Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399

Tel 425 882 8080
Fax 425 706 7329
www.microsoft.com

Microsoft

Jay Bhattacharya, Ph.D.
Director of the National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

Dear Dr. Bhattacharya,

Microsoft appreciates the opportunity to provide comments to the National Institutes of Health in its request for information on Maximizing Research Funds by Limiting Allowable Publishing Costs. As a leading U.S. technology company, Microsoft is deeply committed to ensuring America's leadership in artificial intelligence (AI), research, and science. We also share the NIH's and Director's concerns regarding research accessibility, as well as his strong commitment to open access. To keep the U.S. at the forefront of AI-driven innovation, researchers, scientists, and the public need worldclass datasets, AI-enabled science, and openness. The Trump administration's AI Action Plan specifically called for these to lead the world in AI innovation. The NIH can deliver on this vision by prioritizing open science practices and investing in open science infrastructure to ensure all NIH-funded research outputs are discoverable, reusable, and AI-ready.

Policy Solutions

Microsoft appreciates NIH's goal of balancing flexibility in providing research results while maximizing the use of taxpayer funds to support research. We believe that open infrastructure is a way to achieve this goal, as well as to ensure that the NIH aligns with the AI Action Plan. As such, we urge the NIH to consider prioritizing investments in open infrastructure to advance open science practices among its grantees. These practices enhance transparency and reproducibility by design. In the case of disseminating and publishing research findings, the NIH could:

1. Require the manuscript and metadata to be deposited in a recognized preprint server at the time of journal submission under an open license (e.g., CC-BY 4.0 or a functionally equivalent license).

2. Require the final peer-reviewed version, when accepted by the journal, (author-accepted or publisher-permitted) to be deposited in PubMed Central (PMC) without embargo upon acceptance.

Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399

Tel 425 882 8080
Fax 425 706 7329
www.microsoft.com

Because not all research manuscripts are accepted for journal publication, this approach ensures that every NIH-funded paper is immediately and freely available through trusted repositories, regardless of the journal chosen for possible publication. Researchers retain full freedom to select their preferred journals, and access is guaranteed through open repositories and not dependent on whether the article was accepted for publication by an academic journal.

To further advance U.S. leadership in AI and maximize the return on taxpayer investment, the NIH might also consider the following actions and investments in open science infrastructure to ensure the NIH research outputs are optimized for the data-driven, AI-enabled scientific future.

- Expand access beyond publication to include all NIH-funded outputs, such as peer review reports, data, and code, via preprints, shared repositories, and standard open access platforms to maximize reach and reuse at no extra public cost;
- Invest in interoperable repositories, metadata standards, and digital tools that enhance discoverability, reproducibility, and AI-readiness;
- Support open-source tools and AI models that help build reusable, machine-actionable scientific commons, accelerating progress across biomedical and AI research; and
- Require machine-readable formats, persistent identifiers, rich metadata, and APIs to enable AI systems to efficiently ingest and analyze NIH-funded research outputs, catalyzing innovation.

EVIDENCE RELATED TO PUBLICATION COSTS AND PROPOSED OPTIONS

Reports on open science infrastructure emphasize that shared repositories, interoperable metadata, and open-source tools provide broad, recurring benefits across disciplines. These investments expand access for all research outputs while supporting AI-driven discovery. For example, PubMed Central already provides a trusted and widely used repository. Expanding this repository and similar infrastructures could ensure compliance, reduce costs over time, and increase discoverability, particularly for machine learning applications that require structured, machine-readable content.

The evidence suggests that including focus on infrastructure and standards can provide more durable, cost-effective access, amplifying the value of NIH's research portfolio, and enabling faster AI-driven advances.

Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399

Tel 425 882 8080
Fax 425 706 7329
www.microsoft.com

Microsoft

PEER REVIEW COMPENSATION

To encourage open science practices, the NIH should consider opening the peer review process more to ensure greater public accessibility. Following the example of the Gates Foundation and Wellcome Open Research platforms, which are built on the F1000 platform, this could include publishing structured, non-confidential versions of reviews alongside manuscripts or preprints, assigning digital object identifiers (DOIs) to reviews so they become citable scholarly contributions, and linking reviews to researcher identifiers such as an open researcher and contributor ID (ORCID), that provides a unique, persistent identifier for each researcher, helping distinguish work and resolve name confusion in research.

Incentives could include reviewer recognition programs, integration of reviews into professional records, and reviewer credits that can be redeemed for training opportunities or conference participation. Such measures would reward the significant expertise and effort required for peer review while also transforming reviews into reusable, verifiable outputs that accelerate scientific progress.

CONCLUSION

Microsoft appreciates the opportunity to respond to the National Institutes for Health in its request for information for Maximizing Research Funds by Limiting Allowable Publishing Costs. As the NIH considers reforms to its publication policies, the focus should include building and sustaining open science infrastructure that supports open science practices to accelerate the dissemination of research beyond the published article. Investing in sustainable, open infrastructure will enable U.S. research to move more rapidly into the public domain, where it can fuel innovation in artificial intelligence and other critical fields.

The United States has a unique opportunity to lead globally by setting publishing policies that accelerate discovery and strengthen the nation's competitive edge in AI. By prioritizing preprints, open repositories, transparent peer review, and investment in open science infrastructure, the NIH can help ensure that U.S.-funded research outputs are immediately available for computational use and large-scale analysis. This open environment will drive advances in machine learning models, data integration, and predictive science that directly support America's AI Action Plan.

Microsoft Corporation
One Microsoft Way
Redmond, WA 98052-6399

Tel 425 882 8080
Fax 425 706 7329
www.microsoft.com

We encourage the NIH to align its publishing policies with this broader vision: advancing U.S. leadership in AI and scientific innovation by making taxpayer-funded knowledge open, transparent, and ready for use in next-generation research. By supporting open science practices NIH can establish a foundation for the U.S. to remain at the forefront of global scientific and technological progress.