research center, recently analyzed the distribution and impact of articles published in the hybrid science journal *Nature Communications*². After 180 days, OA articles were viewed more than twice as often as those articles accessible only to the journal's subscribers. A citation analysis of more than 2,000 papers published in *Nature Communications* between April 2010 and June 2013 revealed that OA articles were cited a median of 11 times, compared with a median of seven citations for subscription-only articles.

¹ Harnad, S. and T. Brody. 2004. Comparing the impact of open access (OA) vs. non-OA articles in the same journals: D-Lib Magazine 10(June).

Moed, H. F. 2007. The effect of "open access" upon citation impact: An analysis of ArXiv's Condensed Matter Section. J. Am. Soc. Info. Sci. Technol. 58(13): 2145-2154.

Antelman, K. 2004. Do open-access articles have a greater research impact? College & Research Libraries 65:372-382.

² The report: http://www.nature.com/press_releases/ncommsreport2014.pdf.

Table 4. Top journals of papers supported by OAK Fund awards, 2013-2015.

Journal Name	Count	JCR Rank	JCR Quartile	Categories
PLoS ONE	44	11	Q1	Multidisciplinary Sciences
Frontiers in Psychology	6	29	Q1	Psychology, Multidisciplinary
Scientific Reports	6	7	Q1	Multidisciplinary Sciences
Ecology and Evolution	4	54	Q2	Ecology
Sustainability ¹	4	22	Q4	Green & Sustainable Science & Technology
International Journal of Environmental Research and Public Health	3	101	Q2	Environmental Sciences
PLoS Neglected Tropical Diseases ¹	3	1	Q1	Tropical Medicine Biotechnology & Applied Microbiology
BMC Genomics ¹	2	32	Q1	Microbiology
Frontiers in Behavioral Neuroscience ¹	2	6	Q1	Behavioral Sciences
Frontiers in Plant Science	2	15	Q1	Plant Sciences
Frontiers in Public Health Education and Promotion	2	–	–	–
International Journal of Adolescence and Youth	2	–	–	–
International Journal of Behavioral Nutrition and Physical Activity ¹	2	15	Q1	Nutrition & Dietetics; Physiology
Journal of Education and Human Development	2	–	–	–
mBio	2	13	Q1	Microbiology
PLoS Genetics	2	15	Q1	Genetics & Heredity

SOURCE: Web of Science Core Collection; Journal Citation Reports (JCR).

¹ Has two or more JCR categories. Highest JCR Category rank shown

Table 5. Cumulative Average Citations Per Article for 2014-2016 Texas A&M University Articles.

Research Areas ¹	Total Article s	Avg Citation Count (Total)	Subscriptio n Articles	Avg Citation Count (Subscription)	OA Article s	p-value ($\alpha = 0.05$)
Agriculture	532	2.74	495	2.63	37	0.6474
Biological Sciences ²	2,813	5.53	2,420	5.48	393	0.9110
Chemistry	1,160	8.73	1,139	8.85	21	0.0002
Engineering	2,162	3.88	2,130	3.91	32	0.0229
Medicine ³	2,434	5.32	2,164	5.31	270	0.9766
Physics	1,536	8.51	1,241	7.64	295	< 0.0001
Science Technology						
Other Topics	970	9.27	522	12.52	448	< 0.0001

SOURCE: Web of Science Core Collection. Citation and article counts collected 6/10/2017. Total 2014-2016 Article + Reviews = 14,506

¹ "Research Areas" defined by Clarivate Analytics unless otherwise noted.

² Combined the following Research Areas: Biochemistry & Molecular Biology; Biodiversity & Conservation; Biophysics; Biotechnology & Applied Microbiology; Cell Biology; Developmental Biology; Entomology; Environmental Sciences & Ecology; Evolutionary Biology; Fisheries; Forestry; Genetics & Heredity; Marine & Freshwater Biology; Mathematical & Computational Biology; Microbiology; Mycology; Parasitology; Plant Sciences; Reproductive Biology; Virology; Zoology.

³ Combined the following Research Areas: Allergy; Anatomy & Morphology; Anesthesiology; Cardiovascular System & Cardiology; Critical Care Medicine; Dentistry, Oral Surgery & Medicine; Dermatology; Emergency Medicine; Endocrinology & Metabolism; Gastroenterology & Hepatology; General & Internal Medicine; Geriatrics & Gerontology; Health Care Sciences & Services; Hematology; Immunology; Infectious Diseases; Integrative & Complementary Medicine; Legal Medicine; Life Sciences Biomedicine Other Topics; Medical Ethics; Medical Informatics; Medical Laboratory Technology; Neurosciences & Neurology; Nutrition & Dietetics; Obstetrics & Gynecology; Oncology; Ophthalmology; Orthopedics; Otorhinolaryngology; Pathology; Pediatrics; Pharmacology & Pharmacy; Physiology; Psychiatry; Public, Environmental & Occupational Health; Radiology, Nuclear Medicine & Medical Imaging; Rehabilitation; Research & Experimental Medicine; Respiratory System; Rheumatology; Surgery; Toxicology; Transplantation; Tropical Medicine; Urology & Nephrology.

Appendix: Graduate Student Survey Results

Summary

During the 2015-2016 academic year, the Office of Graduate and Professional Studies contributed \$5,000 to OAK Fund, a fund available to full-time TAMU researchers to support open access publishing.

The funds were used to support graduate student authors who were publishing in Gold OA publications. We were asked by OGAPS to survey the graduate students funded through the OAK Fund about their motivation to publish OA. Anna Dabrowski distributed a survey to 15 individuals (unable to find contact information for 1). Ten out of 15 individuals completed the survey.

The survey results generally indicate, for this group of early adopters, that OA articles represent a significant part of their publications (but not all), they are publishing OA because they believe it is the right way to publish, and that some of them are publishing OA because they made the decision, not their advisor. This last point indicates that graduate student authors may influence their advisor's publishing strategies by introducing faculty to OA journals.

Results

Who was funded and where did they publish their research?

Ten applications to the graduate OAKFund were approved for funding. Our records indicate 16 TAMU graduate students listed (as applicants or coauthors) on these applications from a range of departments (Table 1). The

Table 1. TAMU departments represented

#	Department
1	Recreation, Park, and Tourism Sciences
1	Health and Kinesiology
2	Teaching, Learning and Culture
3	Psychology
1	Sociology
1	Anthropology
1	Veterinary Integrative Biosciences
2	Materials Science and Engineering
1	Mechanical Engineering
3	Chemical Engineering

The student authors published their research in a range of Gold OA journals, all of which are good quality journals (Table 2).

Table 2. Publishers represented

#	Department
1	MDPI
1	Taylor & Francis
2	Canadian Center of Science and Education
2	Elsevier
1	Scientific Research
1	American Association for the Advancement of Science
1	BioMed Central
1	PLOS One

Why did they publish their research Open Access?

The survey responses are shown below.

Question 1. Is your graduate research sponsored by a grant?

#	Response
5	Yes
2	No
3	Unsure

Question 2. Which of the following supports your graduate studies.

#	Response
3	Research Assistantship
3	Teaching Assistantship
3	Fellowship
1	Other: "Dissertation fellowship from OGAPS for a year."

Question 3. How many peer-reviewed journal articles have you published as a graduate student (including articles submitted and in review) and how many of these peer-reviewed journal articles did you published in open access venues (including articles submitted and in review)?

#	Response
1	5 total, 3 OA
1	2 total, 1 OA
1	3 total, 2 OA
1	2 total, 1 OA
1	8 total, 7 OA
1	1 total, 1 OA
1	6 total, 2 OA
1	8 total, 2 OA

Question 4. Did you publish in open access [choose any that apply]:

#	Response
7	As a personal decision
1	Due to funding requirements
6	At the request of another individual
1	Other: "Journal required"
1	Other: "to be viewed more frequently by other colleagues"

Question 5. Which of the following reasons motivated you to publish in an open access venue? [choose any that apply]:

#	Response
7	I was directed by my advisor or another individual
5	I believed it would be good for my career
6	I believed it was the right thing to do
1	I believed it was easier than publishing in other venues
7	I believed it was the best venue for my research