December 24, 2025

Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, D.C. 20504

__Submitted via electronic form__

RE: Request for Information; Accelerating the American Scientific Enterprise (OSTP-TECH-2025-0100)

To Director Kratsios:

STM welcomes the opportunity to respond to the Office of Science and Technology Policy's Request for Information (RFI) on "Accelerating the American Scientific Enterprise" and to highlight the essential role that scholarly publishers play in a modern, high-performing research ecosystem. STM and its members comprise a global community of scientific and scholarly publishers that invest heavily in quality assurance, infrastructure, and innovation. These investments ensure that articles and data that report on, connect, and drive research are understandable, trustworthy, discoverable, reusable, and translated into societal and economic benefits.

The Critical Role of Publishers in American Scientific Leadership

America's scientific leadership depends on many players, but without a trustworthy, reliable, validated knowledge base – as provided by STM members – scientific advancement and discovery would not be possible. Through the dissemination of American research discoveries, STM members are key participants in both in both expanding scientific knowledge and translating it into real-world impact. STM appreciates OSTP's explicit acknowledgement of publishers' role in creating and maintaining America's scientific leadership.

Our more than 150 members collectively publish 66% of all journal articles globally, tens of thousands of reference works, and comprise the bulk of the $25 billion global publishing industry. Our members employ and bring together more than one million American scientists, engineers, researchers, medical experts, publishing employees, editors, reviewers, and other professionals to advance science, discovery, and innovation. Most STM members are small, not-for-profit societies that represent and serve the American scientific enterprise.

STM publishers are core infrastructure providers in the "complex machine" of the U.S. scientific enterprise, sitting at the nexus between researchers, funders, institutions, industry, and the public. Publishers invest in peer review systems, editorial oversight, metadata standards, and persistent identifier frameworks that enable rigorous vetting of research and seamless linking for discovery across the literature, data, code, and other research objects. These functions – deployed in a public-private partnership for federally funded research – are critical complements to federal

funding and program design. Without a robust and sustainable publishing layer, federal research investments would not have the same impact, reproducibility, or translation to innovation.

STM's member publishers are actively responding to the forces reshaping not just how scientific research is conducted, but how it is communicated, validated, discovered, and shared. STM's members defend against fraud in the scientific process and provide critical checks against group think. Our members subject all of the research findings they publish to rigorous scrutiny, ensure transparency, surface counter-information, and serve as neutral, trustworthy source of high-quality information. As threats from bad actors and the misuse of technology increasingly challenge the quality and integrity of the scholarly record, STM and its members continue to invest and innovate in tools and outputs that enable America's scientific advancement.

The Case for Protected Investment in Science Communication

To continue powering the American scientific enterprise, the scholarly communication ecosystem must be protected, prioritized, and further developed. Given that science communication is such a critical link between the research itself and its impact on society and the innovation economy, there must be an explicit and ongoing commitment to continued investments in its creation and preservation. The most efficient and effective way to do so is in partnership with publishers, in a healthy marketplace bolstered by competition, copyright, and IP protections and enforcement. This is a fundamental component to the promotion of scientific knowledge and its expansion into impact.

Summary of Recommendations

While this response directly addresses RFI questions (i), (ii), (iv), (v), (viii), (ix), (xii), and (xiii), STM's recommendations reflect three through-lines:

First: Protect and preserve the public-private partnership with scientific publishers that drives innovation and impact through the publication of articles reporting on federally funded research. This requires:

- Funding and flexibility applied in a manner that preserves and expands varied, sustainable business models and researcher choice; and
- Mechanisms that reduce administrative burden and duplication while improving integrity by allowing grantees to satisfy public access requirements via persistent links to the Version of Record (VoR).

Second: Ensure science—including AI-enabled science—builds on validated research rather than inaccurate information that can harm public safety, public understanding, and create inefficiencies. Policy approaches should include:

- Prioritizing the quality and integrity of AI for science by requiring licensing for copyrighted works, transparency in training data and AI system use, and encouraging the use and citation of peer-reviewed, validated VoRs; and
- Leveraging private investments in research quality, integrity, and impact and ensuring that scientific publishing remains viable in the face of threats from piracy, misuse, and illegitimate reuse.

Third: Actively engage with publishers and stakeholders in developing future systems and workflows that protect the integrity of and trust in the scholarly record, enabling researchers and practitioners to build on discoveries for the benefit of the American people.

Detailed Responses to Specific Questions

Question (i): Strengthening Public-Private Collaboration in Federal Funding

Federal policies should explicitly recognize publishers and scholarly communication platforms as a critical part of America's leadership in science. Federal funding mechanisms and procurement processes should acknowledge the significant investments made by publishers to provide the benefits of an accurate and trustworthy knowledge space, preserved with integrity, for researchers and practitioners to build upon. Publishers should also be acknowledged as eligible, valued partners in public–private collaborations.

STM and its member publishers have been key partners with the federal government in driving research forward, ensuring the impact of federal investments in research by making available and discoverable high-quality, validated articles reporting on American research. American science cannot advance without the continued investment and protection of this knowledge base by the publishing sector. Federal policies and funding mechanisms should support an active and vibrant marketplace for publishers and business models.

OSTP should particularly consider public access policies' impact on the publishing ecosystem and pursue changes mitigating unintended negative consequences. Necessary policy changes include:

- **Flexible implementation and full funding:** Additional flexibility in public access implementation and ensuring adequate grant funding with full eligibility of publication and data sharing costs, provided throughout the grant cycle and specifically earmarked and protected for that purpose.

- **Strong IP frameworks:** Embedding robust intellectual property frameworks in funding mechanisms and procurement while avoiding unnecessary or overly broad licensing requirements. IP frameworks, and corollary enforcement of those laws, are essential to incentivize private sector investment in scholarly communication that drives research and enables public benefit.

- **Researcher choice and rights:** Supporting researchers' ability—in coordination with private sector partners—to choose licenses and agreements that broaden the reach and impact of discoveries while protecting academic freedom, unencumbered by overly burdensome government demands. The right IP and copyright structures serves the purposes of the federal investment in science, delivering cost-effective taxpayer benefits in accelerating science and its transition to the marketplace.

Question (ii): Accelerating Translation from Laboratory to Market

STM member publishers, and the trustworthy, reliable, validated and unbiased information they bring to the public, are critical to bringing scientific insights and discoveries to the American public and its researchers and innovators: to individuals and communities who can build upon them and

apply them to new applications and products. Publishers further contribute to the utility of these information products and the efficiency of the R&D ecosystem through investments in discoverability, interoperability, and research integrity.

To accelerate translation, federal programs should:

- **Partner with the private sector** to fund infrastructure supporting translation and interoperability, leveraging existing standards, metadata, and identifier services that publishers maintain and integrate across platforms (e.g., DOIs for articles and data, ORCID for contributors, funder identifiers, and interlinking protocols like Scholix). Using existing systems reduces fragmentation and improves findability for innovators and small and medium-sized enterprises.

- **Protect copyright and IP** in technology transfer policies, including respect for copyright in software, eligible databases, articles, and other copyrighted works. This incentivizes private-sector investment in the laboratory-to-market path. Robust licensing frameworks already exist and are widely used to promote scholarly communication integrity and downstream use.

- **Fund communication of discoveries and their application.** Publication planning, research integrity services, and knowledge mobilization activities—including lay summaries and clinical or policy synopses—should be treated as integral, fundable components of translational projects, incentivized in grant reviews.

Investments in research integrity made by publishers are also fundamental accelerants of research rather than impediments to it. Validated, up-to-date information, as encapsulated in the publisher-maintained Version of Record, supports accurate translation and avoids costly detours down already-discredited research paths. STM is engaged in a number of projects that could be leveraged and supported in pilot implementations: STM's CUSAP (Content-Update Signaling & Alerting Protocol) project, which is designed to propagate corrections and retractions across repositories and knowledge graphs; the STM Integrity Hub, which helps cross-sector research integrity efficiency; and STM's Researcher Identity initiative, to prevent bad actors from fraudulently representing themselves in the scientific record.

Question (iv): Supporting Small and Medium-Sized Businesses

Most STM member publishers are small and medium-sized businesses. One-size-fits-all mandates can unintentionally disadvantage these organizations and reduce diversity in the publishing landscape. Federal policies should support sustainable business models—including those grounded in copyright and licensing—that enable continued investment in integrity safeguards and innovation.

Federal programs should resource the full research lifecycle: preregistration, data sharing, rigorous reporting, and post-publication curation—including plagiarism and image-screening services, community-led reporting guidelines, and corrective mechanisms maintained on publisher platforms. Smaller organizations will need support to enable adoption of existing tools and further

innovation in their use, as highlighted in recent reports, including a _discussion in the Scholarly Kitchen_.

Question (v): Using Metascience to Improve Federal Grantmaking

Publishers collectively oversee millions of peer reviews annually and maintain rich datasets on submission flows, acceptance patterns, corrections, and retractions. This collective expertise is an asset for dialogue with federal science funding agencies to identify practices and metascience markers correlated with robust, reproducible, and highly used research. It could also be a fertile resource for understanding how to sustain America's historic scientific leadership, by identifying areas of growing strength and emerging trends.

Leverage existing data through voluntary partnerships. OSTP could consider pilots or other investments, in partnership with publishers, that collaboratively leverage data and infrastructure to improve the return on investment while minimizing stakeholder burdens. In partnership and with appropriate agreements with the publishers who have invested in understanding the knowledge ecosystem , publisher-side data (e.g., usage analytics, citations, and knowledge maps) combined with open infrastructures (e.g., publisher-supported initiatives like Crossref, ORCID, GetFTR) could identify high-potential, high-rigor work and improve American scientific leadership.

Reducing regulatory burden is equally critical. There is a substantial body of evidence from organizations such as the Council on Governmental Relations (COGR), the National Academies, and the Federal Demonstration Partnership documenting how administrative burden and regulatory complexity reduce scientific productivity. OSTP's modernization efforts must incorporate these findings while ensuring new access, reporting, and compliance requirements do not replicate or exacerbate existing burdens.

Support a market-driven approach that leverages publisher expertise. Previous analyses by NIH and OSTP have suggested less than 1% of research funding is used to support publishing, an excellent return on investment enabling funded research to generate impact beyond the laboratory. Public reporting – although anecdotal – suggests inflexible public access policies disproportionately harm scientific societies and mission-driven publishers, not only in article dissemination, but also in their contributions to their scientific disciplines. Proposals to further limit funding or flexibility are likely to do harm to them and to the researchers themselves, as indicated by recent reports. Modeling of a recent NIH proposal to limit publishing expenditures suggests that up to 94% of articles might not be able to be published under one option– which would mean less impact for NIH funded research, less American leadership in key fields, and less opportunity for translation of discoveries into meaningful impact and applications that drive American economic growth and public benefit. While further research is warranted, current evidence suggests inflexible caps and narrow funding channels risk more harm than benefit.

Question (viii): Leveraging AI While Maintaining Scientific Integrity

Emerging AI capabilities have the potential to transform both how research is done and how it is communicated, discovered, and evaluated. At the same time, AI only heightens the need for robust checks for scientific rigor and research integrity for both AI inputs and AI outputs. Publishers are in

an arms race with bad actors to prevent AI-generated low-quality or inaccurate content ("AI slop") from entering and polluting the scholarly record. STM and its members invest extensively in research integrity tools and the peer review process to preserve the accuracy and integrity of scientific communication. This shared responsibility requires ongoing investments in shared tools, like the STM Integrity Hub, and will require federal attention and support for public-private partnerships.

AI depends on accurate, high-quality knowledge works that publishers produce and maintain—another reason why protecting the scientific publishing ecosystem is vital. Federal efforts to encourage and support AI for science must recognize and promote established copyright laws and licensing mechanisms. Licensing high-quality, validated copyrighted works improves AI systems involved in science and their outputs. Without safeguards that ensure that AI systems are trained on and can validate the direction of their hypothesis generation and experimentation with traceable citations, AI systems will be less reliable, and less useful for professional scientists and researchers. Policies enabling and enhancing AI for science must support markets for the scientific publications and educational materials upon which they rely for training. They must also support the accuracy and transparency of the systems themselves to ensure their reliability and encourage their use by researchers and practitioners.

Publishers are already experimenting with AI-assisted tools for literature synthesis, metadata enrichment, integrity checks, and accessibility; however, safe and effective deployment requires clear guardrails. AI's utility and adoption hinge on transparency and accountability. Just as laboratory scientists must truthfully disclose their materials, methods, and results, so too should AI tools. To combat hallucination, fabrication, and bias in scientific research, AI systems must, at minimum, disclose their training data sets, enable users to trace and measure how specific training inputs affect AI outputs, and submit to ongoing accountability audits. New research demonstrates that models that have scraped the internet for training material can become profoundly poisoned by as few as 250 malicious documents. To be useful to American scientific leadership and its translation to the market, the security of AI systems employed by scientific research must be verifiable and subject to scrutiny.

STM recommends OSTP:

- **Develop AI guidelines for use and disclosure throughout science**:
  - Create, with publishers and other stakeholders, guidelines on generative and analytical AI use in peer review, editorial decision-making, and research reporting, emphasizing transparency, traceability to underlying sources, and safeguards against fabricated or manipulated content.
  - Promote standardized AI-use declarations in manuscripts, grant reports, and repository records, referencing STM's classification framework as a model, including clear signaling of AI-generated content to protect the scientific record.
- **Promote responsible licensing**: Issue guidance on rights-respecting text and data mining and AI training that promotes responsible licensing channels for using high-quality scientific works, consistent with STM's statement on licensing of contents.

- **Support public–private partnerships** to strengthen the infrastructure that responsible AI tools depend upon, including research integrity checks, machine-readable metadata, persistent identifiers for authors, institutions, grants, and datasets, and domain ontologies.
- **Prioritize validated research:** Signal that AI systems used for scientific discovery should preferentially rely on peer-reviewed, corrected, and up-to-date Versions of Record and PID-rich metadata, licensed at the point of use.
- **Ensure attribution and currency**: Require full attribution for copyrighted content and ensure the use of the latest, accurate, non-retracted Version of Record is used. Pilots such as CUSAP could be leveraged to ensure that corrections and retractions propagate across repositories, preprints, and knowledge graphs, preserving provenance and reliability as AI accelerates translation.
- **Invest in workforce development:** Support education and training ensuring these values guide AI system creation and use. Publishers already work to educate researchers on appropriate AI use and research integrity importance; our members could collaborate on expanding workforce development tools and resources in public-private partnerships.

STM welcomes further engagement with OSTP, Federal agencies, and AI policymakers to further discuss AI and science, based on our experience, empirical evidence, and access to expert networks and data to help inform educational opportunities or roundtable discussions on these topics.

Question (ix): Removing Unnecessary Barriers to Scientific Research

Federal statutes that undermine copyright create unnecessary barriers to research impact, whether with respect to the use of copyrighted materials without licensing by the rightsholder in AI or in grant regulations that require licenses broader than those needed for public access. Implementations of public access and related policies can create barriers when they restrict viable business models, weaken copyright protections, restrict authors' choices, impose duplicative administrative steps, or conflict with private-sector innovation in communicating and presenting scientific discoveries.

Remedies include providing sufficient funding to institutions and for publishing to support the broader scholarly ecosystem, offering flexible approaches to providing access (including the consideration of the use of grant reports or allowing embargoes where appropriate), and enabling access to be provided in context by allowing persistent links to articles in the journals where they are published rather than relying solely on duplicative, federally-run infrastructure. OSTP should consider how different agency federal public access and data-sharing requirements create undue burdens—including deposit expectations, licensing, the removal of embargos, and metadata standards—and consider alternative approaches in dialogue with publishers to avoid conflicting obligations and duplication of effort.

To reduce duplicative compliance burdens and strengthen integrity, one option could be for grantees to satisfy public access requirements by linking to the publisher VoR instead of depositing and re-tagging accepted manuscripts, and agencies should standardize public-facing grant

summaries and compliance checklists. Existing infrastructures such as [CHORUS](#) and publisher platforms can be used to harvest compliance metadata (DOIs, ORCIDs, funder IDs) and marshal links to authoritative versions, updates, corrections, and retractions—an approach already demonstrated in programs such as [NASA PubSpace](#) and related initiatives.

Question (xii): Ensuring All Americans Benefit from Federally Funded Research

For the benefits of federally funded research to reach all Americans, access must be both broad and sustainable while respecting intellectual property and enabling continued investment in quality, integrity, and infrastructure. Publishers already investment significantly to ensure that high-quality, validated reports on federally-funded research have broad reach, including through open access policies and business models, responsible AI licensing agreements, investments in accessibility in line with the Americans with Disabilities Act, and public outreach through article promotion, contact with journalists and non-traditional media, and lay summaries.

STM recommends OSTP:

- **Enable sustained publisher investment to broaden access** and drive American science and its impact, including by
    - **Supporting quality**: Recognizing that a variety of business models—including subscriptions, transformative agreements, and other innovative approaches—will be needed to support high-quality publishing across disciplines and institutions.
    - **Increasing flexibility** in grant regulations related to the dissemination of research, to capitalize on existing paths for information to reach Americans and avoiding one-size-fits-all mandates that may unintentionally reduce opportunities for researchers and the public.
    - **Requiring licensing** for the use of copyrighted scholarly works in AI training, which has already proven to be a successful mechanism to ensure integrity in AI systems for science.
- **Support accessibility**: Encourage and, where appropriate, fund community efforts to improve accessibility for different audiences—such as teachers, clinicians, policymakers, patients, and practitioners—through plain-language summaries, enriched metadata, and inclusive design standards, delivered via publisher platforms that can reach American citizens and researchers at scale.
- **Leverage existing materials and systems**: Explore the potential of pilots that integrate federal grant descriptions and contextual materials into federal repositories and agency sites via linking to publisher VoRs and related information, rather than building duplicative dissemination channels that lack the rich context and updates provided on publisher platforms.

Question (xiii): Strengthening Research Security While Minimizing Compliance Burden

Research security policies should clearly distinguish between legitimate safeguards for sensitive technologies and dual-use research, on the one hand, and routine scholarly dissemination through journals and conferences, on the other. Compliance frameworks should, wherever feasible, build

on existing publisher integrity checks and editorial policies—such as disclosure requirements, conflict-of-interest management, and provenance screening—instead of creating parallel, duplicative, and burdensome systems.

Federal agencies can utilize bibliometric and network-analysis tools to help identify potential security-relevant patterns or conflicts of interest, while ensuring that such tools are complemented by clear review processes rather than relying solely on automated flags. Engaging publishers as partners in these efforts will help strengthen research security without imposing undue burden on researchers or undermining the openness that underpins scientific progress.

Conclusion

Additional information on these topics can be found in STM's previous submissions to OSTP on the AI R&D Strategic Plan and on Regulatory Reform on Artificial Intelligence and to Senators Rounds and Heinrich on their ASAP initiative and at STM's resource on AI and Trusted Science.

STM and its members stand ready to work with OSTP, federal agencies, and the broader community to co-design policies and partnerships that accelerate American science while safeguarding rigor, integrity, and sustainability across the research lifecycle. Feel free to reach out to me or to David Weinreich, Director of Policy and Government Relations, with any questions.

Respectfully submitted,

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STM