STM Advancing trusted research

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Submitted via electronic form.

To Director Bhattacharya and the NIH team:

STM (the International Association of Scientific, Technical, and Medical Publishers) appreciates the opportunity to respond to the "Request for Information on Maximizing Research Funds by Limiting Allowable Publishing Costs" (NOT-OD-25-138). STM members partner with NIH to enhance the impact of the research funded by NIH as the primary mechanism that American science reaches the public, health professionals, and researchers. Our more than 150 members include American scholarly societies representing more than a million American scientists, engineers, researchers, medical experts, and others engaged in discovery and innovation.

We understand NIH's interest in examining all aspects of research investment, including publishing expenditures, as part of responsible stewardship of public funds. American leadership in science and medicine depends on a strong NIH, and for both the future of American leadership and the best taxpayer investment, NIH needs to have a complete understanding of how research dollars create impact. NIH's track record shows strong returns: for every dollar invested, NIH returns $2.56 in economic activity.[1]

The United States has built its research strength over decades through sustained investment in discovery and by factoring in the costs of infrastructure that has evolved alongside the research enterprise to accommodate the dramatic growth in research activity and enable scientific collaboration. This leadership, which is now increasingly matched by other global actors like China, that are growing their investments in both research and publishing, comes not just from funding research, but from ensuring that new findings connect with existing knowledge and remain accessible to future researchers. American scientific leadership is built on its contributions to the scientific record.

The scientific record exists because we've created durable systems that preserve research findings and make them searchable across institutions and decades. STM and its member publishers work with NIH to ensure that discoveries reach the research community and remain accessible for scientists, entrepreneurs, and innovators who will build on today's breakthroughs. Based on NIH's own estimates[2] and of OSTP[3] and others,[4] investments in publishing represent around 1% of overall research investment but help enable the remaining 99% of funding to have lasting impact.

Two Critical Considerations Before Evaluating Our Response

First, it's important to distinguish between higher publishing costs and increased spending on publishing. US research spending has doubled over the past decade.[5] Over that period, the volume of published papers has gone up nearly 60%,[6] but overall revenues for journal publishing have gone up only 18%.[7] As research activity grows, total publishing spending naturally increases even when the cost per paper stays the same or goes down, as the evidence shows is the case.

Second, focusing on APC caps in isolation overlooks the complexity of how the publishing marketplace actually works. The current publishing landscape includes various agreements and models that affect how prices and expenses for publishing are structured and perceived. Different types of research and journals also have inherently different cost dynamics. We'll share concrete examples of these differences that impact perceptions in our response. This complexity is important context for evaluating any APC-focused policy approach. Additionally, capping APC charges at a time of unprecedented and growing integrity threats, which are requiring significant, sustained investments by publishers, raises serious concerns. We'll share concrete examples of these cost complexities and integrity investments in our response.

STM members are always working to deliver the most value from taxpayers' investment in scholarly publishing. We balance efficiency with maintaining the integrity and quality that researchers need. We're constantly developing new technologies, improving our processes, and finding better ways to serve the research community. Our new microsite, Publishing Decoded, discusses the many ways that publishers advance trusted research and improve impact.[8]

This submission is necessarily limited by competition law, which restricts STM's ability as a trade association to gather and share competitively sensitive information from our members. We have worked to provide publicly accessible information and evidence to contribute to NIH's policymaking deliberations and would welcome additional opportunities to work together to support evidence-gathering consistent with competition law. STM is firmly committed to complying with all applicable competition and antitrust laws, and this document is intended to fully comply with such laws.

We appreciate this opportunity to comment and look forward to reviewing the feedback NIH receives. We particularly value the RFI's recognition that preserving academic freedom and author choice remains essential to maintaining a dynamic and impactful research ecosystem.

1. *The option, or other option not considered here, that best achieves the goal of balancing flexibility in providing research results with maximizing the use of taxpayer funds to support research;*

While STM agrees with the NIH RFI's goal of preserving flexibility and maximizing the use of taxpayer funds, STM cannot endorse price or spending caps: such approaches do not give researchers the flexibility to choose the venue best suited to enable them to promote their research and its impact,

preserve funding for research rather than bureaucracy, and enable publishers to invest in quality, research integrity, and promoting the impact of NIH-funded research. One size will not fit all, and the journal that best serves to ensure maximal impact for one piece of funded research may cost more (or less) than the one fit to purpose for another. Exceptions may be necessary to ensure researchers have the maximum opportunity to promote exceptional research.

That said, given the substantive cuts to NIH funding and the concerns expressed by NIH Director Bhattacharya regarding responsible stewardship of American tax dollars, STM recognizes NIH's desire to introduce a policy in this area. STM is open to working with NIH on developing additional evidence on how to implement such a policy, as the available evidence is limited and the scholarly publishing marketplace is dynamic. Although STM is generally against market-distorting price controls, of the options presented, option 4 comes closest to providing flexibility by allowing researchers to choose how to use funding and, if implemented carefully and flexibly, such an approach could ensure continued support for innovations in publishing and the quality and integrity of scholarly communication that drives impact. Critically, however, the overall limit proposed in option 4 is insufficient, as we demonstrate below. In addition, mechanisms, such as exceptions to a cap, would need to be put in place to ensure that researchers can publish as many high-quality, peer-reviewed reports on NIH-funded research as needed to support the maximal impact of that research and best return on investment for the taxpayer. More research is likely needed should even a soft suggestive cap be used as an option.

Price controls and caps have a poor track record throughout history.[9] Recent examples are riddled with unintended consequences, from the former Soviet Bloc to Venezuela.[10] Conservative economist Friedrich Hayek noted that price controls mean "the end of the free political order"[11] and the Heritage Foundation notes that price controls "invariably worsen the very problems they are designed to solve."[12] Libertarian economist Thomas Sowell notes that a key impact of price controls is to lower quality,[13] an effect seen with gas price controls as well.[14] In the opposite direction, Ronald Reagan successfully removed price controls on oil in the 1980s, which led to competition and a reduction in the price of oil and gas.[15] The bottom line, as the Hoover Institution notes, is that "price controls change the product" and "often lead to favoritism."[16] In the case of research communication, the ultimate effect is uncertain but would likely undermine the quality and impact promotion aspects of publishing.

Whilst the proposals made in the NIH RFI are not strictly price controls, as they limit only part of the input, researchers are also reluctant to – or find it difficult to – find their own sources of money for articles that report on NIH-funded research.[17] The impact is likely the same: quality reductions, product degradation, increased bureaucracy and compliance burdens, and reduced impact and reach for funded research.

The principles that STM can support in a policy to control overall costs would be in line with those articulated by Director Bhattacharya and by President Trump in the Gold Standard Science Executive Order: ensuring that researchers can publish in their outlets of choice, preserving access to publishing for all (rather than a two-tier system), promoting active dialogue and debate in the scientific community; ensuring quality and integrity in the communication of science (including an

understanding of uncertainty), and enabling the scientific record to be preserved free of manipulation. Underlying all of these principles is the ability of publishers to invest in a system that achieves these goals. STM would welcome collaborative dialogue following on this RFI process to develop additional evidence and support an approach that manages costs while preserving academic freedom, open scientific debate, and the quality and integrity of the scientific record.

2. *Any evidence (either from your own work or other publicly available sources) that can be publicly shared that addresses the considerations of one or more of the options;*

In order to move towards a policy that achieves our shared goal of maximizing the impact of NIH investments in research, STM offers the following discussion and links to evidence that might help in the consideration of the options presented and support further dialogue.

Independent research suggests higher APCs than proposed caps

Much research has been done into what it actually costs to provide high-quality publishing services. Findings consistently exceed the proposed caps. When OSTP investigated average APCs for journals that are likely to be chosen by federally funded researchers to best advance and ensure the impact of their findings, they found average APCs of $3372 for fully open journals and $4824 for Hybrid journals, significantly higher than the data from the Directory of Open Access Journals (DOAJ) used in the RFI calculations.[18] Even the publisher-critical cOAlition S finds higher APCs, with a reported average of $2648 and a median of $2940.[19]

Theoretical models find similar results. Analysis of necessary spending for publishing by Research Consulting commissioned for the development of a centralized Open Research Europe estimated that costs per article would actually average €2,403 ($2,818) over 10 years,[20] although actual costs for the first 18 months of operation were between €3,700 and €5,500 ($4339-$6450).[21] The model assumes a 50% acceptance rate, but if one were to allow more highly selective journals to improve impact and reach of published articles, as well as to account for the increasing need for integrity checks to address paper mills and other bad actors, the cost would likely be even higher.

These costs are real, regardless of the business model or profit status of the entity publishing the journal. For example, the Public Library of Science (PLoS) is a non-profit publisher that only exists to publish open access journals. They have no profit motive nor parent society to support. Their APCs range from $2300 to $6400,[22] and even with these APCs they have generated positive revenue only 5 of the past 9 years.[23] A similar publisher, eLife, charges $3000 for each *submitted* article (with a 0% rejection rate) and also receives significant outside funded support to remain solvent.[24]

The gap between proposed caps and actual costs creates system risks

This independent research helps explain why there is such a significant gap between the proposed caps and current market realities. As noted by research from the ScholCommLab (which is critical of the current publishing system), a $2000 cap would cover APCs for as few as 6% of papers reporting on NIH-funded research that were published in the first half of 2025. 10% of papers would not be able to be published with a $6000 cap.[25] The authors conclude,

> "there is a significant gap between what the NIH is proposing as reasonable caps and the substantially higher charges imposed by publishers of journals where NIH-funded authors most frequently publish. This gap is likely even greater than our analysis indicates, since prior to the zero-embargo of the new policy, some authors included in the data had not paid APCs but instead complied by depositing their articles in PubMedCentral at no cost (green OA)."

This last point is critical in evaluating any analysis of historic costs of publishing for NIH-funded researchers, as looking at past expenses and proposed budgets will fail to account for the real-world behavior of NIH-funded researchers in the face of the new mandates and a reduction of options for delayed access. More research and time are needed to assess and calculate the actual impact on researchers' choices of APC-supported publishing and other models to investigate whether expenses are "reasonable." Expenses also need to be considered in the context of the growing use of transformative agreements and other models for open access publishing.[26]

Evidence conflicts with calculations presented in the RFI

In the absence of additional research, however, there is additional evidence that could be helpful in improving the calculations presented in the RFI.

The first calculation, based on DOAJ data, excludes journals that do not meet DOAJ's criteria (including many long-standing high-quality hybrid open access journals) and includes many that are unlikely to be useful to advance the impact of NIH-funded research.[27]

The second analysis, looking at proposed NIH budgets, is more reasonable, but looks at proposed budgets, rather than actual expenditures. Even past expenditures may not reflect actual costs, as publishing fees may be covered by institutional agreements or other arrangements that do not currently end up in direct costs. In a more constrained funding and policy environment, NIH might see more of these expenses budgeted for in direct costs for publishing. This is especially true as NIH eliminates the option of delayed access under its public access policy, which will require researchers to choose open access in those journals that are not able to offer immediate access without payment.

Research also indicates that the cost of publishing in a journal can depend on various factors of investment by the journal. Empirical research suggests that these may fall into "bands," or groups of journals with similar characteristics.[28] While STM does not recommend that NIH add to researcher burden by having researchers audit journals for differentiating characteristics, it is worth noting that hard caps could unintentionally prevent researchers from taking advantage of the differentiation of journals. This particularly puts at risk many US-based scientific societies, as reported in Inside Higher Education.[29]

Evidence regarding administrative burden and market distortion

As discussed above, price caps distort a market system, as well as increase researcher burdens. The more complex and numerous grant regulations are, the more costly they are to implement. Such burdens take valuable funding and time away from the research and research communication

that a grant is designed to support. Studies estimate that grantors spend more than 10% of their funding on grant administration, and that grantees spend an additional ~9% on administration.[30] According to data compiled by the Council on Governmental Relations (COGR), in the past decade, there have been 168 new regulatory requirements that impact a university's cost to perform research while potentially increasing faculty burden to address these additional regulations.[31] A 2018 Federal Demonstration Project (FDP) survey found that researchers spend 44% of their research time on administrative tasks.[32] The percentage has likely gone up even more due to the increasing regulatory burdens, as outlined in a recent National Academies report, which also makes recommendations for simplifying policies.[33] If the goal of this policy is to direct more funding to direct research activities, adding to the compliance burden even slightly could significantly overcome any potential saving from what NIH estimates is less than 1% of overall grant funding.

Evidence regarding percentage-based approaches

An approach that limits the overall percentage of funding for publishing without restricting individual costs, as envisioned in option 4, could potentially provide flexibility for researchers in choosing the outlet that can best advance their research and could enable support for the publishing enterprise without bias. However, such a limit still raises concerns about potential limitations on publishing if the percentage is insufficient or an unusual volume of articles is appropriate to best ensure the impact of the funded research. More research is needed to ensure that any proposed percentage cap is sufficient to enable researchers to fully communicate and share reports of the results of NIH funded research to the greatest effect. Using a simple analysis of public research investments from WIPO[34] and NCSES[35], R&D investments that are public and could lead to publishable reports are approximately $800 billion, excluding defense and proprietary business R&D.[36] The scholarly journals market is worth between $10.8[37] and $12.65[38] billion, meaning that investment in publishing represents between 1.3% and 1.6% of publishable R&D investment (this is also consistent with the previously-cited SPARC figures). A figure more in line with these calculations, rather than the 0.8% in the provided estimate, would better ensure researchers have the funding needed to communicate their research. Any flat minimum should also account for an appropriate number of publications, be indexed for inflation, and allow for exceptions to ensure all funded research can be published in a manner that best enables the use and impact of the funded research.

Peer review compensation

The idea of paying peer reviewers has been actively debated for many years.[39] There is no debate, however, that paying reviewers will add significant additional costs,[40] which seems counter to the goals expressed in the RFI. The RFI's calculation of potential costs for paying peer reviewers should be adjusted to account for the fact that journals may use more than three reviewers per submitted article, and there may be anywhere from 2 to 20 articles reviewed for each article published. Using the RFI's proposed payment of $300 per reviewer (which is lower than that proposed by some[41]) for three reviewers for each submitted article, paying peer reviewers at a highly selective journal could add $18000 or more to the cost of publishing an article.

Legal authority

Finally, and importantly, STM notes that 2 CFR 200 clearly specifies that APCs are an allowable direct cost[42] and does not provide any additional authorization for restrictions on payments of these costs, nor other categories of direct costs.[43] This is consistent with regulations from NIH itself as well as other OMB guidance. If NIH wishes to examine overall spending to ensure the effectiveness and impact of the investment in research, STM would urge a more holistic view of costs rather than focusing on what is only approximately 1% of current budgets (whichever calculation one uses).

3. *Factors that NIH should consider in determining whether peer reviewers are appropriately compensated;*

Whether or not compensation for peer reviewers is a good idea is a topic that has been debated widely, including the question of what level of compensation is appropriate.[44] At the same time, peer reviewers generally report being satisfied with the current system and highlight the intangible benefits of peer review in longitudinal studies.[45] This system of collegial service and academic responsibility would undoubtedly be changed in unpredictable ways by paying reviewers.

The bureaucratic and administrative burden of setting pay rates, implementing payments, and oversight by funded researchers, their institutions, and NIH itself would be significant. The appropriate level of compensation might be different for a given field, researcher, or community. It is unclear how individual researchers would be able to confirm that a given publisher is paying reviewers appropriately, or how NIH would audit publishers to ensure appropriate payment, or even if NIH has statutory authority to do so. The burdens could especially impact smaller US scientific society publishers and therefore exacerbate publishing inequities for smaller publishers and less-resourced researchers alike.

In addition to the potential costs of direct payments to peer reviewers, other direct and identifiable investments that publishers make to support researchers and enhance the scholarly record could also be considered as inputs that add to the costs of publishing. These payments that publishers make to researchers, vendors, and staff, as well as payments made by other suppliers of services and equipment to NIH funded researchers, are no less important to the research enterprise. However, NIH has not historically audited the input costs of any service or product provider to NIH researchers, and the statutory authority to interfere in the marketplace is unclear. STM urges caution to NIH in going down the path of potentially auditing such suppliers or requiring researchers to do so.

4. *In addition to compensating peer reviewers, what other kinds of publishing best practices that NIH should consider as factors in determining the potential allowability of a higher per publication cost, such as use of automated fraud detection capabilities;*

STM cautions against NIH creating a checklist of criteria that need to be audited to enable different levels of funding. The burdens of maintaining a list of publishing best practices and assigning financial value to each seems counter to the goals of NIH to reduce bureaucracy and regulation and

to ensure that researchers spend time on research, rather than administrative oversight. Whether individual researchers or NIH itself is responsible for monitoring and review, the effort to do so would likely be more expensive than any potential savings. Any list of best practices would be lengthy and need to be continually adapted and expanded to meet emerging developments in scholarly communication, which would therefore require ongoing monitoring and review by the NIH to remain up to date.

That said, NIH is correct in noting that following best practices requires significant and ongoing investment. Detecting and preventing fraud, monitoring and reviewing the scholarly record, maintaining the record with integrity – these all have notable costs. Many other investments that improve the utility and reach of the articles published in journals are also costly and improve the impact of the research that appears in the pages of journals. If NIH is going to consider specific cost factors, it needs to take a broad view and include both manual and automated activities and both those implemented by humans and by technology.

Ultimately, publishers are accountable for the accuracy, integrity, and maintenance of the permanent scholarly record and take this accountability seriously, investing accordingly. Best practices and standards across a wide range of areas are an important means of safe-guarding systems and processes against bias and/or poor quality, while ensuring the widest possible dissemination and discoverability.

The volume and complexity of best practices that reputable publishers invest in has grown significantly, making it difficult to succinctly list recommended practices and standards. In the area of medical reporting alone, the EQUATOR network lists 676 reporting guidelines for randomised trials, observational studies, systematic reviews, study protocols, diagnostic/prognostic studies, case reports, clinical practice guidelines, qualitive research, animal pre-clinical studies, quality improvement studies, and economic evaluations.[46] Publishers have oversight of the evaluation of submitted work and whether such best practice guidelines have been followed where relevant, while also responsibly communicating these guidelines and best practices to editors, editorial boards, and authors, and then following through to verify how they are implemented.[47]

Best practices go beyond reporting guidelines. The prompt suggests an interest in editorial and research integrity practices, which is one of several domains related to best practices and standards. In this area, the best practices and standards defined by COPE, ICMJE, and WAME are critical, and STM and our member organisations regularly collaborate with these entities.[48] Best practices typically refer to editorial independence and firewalls between editorial and commercial activities, transparent peer review practices and policies, authorship and contribution standards (which now often include disclosure of the use of AI in the preparation of a manuscript), conflicts of interest, research ethics covering both human and animal subjects, research integrity checks and management of reported misconduct, and corrections to the record of self-reported errors.

It is worth noting that STM members report that submissions have grown exponentially year on year.[49] At the same time, most STM members report an exponential growth in the volume of research integrity issues, including fraudulent identities (authors and peer reviewers), manipulation

of data and imaging, paper mills, and an evolving array of challenges.[50] This has resulted in major investments in technical systems and human capital to support integrity checks, including collaborative funding and development of the STM Integrity Hub.

This is a rapidly evolving space, and a situation that many have referred to as an integrity arms race due to the increasing sophistication of purposeful fraudulent activities supported by evolving AI. STM members report that their investment in research integrity, particularly staffing, has grown exponentially in recent years.[51] STM and its members have also invested significantly in technological improvements to research integrity.[52] STM members agree that in addition to the current technical and human checks that already exist and are being developed, future systems will need to consider a range of trust markers that together build confidence in the author, their institution, the instruments used, the data, and in the reported results.[53]

The RFI specifically mention "automated" fraud detection capabilities. STM would emphasize again that this is an evolving landscape. For instance, STM funded a 2024 report by More Brains on "Feasibility of technical solutions for the detection of falsified images in research"[54] that indicates the continual and ongoing nature of investments in this area. Other current efforts target the need for identity verification, inspired by efforts in financial services. These technical systems require agreement across the ecosystem and financial investment by publishers, and as such will take some time to develop and implement.

It is not clear why one would support higher costs for "automated" activities as opposed to manual or human-based fraud detection and research integrity checks. Our STM Trends 2028 report[55] and work through the STM Integrity Hub show that the threats we face today - and those emerging on the horizon - demand a coupled approach that combines technological tools with human expertise. These investments support the quality and integrity of the research ecosystem and require continuous development and investment to address evolving challenges.

Beyond best practices related to editorial and integrity checks and policies, the development and implementation of technical standards requires significant investment. These standards may include such things as metadata tagging for machine readability and linking of research outputs, authors, institutions, funders and more, and they are ever evolving. Similarly, standards related to discoverability and interoperability, including such work as deposit of DOIs with Crossref (a solution created and funded by publishers) for seamless linking and indexing, is critical. Maintaining these links and metadata is a significant investment.

Technical standards related to the accessibility of content for the visually impaired is another area of investment by publishers. Publishing technology makes it possible to add accessibility features like tags, captions, and audio descriptions at the time of publication, but it does not come without cost. Some specialized content, especially medical content, is often more complex than straight-forward text (including, e.g., imaging, formulas, or tables) and creates additional challenges for accessibility. Publishers are working to identify gaps in current technology that must be closed to enable a born accessible future. Meanwhile, publishers are coming together to share best practices

and tools and STM has collated this for wider dissemination.[56] While this collaboration enables some efficiencies, each publisher must invest in its own implementation.

Other areas of best practice include work in areas such as continuous improvement, editorial and peer review training, other community support, development of open research standards, policies and driving adoption of these, development of submission systems that support researchers in complying with funder mandates, and many other areas too numerous to list. While these do not amount to direct payment to peer reviewers, these do represent investments in and commitment to the research community, which creates its own benefits and incentives.

5. *Other evidence or information not considered here that NIH should consider in its policy on limiting allowable publication costs.*

America has long been the leader in biomedical research, public health investments, and innovations in treatment and cures related to that research. This has been led to a large degree by NIH's leadership and investment in research, and US medical societies and other publishers' contributions in making reports on those research investments available, usable, and accessible with quality and integrity. US leadership in medicine is therefore linked to our innovative and high-quality publishing industry. STM and our member publishers stand ready to work with NIH to preserve this innovation while also working to ensure the most effective use of precious taxpayer funding for the research enterprise.

Fundamentally, publishing is part of the research process. The research that NIH funds would be worthless without it being shared and disseminated, and the investments made by publishers make it more useful and impactful than it would be without the myriad investments made in research integrity, metadata tagging, dissemination, and preservation. This is why Congress, in authorizing NIH's public access policies, OSTP, in expanding those policies, and NIH itself have always asked for post-acceptance articles rather than initial drafts or unpublished manuscripts.

As discussed earlier, any policy that limits allowable publication costs should ensure that researchers continue to be able to publish in the outlet of their choice; diverse voices can participate in the scientific dialogue; and incentives for transparency and open debate are not undermined. In order to do so, such a policy must enable publishers to continue to invest in quality, integrity, and impact. Additionally, any policy should consider the unintended impacts on not only under resourced researchers and institutions, including HBCUs and Emerging Research Institutions, but on the US scientific and medical societies that are key to US leadership and innovation. Reducing scientific and medical society publishers' ability to maintain their publishing programs and activities will limit the diversity of voices in the scientific discourse. Many reports indicate that public access mandates have had some unintended negative impact, reducing potential revenues for scientific societies in a manner that is devastating for the next generation of researchers and the society activities that support them.[57] Care must be taken to protect and preserve these key American assets.

The proposed policy of limiting allowable costs is a significant change from long-standing research policy as articulated in 2 CFR 200 and other OMB and NIH policy. Just two years ago, when OMB was contemplating adjustments to the uniform grant guidance, there was a robust and lengthy public consultation and internal cross-agency work.[58] Over the past decade, when agencies have considered changes to grant policies, Congress has often asked for additional evidence,[59] stakeholder engagement, and deliberation[60] before policies have been put in place. The proposed drastic and significant change in allowable costs should be well-researched, evidence-based, and implemented slowly to allow stakeholders to adjust and NIH to assess the effectiveness of the policy.[61] STM welcomes the opportunity to work with NIH as responsible stewards of the US's investment in research and innovation. Given the interconnected nature of the publishing ecosystem, we believe a partnership approach that allows enough time for collective dialogue pertaining to new policies would best serve our shared commitment to maximum impact for research investment.

Finally, STM also notes that there are many efforts afoot to improve science and the scholarly dialogue, as well as to reform the federal science funding system. Some of these changes have been discussed above, such as the new NIH public access policy and potential changes to the federal approach to direct and indirect costs. These will have significant effects on the scholarly community and the communications system, which should be assessed before enacting another significant change. Other actions and proposals similarly could have significant impact on the need to support publishing costs. For example, Director Bhattacharya's call for more replication studies and publication of negative results, which STM supports, are likely to lead to more articles reporting on NIH-funded research, rather than fewer. How this might affect APCs and the need for NIH funding for publication charges could be investigated further. STM stands ready to work with NIH on gathering such evidence as these changes unfold.

- *Conclusion*

The publishing ecosystem that supports US research is both sophisticated and constantly evolving to meet the changing needs of not just researchers, but institutions and society. This isn't just about publishing services. Rather, it's about a dynamic innovation sector that brings private-sector capabilities to serve public research goals, enabling the maximal impact for the research the public funds. This sector has helped support the United States as a model for research excellence worldwide.

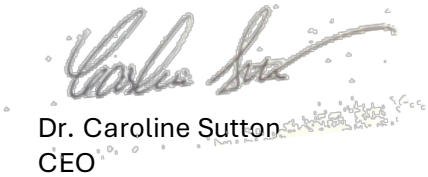
As we have touched on in our response to Questions 4 and 5, much of the infrastructure lies beneath the surface, invisible to users—like well-designed consumer technology. Publishers have created systems that feel seamless to researchers while handling millions of details to ensure scientific integrity, global accessibility, and long-term preservation of knowledge. APCs are one mechanism that supports this broader ecosystem.

We're eager to keep working with NIH as you consider policy changes, as they relate to spending and broader issues, to deliver on the promise of Gold Standard Science. We've always approached

NIH as partners in serving the research community, and the current publishing landscape reflects years of adaptation developed through this collaborative relationship. We welcome additional opportunities to collaboratively develop additional evidence to support a deeper understanding of publishing, the impact of scientific communication, and the investments made in the same. A partnership approach that examines the system more deeply together will best serve our shared goal of maintaining America's research leadership while ensuring responsible stewardship of public funds.

We look forward to continuing our work together to preserve and strengthen the infrastructure that enables scientific discovery to reach those who can build upon it.

Respectfully submitted,



Dr. Caroline Sutton
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STM

About STM

At STM we support our members in their mission to advance trusted research worldwide. Our more than 150 members collectively publish 66% of all journal articles and tens of thousands of monographs and reference works. They also support researchers and the research enterprise, and US-based scientific societies devoted to their scientific, medical, and scholarly disciplines represent our largest category of members.

The majority of our members are small businesses and not-for-profit organizations, who represent tens of thousands of publishing employees, editors, reviewers, researchers, authors, readers, and other professionals across the United States and world who regularly contribute to the advancement of science, learning, culture and innovation throughout the nation. They comprise the bulk of a $25 billion publishing industry that contributes significantly to the U.S. economy and enhances the U.S. balance of trade.

As academic and professional publishers, learned societies, university presses, start-ups and established players, we work together to serve society by developing standards and technology to ensure research is of high quality, trustworthy and easy to access. We promote the contribution that publishers make to innovation, openness and the sharing of knowledge and embrace change to support the growth and sustainability of the research ecosystem. As a common good, we provide data and analysis for all involved in the global activity of research.

Endnotes

[1] United for Medical Research. NIH's Role in Sustaining the U.S. Economy: 2025 Update. March 2025. https://www.unitedformedicalresearch.org/wp-content/uploads/2025/03/UMR_NIH-Role-in-Sustaining-US-Economy-FY2024-2025-Update.pdf.
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[4] Even critical observers agree. SPARC estimates the federal cost for journal publishing is between 1.1% and 1.7% of the federal research budget (although they quote different figures for estimated internal costs of publishers). *See* Scholarly Publishing and Academic Resources Coalition (SPARC). *Public Research and Publisher Profits*. April 2022. https://sparcopen.org/wp-content/uploads/2022/04/Public-Research-and-Publisher-Profits.docx.pdf.
[5] Over the last decade (2012–22), the average annual increase in U.S. total R&D expenditures was 7.5% (measured as compound average growth rate [CAGR]). *See* National Center for Science and Engineering Statistics (NCSES). *Research and Development: U.S. Trends and International Comparisons* (NSF 25-327). Alexandria, VA: National Science Foundation, 2025. https://ncses.nsf.gov/pubs/nsf25327.
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[7] Actual growth is likely lower as the 18% calculation is before adjusting for inflation. Based on Simba Information reports from 2013 and 2024: Simba Information. *Global Sales in the Scientific and Technical Publishing Market Increased Just 0.2 Percent in 2012, Says Simba Report*. January 2013. https://www.stm-publishing.com/global-sales-in-the-scientific-and-technical-publishing-market-increased-just-0-2-percent-in-2012-says-simba-report/ and Simba Information. *Global Scientific & Technical Publishing 2023-2027*. January 2024. https://www.stm-publishing.com/global-scientific-technical-publishing-2023-2027.
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[59] Over the two decades of public access policies, Congress has repeatedly requested additional evidence and impacts of federal policies on publishing through letters and appropriations report language. For example, the Joint Explanatory Statement (JES) accompanying Division C of the Consolidated Appropriations Act, 2024 (P.L. 118-42) required OSTP to provide additional information regarding the financing mechanisms for open access publishing as well as the potential impacts of public access policies on peer review and research integrity. *See* U.S. House of Representatives, Committee on Appropriations. *Joint Explanatory Statement: Division C—Commerce, Justice, Science, and Related Agencies Appropriations Act, 2024*. 118th Cong., 2nd sess., March 3, 2024. https://docs.house.gov/billsthisweek/20240304/FY24%20CJS%20Conference%20JES%20scan%203.3.24.pdf, p. 64 ("Open Access").

[60] On a bipartisan basis, Congress has written to the Office of Science and Technology Policy regularly calling for more stakeholder engagement and dialogue on policies that impact publishing of federally-funded research. Most recently, Representatives Lucas (R-OK) and Johnson (D-TX) sent a letter to the White House Office of Science and Technology Policy (OSTP) directing OSTP to conduct additional stakeholder engagement and hold public workshops (https://democrats-science.house.gov/news/press-releases/chairwoman-johnson-and-ranking-member-lucas-send-letter-to-ostp-director-prabhakar-requesting-implementation-details-of-new-memorandum-on-access-to-federally-funded-research). In 2009, the US House Committee on Science and Technology convened a Scholarly Publishing Roundtable to ensure robust dialogue and discussion of publishing issues, which then released a report that was instructive to deliberative and evidence-based policymaking (*see* Scholarly Publishing Roundtable. Report and Recommendations from the Scholarly Publishing Roundtable. Washington, DC: Scholarly Publishing Roundtable, January 2010. https://www.aau.edu/sites/default/files/AAU%20Files/Key%20Issues/Intellectual%20Property/Scholarly%20Publishing%20Roundtable%20Report%20and%20Recommendations%20-%201-12-10.pdf.)

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