

OSI2017 SUMMARY REPORT

And overview of 2016-17 recommendations and 2018-19 plans

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Executive Summary

The Open Scholarship Initiative (OSI) is the world's only global, large-scale, multistakeholder effort to improve the flow of information within research and between researchers, policymakers, funders and the public. This effort, which is nearing its third full year of operation, was developed in partnership between the Science Communication Institute (SCI) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in early 2016. There is no other initiative like this, focusing on improving the entire landscape of research communication (from peer review to open access to publish or perish pressures in academia) by working together instead of separately through dozens of individual and often conflicting efforts.

As you will see in this report, OSI participants are beginning to understand how they might be able to work together as a global community on this issue. Most participants see eye to eye on the broad outlines of this challenge, and their reports—considered together and building upon each other—point to specific solutions that can be developed starting this year with minimal funding. Fully pursuing all the recommendations will require much more funding, but our hope is that we can get started now on a tight budget and build from there.

On behalf of SCI and OSI, thank you to our sponsors who have made this work possible, and to OSI participants who have contributed so much of their time and energies to this important effort.

1. Background on why OSI2017

was important

Anyone who thinks they fully understand scholarly communication probably doesn't. This may sound like a harsh assessment—there are a great many very smart people who have been involved in and around this marketplace for a long time. But this is one of those "the more you know the less you know" kinds of environments. Scholarly communication is a massively complicated space that looks different for each of the two million plus papers published every year, connecting researcher needs with author incentives, publishing options, journal options, copyright choices, funder mandates, institutional guidelines, government policies,

© 2017 OSI. This open access article is distributed under the <u>Creative Commons Attribution 4.0 Interna-</u> <u>tional License</u>. This document reflects the opinion of the author, Glenn Hampson, Executive Director of the Science Communication Institute and Program Director of OSI. The ideas and opinions expressed herein are those of the author and not necessarily those of OSI, individual OSI participants, or hosts, partners or sponsors, or their trustees, officers, or staff. discipline norms, personal preferences, technological advances, evolving social mores, and probably at least ten other variables. It would be hard to concoct (why would you want to anyway?) a more Rube Goldberg-esque system of ramps and levers.

Unfortunately, this system isn't just for our entertainment. It is very consequential, responsible for vetting and communicating the outputs of researchers from around the globe—outputs that reflect billions upon billions of dollars of annual investment, that are rapidly increasing beyond our ability to completely capture, that are not equitably distributed around the world, and that are critical to our collective future. So, no pressure.

How did all this happen anyway? Not deliberately. Slowly and over time, competing and overlapping interests have collided and morphed around no clear center. What we have now in scholarly communication is what we need to have—it's where this system has naturally evolved. But no one in this space thinks the current system if efficient, effective, or where it needs to be in order to effectively manage the future of research in today's communication environment.

How do we get to this future from where we are now? And who speaks for scholarly communication reform? Is it the researchers (and if so, in what discipline or even institution)? Governments (which ones)? Maybe universities or university libraries? Open access (OA) advocates? Publishers (new or old, big or small, subscription or open, scholarly societies or university presses)? Ask anyone from any of these groups what scholarly publishing means and where it's headed and you'll hear plenty of ideas and opinions but no clear answers.

Indeed, if you stay in your bubble in scholarly communication you're bound to be more misinformed than informed: You'll believe that universal OA is just around the corner, that green repositories are on the cusp of success, that a global flip to APCs will fix all problems, that a myriad of small changes in the system are serving everyone's needs just fine, and so on. There is no shortage of hope, which is great. But hope doesn't make it so. Everyone acknowledges that the promise of open scholarship has enormous potential and people are pushing from many different directions to make this happen. But the reality is that the path to rapid, widely adopted and sustainable open scholarship solutions is strewn with obstacles.

Creating a truly effective and sustainable future of open scholarship will require input and cooperation from the entire global ecosystem of research and scholarly publishing-scientists, university administrators, non-university research institutions, libraries and library groups, repository managers, publishers, government policymakers, funders (private and government), educational policy groups and more, and from all parts of the world. The last 15 or so years of OA reform has raised our awareness of the open issue and the challenges it faces. But we are quite far from succeeding and no one wants to wait another 15-20 years before moving the ball another short distance down the field. The broad goals of open scholarship can be realized more quickly and effectively if all proponents of open scholarship work together-if we find common ground, embrace the big picture, collaborate and

coordinate our efforts, fill in the gaps in our understanding, and make it easier for institutions and governments to work together on rapid and sustainable open solutions.

To this end, UNESCO and the Science Communication Institute joined forces in early 2015 to create the Open Scholarship Initiative. The goal was to lay out a 10year plan for developing a new and robust framework for direct communication and cooperation among all nations and stakeholders in order to improve scholarly communication, beginning with scholarly publishing and the issues that surround it. OSI's approach involves not only discussing solutions that work across stakeholder groups and countries but also building a stronger foundational case for open scholarship that all stakeholders agree with and support.

Why is collaboration needed? What proof is there that collaboration will succeed. and what of criticisms that any effort like this is just co-opting or watering down existing open scholarship goals? For one, it's clear to many people who have followed the changes happening in scholarly publishing over the years that an incredible amount of tension and uncertainty exists in the system. People want to know what to do and how, but they aren't sure who to follow and why, who's leading and who's following, what the long-term implications of change will be for scholars and researchers (not to mention the difficulty of pushing change at a university), how much change needs to be made and how quickly, who will pay for this progress and how, and a whole slew of other critical questions that don't have simple black and white answers or even a workable playbook for making change happen if

it was clear what change was needed. Having a forum where these issues can be discussed across stakeholder groups is critical to making more rapid progress on this issue. It's also clear that no one actor can affect change in this very diverse and interconnected space. Only by working together will be able to achieve open scholarship goals. In addition, it has become increasingly clear to the OSI community that we need to work harder to ensure that what we're doing is makes sense for researchers and not just for consumers of research-that we involve more of them in these conversations, listen to their concerns, and design solutions that work for their disciplines and institutions. This really isn't being done anywhere on a global and interdisciplinary scale. A one-size-fitsall approach to open scholarship hasn't worked over the past 15 years, and it won't work over the next 15.

OSI is the world's only global, crossstakeholder effort to reform scholarly communication. At present, over 380 leaders from 250 institutions, 24 countries and 18 stakeholder groups are part of this effort. Most OSI participants are highlevel representatives of their institutionspeople who are positioned to lead change. In several cases these people are not subject matter experts but instead lead the teams that employ these experts. Our hope is that the scale of this effort will only grow-particularly with more involvement from the global south, which has been marginalized by the information revolution and whose marginalization may only increase if some of the current scholarly publishing reforms being discussed are enacted (such as the so-called "global flip" from subscription to APC, although we don't know this for a fact; more study is needed, and indeed we've earmarked this particular concern for study).

What is the anticipated impact of this effort on access to scientific research results? Realistically, OSI holds the potential to improve the scholarly communication landscape for everyone by (1) achieving open scholarship goals faster and on a more predictable trajectory by bringing all stakeholders to the same side of the table to push together toward their common goals, (2) creating multiple platforms for working on scholarly communication improvements together as a broad stakeholder community, (3) increasing the efficiency and effectiveness of all stakeholder efforts by facilitating the development of a common roadmap of goals, policies, and standards in scholarly communication, and finally (4) in the end, increasing the amount of research information available to the world and the number of people who can access this information. Our sincere hope is that after 10 years, open scholarship will be a reality-that everyone (including the public) who needs access to research will have it and that with OSI's help, new tools and professions will emerge to help mediate the flow of information from research to the public. Whether this access translates into more discovery is anyone's guess-we certainly hope this will be the case, but first things first.

And finally, how do we measure success along the way? To some, success will only mean the immediate resolution of every heretofore intractable problem in open publishing. The official OSI position, however, is that there is a gradient of success on this difficult challenge. We've already achieved some measure of success by simply bringing this diverse group together, having them speak directly to each other, and share their perspectives directly with each other, and by beginning the long process of trying to find common ground on a variety of issues. The next step—actually finding this common ground and building workable solutions is where we're at now. We hope this dialogue will in itself also lead to productive outcomes and other benefits for the scholarly publishing reform movement and its bearing on open scholarship.

2. What was accomplished at OSI2017?

The first OSI conference was held in April 2016 (OSI2016). Immediately afterward, papers and recommendations from the conference were published and an OSI planning group began debating the long-term future and structure of OSI. The goal of OSI2016 and the conversation leading up to it was to explore the scholarly communications terrain, expose a wide variety of perspectives, and davlight possible common interests. The delegates at OSI2017, which ran from April 18-21, 2017 (and whose deliberative process will continue throughout 2017), started looking for answers-a long and interesting road indeed. Here are some common themes that came out of this meeting:

1. <u>Open isn't free</u>. The focus of open scholarship cannot be about costsavings. Open scholarship is going to cost money—the jury is still out on exactly how much. So, if we all agree that more openness is important, it is this importance that needs to drive our efforts going forward and not the promise of spending less. This said, cost is a critical issue. Developing ways to make access less expensive is essential. The extent to which open scholarship will do this, however, is unknown and needs more study.

- Open isn't easy. Aside from the 2. cost involved there is mixed messaging in this space (both in terms of what's being communicated at universities and from whom) and a lack of incentives for several key audiences, namely researchers. More trust and understanding between scholarly communication global stakeholders and stakeholder groups is needed (as discussed below). More balance is also important such as solutions that involve local input and incentives (local as in geographic, but also institution and disciplinespecific), and approaches to open scholarship that are more inclusive (wherein we can all agree on the idea of open scholarship and then identify multiple paths to get there).
- 3. Publishing is critical. Vint Cerf mentioned this in his brilliant opening address and it was echoed by Keith Yamamoto in his equally brilliant closing. For Vint, increasing the reproducibility of published research was paramount, and this requires increasing access, and this in turn requires a much more serious focus on digital preservation-from hardware and operating systems to software and formats. Without preservation and access, there is no modern scientific record. For Keith, the focus was on the act of publishing. "If you don't publish your experiment, it is exactly like not doing it." But the

current system of publishing is too expensive for universities (barring any major restructuring of how much money is allocated to libraries, or how much money comes directly from the government to support publishing and sharing of data), so our focus needs to be on what now-figuring out who pays, figuring out what we publish and where, understanding how to measure the global impact of research and of our attempts to improve the flow of research information, making sure we're resolving researcher concerns, and more.

- 4. OSI can help. Several concrete ideas were proposed regarding where OSI can help push the ball forward on open. These included creating new resources for the open scholarship community, designing new open scholarship outreach materials tailored to specific audiences (instead of one-size-fits-all materials), funding studies to look at issues like how much libraries are spending on open, developing a more globally comprehensive understanding of researcher needs and incentives, convening conversations between funders, helping to identify best practices, promoting the DART framework for open scholarship (discovery, accessibility, reproducibility and transparency), and getting behind efforts like OA2020 and DORA. Please see the "Summary of Recommendations" section of this paper (as well as individual workgroup and stakeholder group reports) for more details.
- 5. <u>We're on the right track.</u> OSI isn't going to be able to tackle this issue by itself—we all acknowledge that

this effort's current lack of significant funding makes it an unlikely candidate to manage a global revolution in scholarly communications, but most participants seem to agree (based on a survey following OSI2016, plus informal impressions and feedback since then) that OSI has potential. Whether this means serving as a forum for discussion, a proponent of inclusive ideas, a convener of parties, or even a developer or funder of new products and projects, the big tent approach is better understood this year than last (although as a group we're still not settled yet on exactly how this group should be managed, if at all). Keith Yamamoto noted one specific way in which OSI might be on target: Helping identify a set of common principles that define what we want at the endpoint. If we can identify these principles as a group, we can then make a broad model that can be adapted or adopted.

- 6. We're more alike than unalike. Several stakeholder groups (in their reports) pushed back against the idea of having distinct groups represented in OSI. We have differences of opinion in this community but there is often as much diversity of opinion within a single stakeholder group as there is between groups. Everyone agreed that we need more involvement from the global community, and also from researchers themselves.
- 7. <u>Convergent needs are everywhere</u>. The OSI2017 HSS & Scientists workgroup in particular identified a raft of areas where these oftendisparate communities can find common ground—for instance, on

the need for visibility, public engagement, preservation, and interdisciplinarity. Convening action on this common ground is the next step. Some stakeholder groups (namely scholarly societies) felt they were already cohesive enough and wellpositioned enough that they could advance agendas and promote culture change—that these convergent needs were (or could become) clear and as actionable. Similarly, several scholarly infrastructure groups are ready to work together and with OSI to help promote and secure open.

- 8. <u>Accountability & recognition</u>. We need to get institutions invested in this effort (not necessarily financially). We all have a stake in the outcome. What this means in practice is to be determined. As far as recognition is concerned, several groups expressed an interest in developing a way to recognize good work in open—a type of Nobel Prize for open.
- Trust. This conversation needs trust 9. to move forward. There is a lot of mistrust in the system-generally not inside OSI, which is seen by many participants as something of a unique refuge and a valuable opportunity to speak across the aisle-but in the larger scholarly communication (scholcomm) system which has been so polarized for so long (indeed, there are people and groups in the scholcomm system who are actively opposed to OSI because it includes commercial publishers, and this is seen as a waste of time and/or potentially harmful to the cause of open scholarship). Still, even within OSI we haven't started the process vet of negotiating solutions to issues

based on the recommendations of OSI2016 and OSI2017 participants, so our fault lines may just be buried for now. How and where to have these conversations is to be determined—maybe not in full-group annual meetings but we will continue to make progress in this regard over the next several years (most immediately through more online engagement and more regional meetings, as noted later in this report).

To date, OSI's annual meetings have really only showcased the tip of the iceberg as far as participant engagement is concerned. Many OSI participants have also been deeply engaged in listserv conversations for the past two years; others have been involved in meeting planning, strategic planning, and project management, and our list of engaged volunteers will probably grow in the coming years (hopefully our paid staff as well). With regard to the OSI listserv, this currently has 377 members on it who exchange about 2,500 messages per year, often quite substantial dives into complicated topics. In the two years since it started, a great many issues have been discussed at length, not necessarily with an eye toward finding solutions at this juncture-the "action" stage of OSI's work will begin in 2018, as noted later-but to air perspectives and educate each other. Detailed issue briefs will be culled from these conversations as part of the forthcoming OSI communications reform plan (also described later in this report).

What has this group learned about itself during this two-year period? For one, as noted previously, there seems to be growing philosophical alignment on a number of matters and this alignment forms the foundation of our action plans going forward, as described in the next section of this report. More specific to OSI itself, it might be safe to conclude that most participants are of the option that:

- 1. Despite the enormous expertise in this group, there are significant gaps in our understanding (and in the scholcomm community's understanding) of many key issues, from the proper length of embargos to the economic impacts of open scholarship to the magnitude of the OA citation advantage and much more. More study is needed on a wide range of topics so our advocacy can be firmly rooted in facts and evidence and our solutions can be properly tailored.
- 2. Opinions in the broad scholcomm community are polarized and OSI is not immune from this polarization. Breaking through the acrimony to work together on solutions is not going to work for everyone. Several key research universities haven't been interested in joining OSI, nor have several key advocacy groups (see the trust discussion, above). The door is wide open-OSI has always welcomed all groups and perspectivesbut some groups appear to have made up their mind about what a more open future should look like and the best way to get there and aren't interested in revising their course at the moment. This effort will be, as Wim Van der Stelt has noted, "a coalition of the willing." Thankfully, there are many partici-

pants in OSI who are ready and willing to work across the aisle.

- 3. OSI is under-resourced to do all this alone. This effort need significant funding support if it is going to be more than just a convener of discussions and annual meetings (which is important, of course, but it doesn't fulfill the lofty expectations that have been set forth by OSI participants).
- 4. The OSI group will need to come up with new ways of communicating in order to push past simply discussing issues to actually working on them. A new communication plan for OSI has been developed and is described later in this document.

3. Summary of recommendations

from OSI2016 and OSI2017

As described in the first section of this paper, there appears to be broad consensus among OSI participants on the general contours of the road ahead. As described in this section, there also appears to be consensus on many specific ways this group can begin moving down this road together toward workable solutions.

The OSI deliberative process has so far been a mixture of listserv conversations and annual meetings—fact-finding activities designed to assess this community's perspectives, identify the most significant issues and discuss the best ways to go about solving these. More specifically, this process has a cross between triangulation and iteration—seeking out a wide range of perspectives and from these trying to find common concerns, then exploring these concerns in detail to see which are most salient, then looking for solutions to these concerns, raising these ideas with the OSI community for feedback, and continuing to refine the answers we get.

There are probably more sophisticated ways to map out an issue and solution space but this conversation-based approach has been effective and the recommendations developed are original and insightful. Even more important, these recommendations are workable solutions put forward by a diverse group of experienced global leaders who are wellpositioned to follow through with action.

The workgroup topics tackled at all-grew OSI2017—12 in of out recommendations workgroup from OSI2016. Some topics represented common threads from the OSI2016 meeting (such as the culture of communication topic), some were follow-up of particularly thorny topics (such as impact factors and peer review) and some were new topics that were added by popular demand (such as the issue of rogue solutions). The charge of these groups was to try to develop solutions to these issues (see the OSI2017 program in the Annex for details on the evolution of these topics). Specifically, OSI2017 participants were instructed to:

- (1) Quickly summarize the issue and the various perspectives involved (please refer to and build off of the work done by OSI2016 delegates as much as possible and appropriate),
- (2) In more detail, describe areas of general agreement and disagreement between stakeholders and the knowledge, perspective and/or policy gaps that may be powering these

different viewpoints, and very importantly this year

(3) Propose a set of specific actions or outcomes that can balance the needs and interests of all stakeholders (or a mechanism for finding solutions or bridging gaps). Also describe the challenges your proposal faces and how these can be addressed in a realistic and collaborative way (for instance, by linking together existing efforts with a similar focus). Beginning below are tables summarizing the recommendations put forward by OSI2017 participants. A "tools" column has been added to suggest what kinds of strategies and resources might be needed to move forward with these recommendations. Full versions of workgroup and stakeholder group reports from OSI2016 and OSI2017 have been published by Mason Press and are available online at https://journals.gmu.edu/osi/index.

GROUP	GOAL	KI	EY RECOMMENDATIONS	TOOLS	TAKEAWAY
Culture of Communica- tion	Improve the culture of communication around OA inside academ- ia, particularly inside research	1. 2. 3.	<u>Clarify</u> the message about OA. Identify what OA is, and what it is not <u>Create and communicate mes-</u> sages for particular communi- ties regarding the benefits and impacts of Open Determine what resources and information are needed before this messaging can be effective (1)	Website, plus partnerships, awards, work- shops, stories, social marketing, communication mapping (for each institution), OSI as fulcrum or catalyst	Better commu- nication needed to advance open
Funding	Identify and/or design new funding models for open, or propose ways to improve existing fund- ing by improv- ing the flexibil- ity of library budgets	1. 2. 3.	One model of open scholar- ship will not work for all communities. Stop pursuing one-size fits all. Share lessons from different communities (blogs, case stud- ies, etc.) and set and track goals to increase OA More research: Find more info on APC costs and spending, identify income-generating possibilities in scholarly pub- lishing, identify economies of scale to reduce access costs	Website	Need better OA tech, coor- dination, communica- tion, incentives, rewards, and more. Address these issues first and more money for OA will follow.
Global flip and other studies	Create a broad action plan for the global flip. Other studies were acknowl- edged but not addressed (em- bargos, pub- lisher services disaggregation	1.	Support development and dissemination of tools to in- crease understanding of the potential impact of a Global Flip on library budgets. Commission a third-party study to analyze the financial and scholarly implications of the flip on both publishers and the academic community,	Website (gather- ing more under- standing about concerns, im- pacts, and show- casing global flip as a path and not a destination)	More under- standing need- ed, followed by broad sharing of best practic- es

WORK-

WORK- GROUP	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
	and an assess- ment of open impacts)	3. Identify, support, and share information about cooperative models that align with the Global Flip strategy to in- crease trust and transparency among stakeholders		
HSS & Science	What are the universal solu- tions for both HSS & STEM with regard to open? HSS and STEM have different chal- lenges and much more focus and funding) is available for STEM than HSS.	 Disciplines need to find their own solutions from within. Pi- lot an OA program in HSS or social science. Promote areas of inter- est/benefit convergence be- tween HSS & science: Visibility Public engagement Preservation Text and data mining Interdisciplinarity 	Website, more funding for HSS (legislation), common solu- tions	OA models are not strong in HSS. More communication is needed about the different needs of HSS & STEM
Impact fac- tors	Improve ways to measure research impact	 Interview journal editors to find out what's working, what's not, and what's missing Get behind effort to share information on metrics best practices and drive innovation across disciplines and outputs Encourage disciplines to own their own assessments (work with societies to get this effort stated) 	Website, studies, collaborations	Measuring the impact of the broad range of scholarly communication output isn't happening with current tools
Open IP	Develop rec- ommendations relevant to improving the discovery, ac- cess and use of patent data and closely-related IP	 Promote guiding principles for Open IP as detailed in workgroup report and explain how this ties in to the open spectrum Work with WIPO to help es- tablish international standards for open IP Create IP literacy materials for 	Partner with WIPO	Open IP is an emerging issue with many needs and chal- lenges. OSI can help coordinate needs and chal- lenges with scholarly communica-

GROUP	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
		the research community		tions.
Peer review	Develop a broader and clearer descrip- tion of peer review that considers the different needs for different stages of re- view, as well as discuss possi- bly emerging issues such as the need to promote uni- form interpre- tation and en- forcement of peer review definitions, and develop pro- posals for moving for- ward.	 Work as a community (coordinating with partners like COPE) to define more clearly what is and isn't peer review, in order to impose an accepted standard that all journals will need to follow. Support or conduct studies that investigate the effective- ness of different modalities of peer review (open vs. closed, two-person vs. many, etc.) to help provide support and di- rection to the scholarly com- munication community as it experiments with different peer review systems Investigate the feasibility of publisher services disaggrega- tion, whereby peer review (and other services such as editing) can be offered as discrete ser- vices 	Coordination with partners	The best course of ac- tion for this community will be to support continued in- vestigation and experimenta- tion with new methods and weigh the pros and cons of each
Institutional repositories	Propose a way forward for repository and infrastructure solutions, de- tailing what's needed before action to be taken, what this action should look like and what actors should be in- volved	 Step 1: Study and map the current IR network. Identify the nodes, as the potential networks and sub-networks. Step 2: Convene a conversa- tion with major and globally diverse IR stakeholders under the auspices of UNESCO to ask what problems we're trying to solve, etc. (2) 	UNESCO-led global meeting	Institutional repositories mean many different things to different people. Finding common ground on the future of IRs is important— aligning incen- tives that will result in more interoperability and sustainabil- ity.

WORK- GROUP	GOAL	K	EY RECOMMENDATIONS	TOOLS	TAKEAWAY
Rogue solu- tions	What are the impacts of Sci- Hub and other rogue solutions on OA and what is the future of this approach?	1.	Sci-Hub and any other service that acts in blatant violation of copyright laws, does not fall within the definition of OA and is not a solution to be considered by the workgroup To get away from the solely negative connotations of "rogue," we decided to coin a more expansive term and asked, what can we learn about scholarly communication from the rise of New and Entrepre- neurial Approaches to Open orNEATOs	Observe and educate	NEATOs highlight pain points in the current schol- comm system. They are less effective at addressing the large-scale problems in scholcomm or advancing the cause of open.
Standards	Identify exist- ing relevant standards, evaluate areas of overlap or perhaps con- flict, which can be used to fos- ter increased collaboration, and areas where relevant standards do not yet exist, which can be used to focus future effort	1.	Modify DART spectrum from OSI2016 to become the DARTS spectrum (adding "sustainability") and officially endorse this as a group (3). Connect DARTS to the Open Science Framework and also a new Open Standards Matrix (as described in the report) Work toward standardization across many other issues and questions in scholcomm, from peer review to data deposits by coordinating with other actors in this space and connecting related efforts Advocate for tools that make every part of the research workflow more connected, ef- ficient, and preserved, such as the Open Science Framework.	Promote DART, collaborate with many partners, market- ing/outreach (website)	Creating a more transpar- ent scholarly ecosystem re- quires rethink- ing how each individual and institution is rewarded and recognized for their roles in knowledge creation and dissemination, so that trans- parency be- comes a key metric of suc- cess and ac- countability. Furthermore, it requires careful attention in order to design a system that is sustainable, just, and re- sponsive to new evidence.

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WORK- GROUP	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
Promotion & tenure reform	How can pro- fessional ad- vancement practices— including and beyond promo- tion & tenure (P&T) review standards—be realigned to encourage re- searchers' adoption of open access, open research, and open edu- cational prac- tices?	 Research the existing land- scape to better understand open research recommenda- tions and requirements in pro- fessional advancement materi- als (P&T guidelines, job adver- tisements, university contracts, annual appraisal guidelines, etc.) at leading universities worldwide. Engage scholarly societies and high-level university research administrators and provosts to learn more about the challeng- es of promoting openness in promotion and tenure from their perspective. Most debate around open re- search practices and profes- sional advancement only ad- dress STEM use cases. OSI delegates should conduct a thorough literature review and interview and survey faculty from across all disciplines, ca- reer levels, and institution types to find answers to key questions (4) 	Research, part- nerships (to aid in both research and outreach/ promotion), and then carry out a plan to present recommenda- tions, gather feedback, and promote piloting and adoption of new P&T guide- lines	Academia needs: A closer reading of re- search by committees charged with evaluation, rather than relying on the surrogates of publication venue and im- pact factor; a broader view of scholarly outputs that committees should consid- er as evidence of productivity and impact; an explicit acknowledge- ment of the benefits of publishing in OA venues; and incentives that encourage openness.
Underserved	What are the unique challeng- es in scholcomm faced by the global south?	 Build an APC-finder tool Policy shifts needed: Encourage more public sector shifts toward openness, more incentives for universities to publish in in- country journals, strengthen re- gional OA publishing systems, linking of OA with science policy agendas, expansion of LMIC ag- gregator platforms, more south- south networking and collabora- tion Development of visible displays of verified, appropriate, and ob- jective standards is needed to showcase excellent journals from developing countries and mentor young emerging ones, dispelling stereotypes and excluding fake journals. 	Partnerships, broad policy de- velopment and implementation, standards and best practices initiatives	There is much bias in the cur- rent global sys- tem of scholarly publishing. Un- less corrected, this bias will continue to wid- en the gap be- tween the global north and global south with re- gard to scholarly publishing op- portunities and outputs.

Notes:

- including showing the benefits of open scholarship to a skeptical research community; addressing the many concerns of stakeholders; clearly explaining the pros and cons; and demonstrating the case for why the transition to open scholarship is worth the trouble
- (2) These questions include: What problems are repositories trying to solve? What repository behavior would we like to see and why? How can we work together to incentivize it? How can we attend to different scholcomm needs across different fields? How can we make everyone accountable: publishers, libraries, funders, researchers? How can we achieve a sustainable, decentralized, networked system while gaining efficiency through higher levels of aggregation? How do we minimize waste and maximize value in the repository ecosystem?
- (3) Proposed: The Opens Scholarship Initiative envisions a scholarly community where all parts of the research lifecycle are openly available. In order to achieve this vision, OSI adopts the following principles in order to evaluate policy proposals and actions: research products must be made more Discoverable, Accessible, Reusable, Transparent, and Sustainably supported. Policies that increase openness among one or more of these dimensions, while having no net decrease on any other, are aligned with the mission and purpose of OSI delegates and member institutions.
- (4) These questions include: Where are the pain points for researchers with respect to OA and open research practices? How many researchers worldwide have funding requiring open publishing and open research mandates? What are the pain points for those researchers? How do institutional OA policies impact tenure-track faculty that are also required to follow promotion and tenure requirements that disincentivize open research practices? Do funder requirements for OA positively affect open research practices in the tenure and promotion process, where such P&T requirements weigh research funding into P&T cases? What can we learn about researcher evaluation from research institutes or academic libraries that don't have tenure (e.g. Scripps or HHMI)? What are the best parts of research evaluation practices worldwide, which we can borrow from to promote openness? What are the worst evaluation practices that should be avoided?

In addition to workgroup meetings, stakeholders were also asked to meet with the following instructions:

- (1) Quickly summarize the various perspectives involved with regard to open,
- (2) In more detail, describe areas of general agreement and disagreement between stakeholders and the issues and questions that may be powering these different viewpoints, and
- (3) Propose a set of specific actions or outcomes that can balance the needs and interests of all members of your group (or a mechanism for finding solutions or bridging gaps). Also describe the challenges your proposal faces and how these can be addressed in a realistic and collaborative way.

Stakeholder meetings were an experiment at OSI2017. This exact same meeting format probably won't be repeated in future meetings. There simply wasn't enough time for stakeholder groups to get organized, not all groups were adequately represented, and the additional reportwriting requirement created a burden for some participants. It also became evident that some stakeholder groups were entirely too heterogeneous to really be called a stakeholder group at all, so this realization may in fact force some reconsideration of the stakeholder group structure of OSI (or at least the rigidity of it). All this said, the stakeholder meetings served an important purpose insofar as refocusing this group's attention on what it can do together to advance the cause of open. While workgroup conversations focus on issues, stakeholder groups focus on relationships, and it's these relationships that will be at the center of OSI's reform efforts going forward.

STAKEHOLDER	GOAL	RF	KEY COMMENDATIONS	TOOLS	TAKEAWAY
Infrastructure	More collabora- tion and coopera- tion amongst in- frastructure groups is needed to advance goal of open. Given that research trans- cends disciplines, geography, institu- tions and stake- holders, the infra- structure that supports it needs to do the same.	1. 2.	Scan the current bits and pieces of infra- structure and evaluate their adoption on a global scale Engage with the "own- ers" of the infrastruc- tures to push for measures that can se- cure global implemen- tation/adoption	Collaboration, partnerships with and between infra- structure groups, negotiation with and between other stakeholder groups	Infrastructure is critical to open scholarship but these structures originated and are oriented to- ward the North/West, and most devel- oped without sufficient consul- tation with the global communi- ty
Journal editors	to do the same. What are the common issues across all journals in all regions that can be improved, particularly with regard to journals in the global south?	1.	Pursue systemic chang- es regarding standards, indexing and language access (1) Educate the academic community about the importance of journals to research culture and open publishing (in- cluding editors, peer reviewers, editorial boards); the role of im- pact factors in P&T in undermining smaller, more specialized jour- nals and those in the global south; the im- portance of mentor- ship; learning from global south journals, many of which are al- ready OA and publish- ing at low cost; and ad- dressing academic cul- ture change to improve research standards (2).	International col- laboration and agreement across disciplines on new standards and approaches	Journals in the global south face unique challeng- es. These are partly the result of having to try to fit into an expensive and rigid "northern" system, and part- ly because of lack of funding and training and a less developed research and academic infra- structure.
Libraries	What are the common interests and perspectives of libraries and how can they work together to help advance open?	1.	Support, engage and/or collaborate on actions that continue to build out the frame- work for more open scholarship (3) Support, engage and/or collaborate on actions that continue	Outreach, discus- sion, and collabo- ration ef- forts/tools	Despite wide differences in resources, defini- tions and more, there is broad support amongst libraries every- where for open—to pro-

STAKEHOLDER	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
		 connecting resources and efforts to make more open scholarship possible (3) <u>Support, engage</u> <u>and/or collaborate on</u> <u>actions that</u> continue to improve the capacity of existing open scholar- ship resources and ef- forts (3) 		vide stewardship in discovery, preserve and disseminate the scholarly record, ensure the effi- cient and effec- tive use of budg- ets, and to advo- cate for equitable access.
Open knowledge groups	What are the common interests and perspectives of open knowledge groups?	 <u>Address question 1:</u> OA jargon is a barrier to understanding amongst stakeholders. What can we do to re- duce the jargon? <u>Address question 2:</u> We need to deliver more content to the commu- nities who need it. How do we do this? <u>Address question 3:</u> How do we establish financial sustainability for a free-free envi- ronment (free to pub- lish, free to consume)? 	Communication, clarity, standards, agreements, out- reach	There's a lot of diversity in the open knowledge stakeholder group. This is an exciting time to innovate, and there are lots of good solutions emerging.
Commercial pub- lishers	What are the common interests and perspectives of publishers with regard to open?	 <u>Address question 1:</u> There is little engagement from funders at the OSI meetings and there is virtually no at- tendance from the Global South. Will we fix this? <u>Address question 2:</u> It is unclear what the ex- act impact of the initia- tive can be, particularly as it will be very diffi- cult to unite all stake- holders in recommen- dations or even opin- ion statements. How will this work with re- gard to commercial publishers? <u>Address question 3:</u> 	More funding, more discussion. Also, more joint ventures in the development of common frame- works for storage, common defini- tions for open, etc.?	OA is an im- portant subject for virtually all publishers. Pub- lishers are also important driv- ers of innovation in scholarly communication, and are commit- ted to serving their clients and customers. However, there are wide variety of publishers with a wide vari- ety of business models, not to mention differ- ent opinions,

STAKEHOLDER	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
		Publishers are con- cerned about the vul- nerability of the organ- ization, as it is basically a one-man-show in its current form. Will this be fixed?		policies and strategies. Also, because many of them compete with each other, it is in many cases forbidden by law and/or unwanted (for competitive rea- sons) to share opinions, poli- cies and strate- gies.
Research univer- sities	What are the common interests of research uni- versities in ad- vancing open?	 <u>Thought exercise</u>: If we were reinventing the modern research university library from scratch, what would it look like? <u>Thought exercise</u>: Think critically and creatively about the development of programs and platforms that explore open scholarship in ways that meet the needs of our scholars. Can we imagine and realize, for example, university-supported platforms for open data sharing that invite peers in as collaborators rather than competitors? Can we incorporate commercialization into our vision of open scholarship as one of a number of modes of dissemination? Real advancement requires support for the innovation and experimentation of our scholars, structures tolerant of failure and admitting of a new range of techniques and approaches. Solu- 	Dialogue (plus a convening party) to expand into creative solutions at local and con- sortia levels, and openness to a variety of solu- tions and ap- proaches	Research univer- sities are com- mitted to explor- ing ways to ad- vance open re- search, but also sensitive to the reality that one- size-fits-all ap- proaches do not reflect the needs and concerns of all scholars (without whom there would be very little intel- lectual product to debate).

STAKEHOLDER	GOAL	KEY RECOMMENDATIONS	TOOLS	TAKEAWAY
		tions will come from the many, many stake- holders that comprise our institutions – our scholars, libraries, computing support, of- fices of sponsored pro- jects and our infor- mation technology and high performance computing infrastruc- ture.		
Scholarly com- munication ex- perts	What are the common interests that scholcomm experts have with regard to open?	 Internal to OSI: Get more input and in- volvement from au- thors, researchers, re- search offices and ad- ministrative leaders. Between OSI and the broader scholcomm <u>community</u>: Cre- ate/facilitate an OSI fellows program that helps share insight be- tween scholcomm silos by seconding staff from libraries to pub- lishers, research admin offices to scholcomm offices and so on. Also, ask OSI participants to serve as ambassadors to their respective communities to facili- tate the broader ex- change of ideas and perspectives. In the scholcomm <u>community</u>: Establish open scholarship norms and standards to make it easier for eve- ryone to participate in the open scholarship ecosystem. Also, sup- port more author choice in this ecosys- tem 	More dialogue, engagement, in- volvement, bridge- building, participa- tion, flexibility— more of every- thing	This stakeholder group shares a perspective of OA that reflects both the need for clarity in communicating about what open scholarship means, and a richer underlying landscape ena- bling a spectrum of openness for different scholar- ly objects. This group also shares an interest in more clearly fostering and articulating the incentives for OA publishing to effectuate behavioral changes.

CTAVELIOI DED	COAL	KEY	TOOLS	
STAKEHOLDER Scholarly socie-	GOAL What are the	RECOMMENDATIONS 1. Socialize concepts of	TOOLS Conversation,	TAKEAWAY Societies are in a
ties	common interests of scholarly socie- ties and how can they work togeth- er to advance open?	 open scholarship more within communities, including by educating constituencies on the benefits and requirements of open. Additionally, offer platforms and recognition for those making the shift by managing member metadata, connecting, tracking, and rewarding contributions to open, offering discipline-specific awards for open, building scholarly communication networks, and offering micro-credentialing in open. Bring together independent society publishers to determine if collaborations can be made. Determine how to increase efficiencies across the ecosystem. Determine how the funds in the system can be redistributed (institutionally, nationally, internationally) to provide a more transparent economic relationship among producers, consumers, and publishers of information. 	collaboration, pilot programs	unique position to influence the move toward open scholarship because they represent large groups of pro- fessional constit- uencies. This said, society pub- lications are self- sustaining and fund other socie- ty programs and services, and traditional socie- ty publishing take care to steward and ad- vance research, so there's a dis- incentive to change models.
Summit group	What are the high-level take- aways from OSI2018?	OSI needs to put new communication tools and processes in place in or- der to continue to engage people productively, par- ticularly across stake- holder groups, through- out the year.	Communication	Even more im- portant than governance structure, OSI needs to put new communi- cation tools and processes

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Notes:

- 1. Proposed systemic changes include:
 - a. Standards:
 - 1. Establish (with global representation) clear, achievable, evidence-based journal standards focused on improving the quality, transparency, and reproducibility of research, rather than the appearance of the journal. Standards should have few out-of-pocket financial requirements and means for journals to pay for them should be addressed.
 - 2. Contact CrossRef and CLOCKSS regarding how to achieve (markedly) reduced costs for Global South and other small under-resourced journals
 - 3. Develop (with global representation) data policy standards regarding authors' retaining and sharing data
 - 4. Identify free or nearly free data repositories such as Figshare for author and editor reference
 - 5. Develop (with global representation) standards for data privacy for Global South authors, institutions, and editors to use
 - 6. Develop (with global representation) approaches for Global South institutions to develop institutional repositories funding and best practices
 - 7. Study why some journals may cease to adhere to standards and determine ways to prevent declining standards
 - b. Indexing:
 - 1. Catalog requirements of major indexes for editors to easily reference; synthesize requirements into standards to improve likelihood of indexing; identify issues with Global South journal practices that impede indexing, and causes and ways to alter their practices
 - 2. Identify liaisons at major indexing organizations to turn to when editors have questions
 - 3. [Until truly global indexing is available] Strengthen regional journal indexes that national research evaluation systems, institutions and researchers (including systematic reviewers) can use to ensure that they are capturing all relevant research
 - 4. Evaluate standards of "international" indexes to determine why Global South journals are preferentially not indexed
 - 5. Approach indexing organizations regarding requirements that may not be essential and inequality practices that may introduce bias against Global South journals
 - 6. Approach Google Scholar re: increasing the likelihood that Global South journals and articles will appear in search results
 - c. Language Access:
 - 1. Identify (with global representation) ways to encourage journals to publish in the main language of the country (with English abstracts provided by the author if the journal cannot afford professional translation)
 - 2. Convey (with global representation) the importance of publishing in the country's language to academic institutions within the country
 - 3. Convey to Google (with global representation) the importance of improving automated translations of research (particularly medical research) to at least improve the first pass of research translation before professional translators or authors refine translations.
- 2. Proposed culture changes include:
 - a. Importance of Journals to the Research Culture
 - 1. Convey to academic institutions and funders the importance of journal editors to the culture of academic scholarship
 - 2. Encourage institutions to recognize the services that peer reviewers and editorial boards provide as important academic achievements
 - b. Impact Factor
 - Convey to Global South academic institutions and funding organizations the problems that use of impact factor and publication in Global North journals as criteria for research impact create for Global South journals and the fostering of academic culture in the Global South; explain the limitations of the impact factor and the alternative means of judging impact set out by DORA and implemented by some funding organizations such RCUK/MRC
 - 2. Examine incentives for Global South researchers and how incentives might be changed to promote open publishing and publishing in Global South journals
 - c. Importance of Mentorship
 - 1. Examine with potential funders ways in which a Global South network might be developed, incorporating existing standards such as ORCID
 - 2. Contact scholarly societies to determine feasibility of new programs pairing specialty societies in the Global North and South

- d. Learning from the "South"
 - Create a clearinghouse for ways in which journals, publishers, and indexers in the Global South and North
 are improving quality, implementing standards, streamlining publishing, evaluating journals, or otherwise
 improving the publishing process. The clearinghouse should be available for researchers to evaluate the efficacy of particular approaches for different regions of the world.
- e. "Open" questions

3.

- 1. Develop (with global representation) best practices for journals based on their funding model, including those funded by government, institutions, and other funders, to preserve editorial freedom and prevent conflicts of interest
- 2. Involve stakeholders in various regions in discussions around how to change academic culture to value openness and to value publishing regionally in the research language
- 3. Involve stakeholders to identify ways in which institutions and funders can incentivize ethical research and detect and prevent research misconduct.
- Library-identified efforts for support, collaboration and/or engagement include:
- a. Shared training and teaching resources
- b. OERs as a means to promote more open practices on campus
- c. Optimization of open source repository platforms
- d. Improve discovery of what is already made available
- e. Engage with projects such as Initiative for Open Citations (I4OC)
- f. Identify opportunities for cross-institutional OA publishing
- g. Exploration and investment into the different models of OA from a library perspective that recognizes institutional diversity (i.e. Pay it Forward project)
- h. Journal Assessment (possibly addressing white/black lists of journals)
- i. Advocacy efforts that push a need for greater transparency in the pricing of OA journals
- j. OSI facilitation of more communication and information sharing across stakeholder groups (i.e. Tenure reform and Impact Factor groups)

OSI2016 workgroups also developed important and detailed recommendations. Most OSI2017 recommendations align with these recommendations since the 2017 reports were grounded in OSI2016 deliberations. The following table contains the key findings and recommendations from OSI2016 (as noted in the OSI2016 final report):

WORK- GROUP	KEY ACTION ITEMS		TOOLS (SUMMARY)		TAKEAWAY (SUMMARY)
What is publishing? 1	Explore disaggregating the cur- rent services provided by pub- lishers (such as filtering, editing, dissemination, registration, and so on) and how current scholar- ly publishing stakeholders might be incentivized to embrace the- se changes.	1.	Develop partnership agreements to work to- gether to change the cul- ture of communication in- side academia (and as part of this effort, clarify mes- saging with regard to ben- efits and impacts of open).	•	Acknowledging: Scholarly communi- cation is changing and this change pre- sents opportunities and challenges. Describing: Some of the change that is
What is publishing? 2	Explore ways to change the publishing culture inside of academia, including systems of academic recognition and re- ward. Identify unmet author needs, and gaps in evidence and knowledge, develop disciplinary approaches, and use pilots ra- ther than one-size-fits-all ap- proaches.	2.	Lay the groundwork for promotion and tenure re- form (a framework agree- ment with stakeholder partners to disentangle the influence of journal pub- lishing and make evalua- tion more transparent). Pilot new spectrum measures for "open" and		happening involves shaking up the cur- rent system to utilize publishing tools and approaches that may be better suited to an Internet-based information world. But not all current

WORK-	VEN ACTION ITEMS		TAKEAWAY
GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	(SUMMARY)
What is open?	The scholarly community's cur- rent definition of "open" cap-	impact (see the reports from the "Open Impacts"	and needed changes fall into this catego-
-	tures only some of the attrib-	and "What is Open?"	ry. Indeed, some of
	utes of openness that exist	workgroups). Also assess	the most needed
	across different publishing	the routes by which such	changes do not.
	models and content types. We	measures might come into	• Doing (general
	suggest that the different attrib-	common use and the les-	guidelines for ac-
	utes of open exist along a broad	sons to be learned from	tion):
	spectrum and propose an alter-	previous attempts that	• We don't have
	native way of describing and	have not been taken up.	a clear, coordi-
	evaluating openness based on	4. Develop and recommend	nated action
	four attributes: discoverable,	new tools to replace the	plan for im-
	accessible, reusable, and trans-	journal impact factor.	proving open.
	parent. These four attributes of	5. Fund studies or pilots that	What needs to
	openness, taken together, form	will help:	happen today,
	the draft "DART Framework	a. Identify which	tomorrow and
	for Open Access." This frame-	publishing ser-	the day after?
	work can be applied to both	vices can/should	Who are the
	research artifacts as well as re-	be better handled	actors, what are
	search processes.	by others (dis-	the mileposts,
Who de-	1. Evaluation: Re-assess the	aggregated).	what are the
cides?	criteria for academic tenure	b. Assemble and	likely impacts,
ciucs:	and promotion	supplement as	and how do we
	a. Fully consider	needed an evi-	
	OA publications	dence base to	measure suc-
	on the same foot-	better inform our	cess? (Note
			that these con-
	ing as all other outlets in research	policies regarding	cerns don't
		embargoes.	necessary sug-
	assessment	c. Develop a	gest that OSI
	b. Research and val- idate the use of	stronger under-	itself should
		pinning (eco-	create and
	altmetrics	nomic model-	evaluate specif-
	c. Reward greater	ing?) for the dis-	ic programs of
	openness 2. Incubation: Nurture alter-	cussion sur-	work. Rather,
		rounding the idea	this is a com-
	native, community-driven	of pushing a	mentary on the
	publishing models	global flip to	need for OSI
	3. Transformation: Facilitate	open using APCs	to identify what
	a "global flip" of research	(e.g., how might	it can do and
	journals from subscription-	this affect access	how it will op-
Monald	based to OA.	in the global	erate, and then
Moral di-	In this transition period, we	south?).	farther down
mensions	need to encourage a period of	d. Identify the eco-	the road, what
	exploration and grace in the	nomic impacts of	kinds of syner-
	search for new models, while	open.	gies OSI can
	being prepared to judge such	e. Get a better un-	encourage.)
	efforts by the highest moral	derstanding of	 Some change
	standards. We must consider,	how the system	will need to in-
	for example, whether a particu-	works now, and	volve reform-
	lar invention maximizes the	then identify	ing the com-
	new digital affordances in order	scholarly publish-	

WORK- GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	TAKEAWAY (SUMMARY)
	to increase universal access. We consider it our responsibility to make judgments about the mo- rality of acts, artifacts, systems, and processes, but not on the morality of people and organi- zations.	ing standards, norms, best prac- tices, exit strate- gies, incentive systems, and a future ideal. 6. Identify which scholarly	munications culture inside academia, where old pub- lishing meth- ods, measures and percep-
Usage di- mensions	 Perform a landscape assessment of scholarly communication and workflow tools to categorize current best practices, standards and norms. Create an issue brief concerning funder support of OA. OSI should identify conversations that are already happening in this area, looking for synergies and potential partnerships, and facilitate knowledge sharing in this area. 	 publishing stakeholders can work together on these and other efforts and how (multiple stakeholders require a convening power). 7. Develop new funding models such as a venture fund that can allow more support for joint efforts, or improve the flexibility of library budgets (e.g., by examining the efficiency of "big deals"). 8. Propose radical new re- 	tions can drive author choices and be used as proxies for merit when evaluating grant awards and tenure de- cisions. And some will need to involve ex- amining our own biases that publishing is a binary proposi-
Evolving open 1	 We need a better understanding of how the system works now. Specifically, we need a comprehensive study that shows in detail, country by country, how funding, tenure, and promotion decisions are made and the role of research outputs and activities within this decision-making process. As a community and at a high level, define an ideal future across all issues—peer review, impact factors, etc. Ensure that any new im- 	 pository interoperability and infrastructure solu- tions. 9. Develop a broader and clearer description of peer review that takes into ac- count the different needs for different stages. 	tion involving either open or closed, sub- scription or APC-based, right or wrong. Open, impact, author choices, peer review and other key concepts all exhibit a range of values. Iden- tifying non- binary measures for some of these values (as pro-
P 1 '	pact system adopted be transparent.		posed by sev- eral
Evolving open 2	 We recommend that OSI commission the development of a comprehensive set of resources and messaging efforts, targeted to specific audiences, to increase the profile of OA across stakeholder groups. We recommend that OSI 		workgroups) may be helpful insofar as al- lowing stake- holders to fo- cus on improv- ing areas most in need of change and

WORK- GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	TAKEAWAY (SUMMARY)
GROOT	appoint a Task Force to		comparing
	develop a strategy for the		progress and
	establishment of an OA		best practices
	venture fund, and deliver a		across disci-
	report at OSI 2017.		plines, institu-
	3. We recommend that the		tions, publish-
	topic of liberating subscrip-		ing approaches,
	tion budgets (and the dis-		funders and so
	solution of "big deal"		on.
	models) be a future OSI		 Any wide-
	Working Group, with rep-		spread change
	resentation from both li-		is going to re-
	braries and publishers.		quire a wide-
	4. We recommend that an		spread effort.
	OSI Working Group iden-		There are
	tify and seek ways to close		simply too
	gaps within the OA infra-		many stake-
	structure, beyond STM		holders with
	journals (the lack of devel-		different inter-
	oped infrastructure beyond		ests and per-
	1		
	STM journals and the		spectives who influence dif-
	fragmentation and lack of		ferent decision
	interoperability of systems		
0	and processes.		points. No sin-
Open im-	Openness scores should be		gle stakeholder
pacts	developed, as well as utilization		or group will be able to af-
	and economic impact measures.		
	Ideas are proposed for what		fect this kind
	would be included in the base-		of change uni-
	lines of each such evaluation.		laterally.
	More research is needed and		• How do we
	proposed, perhaps as standing		make these re-
D	(ongoing) OSI efforts.		forms in re-
Participa-	1. Cultural change		sponse to the
tion	2. Consistent messaging		needs and con-
	3. More and better open pub-		cerns of au-
	lications		thors rather
	4. Institutional commitments		than in spite of
	to scholcomm efforts (in-		authors (au-
	cluding adjusting incentive		thors are not a
	and reward systems)		homogenous
	5. Support more research into		group with
	solutions and sticking		common inter-
	points		ests or opin-
Overload &	1. Increase information litera-		ions, of course,
underload	cy efforts toward under-		but there was
	standing the behavior of		some sense
	information systems and		among dele-
	economies, which can in		gates that re-
	turn prepare students and		form efforts
	scholars to make both		could be better

GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	· · · · ·		
	more understandable to others.2. Expand information litera- cy to include knowledge		attuned to what authors need- ed)? • How do we		
	about the nature of com- putation and its control over what is accessible from and delivered to our		make changes across disci- plines (which have different		
	devices.3. To address the overabundance of information that causes overload, filtering systems are needed to iden-		needs) and that also effectively build on the ef- forts of the many stake-		
	tify, sort, select, and sum- marize relevant infor- mation.		 holders in this space? How do we reform the system 		
	4. To address the problem of under delivery of or lack of access to information, known as information un-		form the sys- tem without losing its bene- fits?		
	derload, remove wide- spread sociopolitical, tech- nological, educational, geo- graphic, and financial bar-		 How do we move from simply repair- ing dysfunction 		
	 riers. 5. Apply more open metada- ta, social media, digital tools and networked exper- tise to advance discovery. 		to creating a more ideal publishing world and reaping the		
	Better exposure and dis- covery options for scholar- ly products are still needed, as well as the means to un-		benefits that such a world could provide in terms of par-		
	derstand and apply them.6. Convert more content into a machine-shareable form		ticipation, effi- cacy, efficiency, and discovery?		
	and continue promoting openness through respon- sible curating, archiving and discovery of raw data.		 Developing standards and norms would be helpful as 		
	 Advocate for mandatory copyright exception for text mining and encourage publishers and vendors to 		we move for- ward, as well as answers to a number of key		
Reposito-	remove obstructions to mining content. 1. Clarify opportunities for		questions.		
ries & preservation	UNESCO and WSIS to engage in this effort 2. Coordinate action among				

WORK-				TAKEAWAY
GROUP		KEY ACTION ITEMS	TOOLS (SUMMARY)	(SUMMARY)
		COAR, CLIR/ DLF)		(*******)
	3.	Raise funds for improved		
		sustainability and steward-		
		ship through investments		
		and endowments in reposi-		
		tories		
	4.	Support aggregation driven		
		by preservation concerns,		
		such as:		
		a. Electronic legal		
		deposit (UK) b. Portico, Chro-		
		nopolis, APTrust,		
		and DuraSpace		
		c. DPN,		
		MetaArchive Co-		
		operative,		
		CLOCKSS		
	5.	Build workflows and an		
		ecosystem in order to en-		
		sure long-term access and		
	4	preservation.		
Peer review	1.	Pre-publication peer re-		
		view:		
		 We encourage the use of preprint 		
		servers		
		• We also encour-		
		age the facilitation		
		of a flexible, non-		
		linear process of		
		peer review out-		
		side of and sup-		
		plementing jour-		
		nal-based peer re-		
	•	view		
	2.	L		
		 We recommend that all disciplines 		
		work toward a		
		culture of open-		
		ness in peer re-		
		view.		
		• We encourage the		
		exploration and		
		addressing of the		
		problems, real		
		and perceived,		
		with transparency		
		in peer review.		
	3.	Post-publication peer re-		

WORK- GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	TAKEAWAY (SUMMARY)
GROOT	view:		
	• We recommend		
	the facilitation of		
	post-publication		
	review of tradi-		
	tionally reviewed		
	publications.		
	• We recommend		
	experiments with		
	crowd systems		
	that incentivize		
	broad, representa-		
	tive participa-		
	tion—for exam-		
	ple, with a cur-		
	rency, rating, or		
	credit system.		
	• Any credits or rat-		
	ings should be		
	acknowledged by		
	employers or		
	funders of those		
	doing the reviews		
	as valid metrics in		
	career progres-		
	sion.		
	4. Overall, more study, pilots and standards are recom-		
	mended, as detailed in the		
	report.		
Embargoes	A project is proposed to study		
8	and reform the current embar-		
	go system. The stages of this		
	project are as follows:		
	1 /		
	1. funder identification (al-		
	ready begun) and brief		
	(drafted)		
	2. literature review (already		
	begun)		
	3. case studies analysis		
	4. employing researcher(s)		
	and surveying stakeholders		
	5. analysis of survey data and		
	presentation at OSI 2017		
	(by the OSI 2016 Embargo		
	Workgroup). The OSI		
	Embargo Workgroup has		
	prepared a set of draft sur-		
	vey questions and will ana-		
	lyze the survey data and		

WORK- GROUP	KEY ACTION ITEM	S TOOLS (SUMMARY)	TAKEAWAY (SUMMARY)
Impact fac- tors	 present it to OSI 2017 DORA recommendation should be implemented 	1.	
	Future OSI workgroup should assess the initial sponse of research fun- especially in the biomed field, to this proposed a tion and amend the fol ing actions accordingly	l re- ders, dical ac- low-	
	2. Create templates for ur versities / disciplines, t facilitate the developme of appropriate tenure a promotion frameworks implement DORA	o ent nd	
	 Create an international metrics lab, learning fro prior attempts to do th and staffed with a coali of groups already in thi space (as identified in t report). 	om is, tion is	
	 Share information about the JIF, metrics, their us and misuse, via a resour page on the OSI websia and partnerships with i tutions as identified in report 	rce te nsti-	
	 Improve the validity of JIF as one indicator of journal quality (OSI workgroups focused or dicators or impact factor should draft a list of im provements required to JIF) 	n in- ors 1-	
At-large	 Promotion and tenure discussed at some poin most, if not all, workgroups. Notably, t was no team expressly ignated to tackling the question of promotion tenure. There is recogn tion that while promoti and tenure is a key corr nent of the publishing system, there is perhap tle that publishers there 	t in there des- and i- tion npo- eco- s lit-	

WORK- GROUP	KEY ACTION ITEMS	TOOLS (SUMMARY)	TAKEAWAY (SUMMARY)
	selves can do to influence		. ,
	the process. In this sense,		
	OSI could conceivably		
	work with other stakehold-		
	ers throughout the academ-		
	ic system to express per-		
	spectives and positions on		
	this evolution.		
	2. More focus on impact is		
	another idea. The at-large		
	committee's observations		
	lend credence to the idea		
	that a "spectrum of im-		
	pact" measure might be		
	developed by OSI to paral-		
	lel the spectrum of open		
	proposal. Specifically, a		
	theme running as an un-		
	dercurrent in many		
	workgroup discussions was		
	a greater need to focus on		
	assessment of the value of		
	research and scholarship.		
	Notably, nearly all partici-		
	pants in the OSI2016 con-		
	ference, and most stake-		
	holders in the entire schol-		
	arly publishing ecosystem,		
	have an interest and need		
	to measure the impact of		
	research and scholarship.		
	3. Improve composition and		
	representation for		
	OSI2017, begin focusing		
	on action instead of ideas		

4. Synthesis of OSI2016 and

OSI2017 recommendations

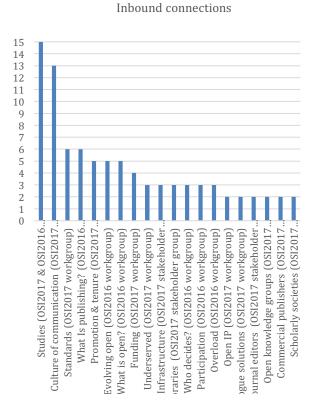
There are several ways to synthesize all these recommendations. The method used here is to calculate the "connectedness" of the reports produced at OSI2016 and OSI2017 in order to supplement the "gut feeling" takeaways described at the outset of this report (both are distinctly subjective approaches, of course; see the spreadsheets included in the Annex section for more details, as well as the analysis critique later in this report). Most OSI2017 reports have three to five "outbound" connections where the issues being addressed by other workgroups are noted as being key. At the same time, most reports have a smaller number (zero to three) of "inbound" connections, where other groups identify the particular issue they are working on as being key. In other words, if a group of 12 people is asked to name the 10 most famous people in history, that's an outbound connection. To the extent that these 12 people are on other's lists, that's an inbound connection.

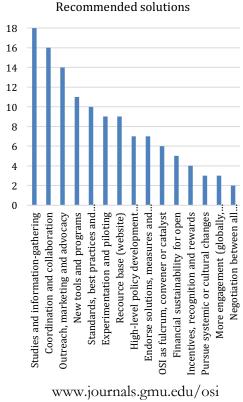
This discrepancy between inbound and outbound connections is owing to the large number of inbound connections being made to the studies groups, the culture of communications group and a few others. That is, a large number of groups across OSI2016 and OSI2017 concurred that two foundational concerns with regard to reforming scholarly communications are the critical need for more studies and information, and the need to reform the culture of communication in academia. Issues such as standards and developing a clearer sense of what "open" means are also among the issues that OSI participants frequently judged to be key.

Another approach to synthesizing these recommendation is to examine the connectedness of specific tools and processes-more meetings, more collaboration, outreach efforts and so on. Here, as you can see from the graph below, it's clear that the key recommendation from OSI2016 and OSI2017 participants is that we need more information.

There are many gaps in our understanding, and more information is needed before we can move forward aggressively and assuredly in a number of areas. However, not every recommendation involves gathering more information. Almost as many recommendations simply call more coordination and collaboration toward common goals, more outreach programs geared toward clarifying the open landscape and sharing information with each other (key to reforming the culture of communication), and more focus on standards development and the deployment of tools and resources that can serve the scholarly communication stakeholder community.

There is overlap in a lot of this terminolo-



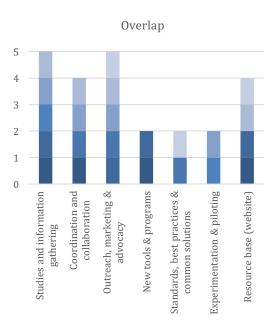


gy, of course—this is a rough pass to help us understand the general road ahead. But it interesting to note from this representation that some of the more complicated approaches like high-level meetings and cross-stakeholder negotiationsapproaches that many in OSI have been skeptical about due to the wide range of perspectives in this group-aren't necessarily the approaches we need to explore first. It's possible that OSI can make significant headway merely by picking the low-hanging fruit first-by gathering more information, partnering on significant efforts, reaching out to the scholarly communication community, creating a resource base for open, and more.

As the OSI group moves forward in 2017 and 2018, therefore, its main focus should be on the most prominent issues and study areas first. Practically speaking, though, OSI may need to skip over the first recommendation calling for more studies until and unless this initiative receives a significant boost in funding. However, we can move forward with "information gathering" to the extent that we can scour the landscape for facts that exist but aren't in our possession yet, or facts that don't require a complicated study to collect (like researcher attitude surveys, for instance). Combined with this effort, we can also try to begin collaborating and coordinating in earnest to work on reforming the culture of communication in academia, developing open outreach programs and products, developing OA information and guidance resources for the stakeholder community, discussing new international standards, and so on down the line.

How can we reconcile these two sets of recommendations, though-that is, how

can we maximize our limited resources to both the right focus area and the right approach? Specifically, if we're agreed that, other than studies, culture of communication is the most salient topic to pursue, and that we should develop the most recommended solutions we can afford, where do these two sets of recommendations intersect? What specific projects should we work on that encompass both the most salient topics and with the most recommended solutions? As the graph below illustrates, this intersection happens for four areas of activity: studies and information-gathering; outreach, marketing and advocacy; coordination and collaboration; and developing a resource base (essentially, a website devoted to OA coordination and education).



5. Recommendations for 4Q17-2Q18

At present, OSI lacks the financial and labor resources to undertake the entire

suite of recommendations put forward by OSI2016 and OSI2017 participants. However, as the above synthesis suggests, if we focus just on the most "connected" recommendations we can stay within our capabilities and also achieve significant impact. Specifically, OSI should focus on three main tasks first and foremost: (1) Outreach, marketing and advocacy efforts-first on behalf of the issues listed in the above table and then spreading to other issues as time and resources permit, (2) building a resource base for use with the issues listed above and then spreading to other issues as time and resources permit, and (3) building coordination and collaboration efforts, again primarily for the central issues for now but spreading later.

As OSI attracts more resources in the future and builds a resume of accomplishment, we can fund studies, develop new tools, work together on standards, support pilots and so on, geared first toward the central issues. Other approaches such as high-level meetings will come over time, as will a focus on issues such as information underload, but for now, OSI's priorities will be to address the highest needs first with the most recommended solutions. These plans will no doubt evolve and change at the margins as they're rolled out, but this is the general direction OSI will start heading in the Fall of 2017.

As these plans roll out, they will build on the common perspective of OSI participants mentioned at the outset of this paper—to wit, that open isn't free, it isn't easy, publishing is critical, OSI can help, we're on the right track, we're more alike than unalike, convergent needs are everywhere, we all have a stake in the outcome and should recognize each other's efforts and hold each other accountable, and that there is a lot of mistrust in the system which needs to be overcome.

How does all this reconcile with the action plan previously developed for 2016 and 2017 (see Annex section)? Reasonably well. Coming out of OSI2016, most of our goals for the last half of 2016 and early 2017 were to figure out how to approach OSI2017-how to interpret and distill the outcomes of the first full year of OSI effort into forward progress and action. This was achieved quite successfully, as the OSI2017 conference outcome can attest. The only goal which wasn't met was forming "tiger teams." The idea behind these teams-groups of OSI participants who are concentrated in a particularly institution or geographic area, or who met regularly as part of a stakeholder group (like scholarly librarians)-was that they could address their institutions, and also key meetings (to be identified). These teams are still a popular idea and can be part of the marketing and outreach strategy for 2017 and 2018. Once outreach materials are developed, tiger teams can draw on these resources for their work.

In addition to this emphasis, OSI participants have recommended taking a closer look at a handful of topics. Small discussion groups peeled off during 2017 to work on these; some may end up becoming 2018 workgroup topics. Going forward, communications reforms (as noted below) should help make these side conversations more fruitful and enduring than just email or listserv groups:

1. <u>Cash incentives to publish:</u> What are the cash incentives to publish in academia? There is anecdotal evidence from some parts of the world that this is a significant and corrosive phenomenon.

- 2. <u>Publisher profit margins</u>: The profit margins of commercial publishers have long been cited in debates about scholarly communication reform. Facts, however, are in short supply. A group of industry leaders and analysts is willing to pull together an authoritative on this topic.
- 3. <u>Open protocols</u>: Open study protocols is an important and underresearched area. There are a few open protocol sites but none for major clinical work. What are the challenges? Is this a solvable problem?
- 4. <u>Blacklist:</u> Should a new blacklist be developed? A whitelist? Some other solution? Various ideas have been discussed at length both on and off list and in a side group but a final decision hasn't been reached yet.
- 5. <u>APCgrabber.com</u>: A website that pulls in data on APCs for easy comparison or where publishers can selfpost pricing info (granted there would be lots of caveats) would be a valuable resource for this community. This idea preceded the blacklist discussion—we wouldn't want to create a tool that makes it easier for fraud dealers to peddle their wares.
- 6. <u>Open impacts</u>: Follow-up on a listserv conversation regarding a hot-ly-disputed report on open impacts (circulated to the list in February) by restarting this conversation with one of the report's authors included.
- 7. <u>iTunes model:</u> Would an iTunes model work for scholarly journals? Would providing a-la-carte access to journal articles at 99 cents apiece be attractive to scholars and publishers?

6. Analysis critique

As noted above, absent full funding, OSI simply isn't able to address all challenges at the same time so some prioritization is necessary. This prioritization does not mean, however, that lower priority challenges are less important or that all OSI participants agree with the priorities identified in this report. OSI will endeavor to stay focused on all the issues and solutions identified by OSI participants and tackle these going forward as possible.

It is also important to note that this synthesis has not had broad input yet from all OSI participants, nor is this approach necessarily the best way of identifying priorities. More input and analysis is needed. To this end, OSI steering committee and summit group members are currently in the process of going over these recommendations and will set aside significant meeting and discussion time between end-2017 and early-2018 to discuss these recommendations and adjust as needed. In addition to broadening input into this decision, improving the transparency of this process will also be important.

7. The 2018-19 action timeframe

Because the scholarly communication stakeholder community is so diverse, the first step in this group's journey has been to acknowledge and value where each stakeholder group is in the process. This stage of OSI took place during 2016 and 2017. The next two years, 2018 and 2019, will involve figuring out what course adjustments can be made to the current system to continue to improve scholarly communication and what assistance this community can offer—new standards, new incentives, better definitions, coordinated policies, collaboration efforts, formal partnerships, new studies, pilot products, and so on. Actively involving the full international community will be vital during these next few years to make sure we're doing the right things for the right reasons. Our hope is that by 2020 the OSI group will be fully engaged in significant reform efforts, fine-tuning these efforts until 2025.

To better engage the international community and ensure that our action plans are the right ones, OSI is currently evaluating several proposals for international meetings in 2018 and 2019. These meetings can do any or all of the following (depending on the interests of the meeting hosts):

- 1. Invite local researchers and research leaders from various disciplines and institutions to comment directly about their scholarly communication needs and challenges. What problems are we trying to solve and what are our options?
- 2. Help coordinate the scholarly communication reform policies of libraries, universities and other institutions around the world. How can we improve our efficiency and effectiveness?
- 3. Address the specific needs of each particular country or region---for instance, improve the global indexing of local journals (or better understand how to improve indexing), improve journal publishing standards (or awareness of standards, or work to adjust global standards to new and emerging realities such as the impracticality of current peer review

standards), and/or improve government policies with regard to open.

- 4. Focus on one evaluating, finetuning, and broadly adopting solutions (with the backing of UNESCO) for just one key issue in scholarly communication—for instance, impact factors, peer review, or embargoes.
- 5. As mentioned earlier, identify a set of common principles that define what the global scholarly communications community wants as an endpoint. If we can identify these principles as a global group, we can then make a broad model that can be adapted or adopted.

OSI participants will be invited to participate in these meetings, depending on the focus (for a meeting on impact factors, for instance, we would want to invite experts in this field). Supplementing this group will be local experts and officials who will be able to sign on to agreements and implement recommendations-university provosts, ministry officials and the like. The structure of each meeting will depend on the nature of challenge-whether we're simply presenting a solution for local discussion and adoption, collecting information for consideration by OSI, and so on.

8. Communication reform

A common refrain from OSI2017 was that OSI's communication channels need to be improved. While the OSI listserv has been a conspicuously active, rich and informative information space, it was never intended to be a decision-making tool for this group. Additionally, as a discussion space it isn't ideal since many individuals prefer more time to weigh in and don't always want to engage in contentious conversations. Here's what's been proposed for late 2017 and beyond:

- 1. The OSI listserv will transition into becoming a forum for discussing moving OSI action-items forward pros/cons, collaborations, etc.
- 2. OSI will launch a new listserv in late 2017 as part of the outreach and resource tools being developed (see above recommendations). This list will be open to the public and will host the deep conversations about the future of scholarly communication that have heretofore been mostly only on the OSI website.
- 3. OSI will launch a new website in late 2017 as part of the outreach and resource tools being developed (see above recommendations). This site may host communication tools of use to the OSI group.
- 4. Slack channels will be set up to start handling the detailed group work on specific topics and projects. Basecamp will be phased out. By using Slack, our hope is that workgroups and issue groups will be able to pull in a wider variety of participants, and that these participants will have an easy-to-use, long-term resource for keeping track of conversations and efforts.
- 5. A provisional summit group comprised of 35 OSI stakeholder representatives has been appointed (and will be elected by early 2018). This group will take control of the OSI agenda and will begin deciding as a group what to do and how. These decisions will be presented to the full OSI group for comment.
- 6. A new monthly MailChimp newsletter will be launched to sum up topics

and efforts and give everyone executive summaries of who's doing what.

7. Action teams will have periodic video chats

9. Governance reform

A governance plan for OSI was developed in late 2016 and circulated to OSI participants for comment and feedback. The most recent version of this plan is included in the Annex section of the pdf version of this report posted online at osinitiative.org.

Our goal was to discuss this proposal as a group at OSI2017—participants had several months of preparation time to review this proposal and prepare feedback—and also to elect a summit group to serve as the "executive board" for OSI (as called for in the governance plan). However, the full group quickly voted to table this effort for further consideration.

To help develop a permanent workable plan for some sort of executive board for OSI, and also refine the governance plan, a provisional summit group was appointed by the OSI program director in July of 2017. This group represents all stakeholder groups in rough proportion to the ratios originally proposed at OSI2017 (seven reps from research universities, three from publishers, and one each from every other group; see osinitiative.org for details), and also includes OSI's conference planning committee. Individuals so appointed will serve in dual roles as both the OSI2018 planning committee and the "steering committee" for the OSI summit group. The provisional summit group will figure out how to transition to a permanent OSI executive group before the next full group meeting.

One change that will occur in the final version of the governance document is the use of the word "member" to define the status of individuals who are participating in OSI. Other words have been used as well, including participant, delegate, and representative. It's important that everyone feels welcome to discuss issues in OSI without also conferring some level of community buy-in that isn't warranted (as Jean-Claude Guedon pointed out on the OSI listserv earlier this year). This said, OSI is an invitation-only group whose purpose is to work together across stakeholder perspectives and divisions, so this isn't just another conversation but an action-oriented group of people who possess some common denominator of willingness to try working in a cross-stakeholder effort. In a poll of OSI members conducted in August 2017 (n=59) a majority of respondents felt the word "participants" best described their affiliation with OSI, followed by "member" and "delegate." Going forward, we will use the term "OSI participant" to describe the people who are involved in OSI.

10. Bookkeeping details

The OSI2017 meeting was held on April 18-21, 2017 in Washington DC. About 115 participants took part (compared to about 190 in 2016). Travel budgets were a significant issue this year, as well as concerns about international travel vis a vis the incoming Trump Administration's efforts early in 2017 to curb international travel into the United States (in response to this ban, OSI participants discussed the possibility of holding future meetings outside the US, and a statement of international solidarity in this effort was posted on the OSI website). In response to the travel budget issues being experienced by many would-be participants, OSI extended \$20,000 in travel and lodging scholarships, made possible by the generous support of OSI2017 sponsors and by efforts to keep conference costs at a minimum.

George Washington University was the host university this year. Most participants stayed at the One Washington Circle Hotel across the street from GWU. Most workgroup presentations were made at the end of the final full day of the conference and stakeholder presentations were made on the final morning of the conference at the Ritz Carlton, located a few blocks north of GWU.

Participants followed the same workshopcentric format as for OSI2016, breaking off into 12 workgroup meetings and giving full-group presentations on these meetings during the final afternoon and morning of the conference. New this year, participants also broke into nine stakeholder group meetings and reported out on these conversations as well. Also new this year, participants welcomed two keynote speakers: Vint Cerf (VP, Google) provided the opening remarks, and Keith Yamamoto (Vice Chancellor for Science Policy and Strategy, UCSF) provided the closing remarks. A number of participants also carved out time to be interviewed for a short film on scholarly publishing ("Paywall").

OSI2017 also featured a quick "fast pitch" segment on the closing morning of presentations where participants were invited to share their ideas about what OSI should work on at 2018 or update participants on their own projects. Several of these ideas and projects clearly tie in with the broader recommendations and conclusions from OSI2017 and others will be considered by the summit group for follow up. The following table provides an overview of this input:

PARTICIPANT NAME(S)	FAST PITCH SUMMARY	DETAILS
Ali Andalibi and Bhanu Neupane	UNESCO-funded hacka- thon to develop apps to get at hidden databases	Collectively identify the technical challenges that open source faces (e.g., databases and interoperability issues). These prob- lems would then be pitched each year at the OSI annual con- ference and the students from the host institution would be able to form teams to propose solutions to the problem. A panel of judges would then pick the top three (or whatever number we feel is right) and we would give them up to \$10k to work on the solution and report at the next conference. Of course, we would pay for their travel to that conference.
Cheryl Ball	VEGA, an OA content access tool	
Peter Berkery	OA monograph access initi- ative, just launched by AAUP. Coalition of the willing, including 61 univer- sity presses.	
Stacy Konikel	<u>idealis.org</u>	<u>The Idealis</u> is a new kind of OA overlay journal, powered by PressForward and curated by librarian-experts. Each week, editors recruit the very best scholarly communication litera- ture from across the Web, working with authors to make their research available, ensuring that librarians are connected to excellent research that's relevant to their work. You can <u>sub-</u> <u>scribe to The Idealis here</u> ; we'd also welcome <u>applications for</u> <u>new editors</u> .
Rachael Samberg	Rewrite the OA2020 mar- keting language to make it clearer that this is not an APC-centric effort or one that dictates a specific roadmap.	
John Dove	Create a discipline-by- discipline approach (con- trolled internally by each discipline) on how to im- prove open	
Crispin Taylor	Scenario-planning effort for OSI (with workgroups based on different future scenarios)	
Alexander Kohls	SCOAP3- the OA solution for particle physics	SCOAP3 is a global collaboration that brings together libraries from all over the world to join forces and enables OA in par- ticle physics at no burden and at no cost for researchers. In fact, researchers continue to publish in their journal of choice but retain the copyright to their work. In the background, SCOAP3 arranges with publishers to make all the particle

		 physics content available OA with a CC-BY license. The agreements with publishers includes a clause that guarantees that all customers benefit from reduced subscription fees (proportionate with the OA content) which frees funds on library side. Consequently, libraries can support OA by paying a SCOAP3 membership fee. We look back to three successful years during which the SCOAP3 partnership grew to more than 3,000 libraries from 43 countries. We supported more than 13,000 articles for a competitive average cost of \$1,100 USD (mainly from "recycled" subscription funds). Thanks to the articles being now OA, their downloads increased by 300% which results in more visibility and recognition of the discipline. More details can be found at: https://scoap3.org.
Catherine Mitchell	Online book production and conversion tool, open source, supported by the Koko Foundation	
Chris Erdmann	Develop tool that tracks all linked data	What if the scholarly community could rise above the current network of repositories and leverage the common infrastruc- ture demonstrated by Wikidata (https://www.wikidata.org/wiki/Wikidata:Main_Page) and the Initiative for Open Citations (https://i4oc.org/)? Scho- lia (https://tools.wmflabs.org/scholia/) is an example of what entrepreneurial activity might be enabled through a common infrastructure.
Bryan Alexander	Ftte.us	Future Trends in Technology and Education (FTTE) is a long-running trends analysis report. Every month it scans the horizon for developments in education and technology, assessing them against a battery of more than 75 trends, ranging from transnational higher education competition to growth in social media, the internet of things to the emergence of new certification forms. Since FTTE has been published for years, we now have a good sense of the relative strength and impact of those trends. We create FTTE using social media to discover and elicit feedback about new developments, which helps us gather multiple perspectives and additional context. These reports also work with the Future Trends Forum, a weekly videoconference exploration into the future of education. <u>http://ftte.us</u>

In terms of financial support for OSI2017, commercial publishers provided the single largest source of funds at 37% of the budget, followed by 33% from foundations, 18% from UNESCO and 11% from participant fees. These figures represent a shift from OSI2016 when del-

egate registration fees accounted for the largest share of the budget at 34%, followed by 29% from UNESCO, 20% from commercial publishers and other sources, 12% from foundations, and 5% from other sources.

Higher overall contributions from commercial publishers and foundations were requested for OSI2017 to help offset lower participant fees and more participant scholarships. This fact, combined with significantly reduced conference costs, gave the appearance to some OSI critics-who think the involvement of commercial publishers in OSI is a bad idea--of large and unwelcome changes. In fact, the overall dollar figures are modest-OSI received \$27,000 from six publishers for OSI2016 and \$40,000 from five publishers for OSI2017. Without this support, the OSI meetings could not happen, and OSI is grateful for everyone's support. OSI does not grant any special policy or action consideration to sponsors and allows all interested stakeholders to help support this effort. Averaging out the annual

OSI2017 INCOME	TOTAL
UNESCO	\$25,000
Foundations	
Doris Duke Charitable Foundation	\$25,000
Alfred P. Sloan Foundation	\$20,000
Commercial publishers	
Elsevier	\$20,000
Nature Publishing Group	\$10,000
Wiley	\$10,000
Sage Publications	\$5,000
Taylor & Francis	\$5,000
Participant fees (most @ \$500 ea.)	\$15,375
Private donations	\$300
Total income	\$135,675

In other bookkeeping matters, about 75 new members were added to the OSI list in 2016 and 2017. Retention on the list remains strong. In our annual membership survey, 99% of listserv members asked to stay on the list. This is similar to last year when 98% of listserv members stayed on (four dropped off due to rechanges in budgets and sponsorships, funding support for OSI2016 and OSI2017 taken together, which has totaled \$303,000 (\$136,000 in 2017 and \$167,000 in 2016) has been roughly evenly between these main divided four sources—publishers (26%),**UNESCO** (24%), participants (24%) and foundations (23%). OSI will endeavor to avoid having any single stakeholder group provide an outsize share of support on an ongoing basis, but annual fluctuations are going to be unavoidable.

The following tables shows the income and expense totals and sources for OSI2017:

OSI2017 EXPENSES	TOTAL
Credit card transaction fees (@19.80 each)	\$700
Transportation (buses and shuttles)	\$1,551
Campus-related	
Meeting room rental charges	\$25,240
Catering (lunch plus breaks)	\$16,248
Friday morning meeting spot	\$29,606
Event videography & photography	\$2,219
Delegate scholarships	\$24,000
Conference hotel-related	
Catering minimum	\$8,003
Additional meeting rooms	\$750
Subsidy (\$x/guest/night)	\$1,000
Management fees and travel (SCI)	\$20,865
Registration fee refunds	\$2,000
Signage	
Misc. extras (name tags, posters)	\$685
Misc. printing (pens, programs, folders)	\$2,808
Total expenses	\$135,675

tirement). In terms of engagement, while a number of participants have periodically expressed frustration with the listserv's volume (although there is significant seasonal ebb and flow), over 65% are fine with receiving every message as it is sent. About 35% would like to change to a "digest" format where they receive just one email summary per day.

The current premise of OSI is that it will endeavor to enroll participants by quota according to the table below. Our actual enrollment totals are close to these numbers in most groups but not exact especially at annual meetings where we have less control over who is able to attend. OSI added two stakeholder groups in 2017, bringing the total to 18 groups.

			TARGET NO. OF OSI	
ST	AKEHOLDER GROUP	PERCENT OF OSI DELEGATES	DELEGATES (OF 380)	SUMMIT REPS (25)
1.	Research universities	35%	133	7
2.	Commercial publishers	10%	38	2
3.	Scholarly societies and society publishers	5%	19	1
4.	Non-university research institutions and pub- lishers	5%	19	1
5.	Open knowledge groups and "born-open" publishers	5%	19	1
6.	University presses and library publishers	5%	19	1
7.	Government policy organizations	5%	19	1
8.	Funders, public and private	5%	19	1
9.	Scholarly libraries and library groups	5%	19	1
10.	Broad faculty and education groups	5%	19	1
11.	Tech industry	5%	19	1
12.	Scholarly research infrastructure groups	5%	19	1
13.	Other universities and colleges	5%	19	1
14.	Scholarly communications and publishing industry experts	Up to 20 per meeting	20+	1
15.	Active researchers and academic authors	Up to 20 per meeting	20+	1
	Scholarly journal editors	Up to 10 per meeting	10+	1
17.	Journalists	Up to 10 per meeting	10+	1
18.	Elected officials	Up to 10 per meeting	10+	1

11. Annexes

Several annexes are included in the pdf version of this report available on the OSI website (osinitiative.org), including the OSI2017 conference program, the OSI2016-17 action plan, the OSI governance plan, tutorials developed for the 2016 meeting and circulated again in advance of the 2017 meeting, and manuscript versions of the workgroup and stakeholder group reports prepared by OSI2017 participants. Final versions of the OSI2017 papers are posted on the Mason Press website (Mason Press is in charge of editing and formatting manuscripts, which were all submitted over the summer months between May and July). Videos of workgroup and stakeholder group presentations are posted on OSI's YouTube channel, which can be linked to from the top of the OSI website.

12. More information

For more information about OSI, please email SCI/OSI director Glenn Hampson at ghampson@nationalscience.org. You can also visit the OSI website at osinitiative.org. The Science Communication Institute (SCI) is the parent body of OSI. The goal of SCI is to change the culture of communication inside science. Other SCI projects related to OSI include the All-Scholarship Repository (ASR), the Science Communication Network and the Science Communication PhD program. Funding for OSI and these other efforts flows through SCI with no overhead. nSCI is a 501c3 tax-exempt nonprofit charity registered in Washington State (EIN 27-4690007). For more information please about nSCI, visit nationalscience.org.