

Submission by The American Association of Immunologists to the National Institutes of Health (NIH) Request for Information (RFI) on the NIH Plan to Enhance Public Access to the Results of NIH-Supported Research

April 21, 2023

### Introduction

The American Association of Immunologists (AAI) appreciates this opportunity to submit comments in response to NOT-OD-23-091: "Request for Information on the NIH Plan to Enhance Public Access to the Results of NIH-Supported Research." AAI is the nation's largest association of professionally trained scientists dedicated to advancing the knowledge of immunology and its related disciplines, fostering the interchange of ideas and information among investigators, and addressing the potential integration of immunologic principles into clinical practice. Founded in 1913, AAI serves its members and the global immunology community by providing a center for the dissemination of information relevant to the field and its practices, organizing and sponsoring educational and professional opportunities, planning and hosting scientific meetings, addressing members' issues and opinions, and advocating for funding and policy priorities that strengthen the biomedical research enterprise, particularly for immunologists. Central to AAI's mission is its role as a scientific publisher: AAI owns and publishes *The Journal of Immunology (The JI)*, the most highly cited journal in the field, as well as *ImmunoHorizons (IH)*, a fully open-access, peer-reviewed journal dedicated to the science of immunology. As a not-for-profit scholarly scientific society, AAI invests the net revenue it receives from publications in programs and activities that advance immunology/related fields or that support AAI members' research and work lives.

AAI understands and appreciates the Administration's goal of increasing public access to the results of taxpayer-funded research. It is imperative, however, that NIH, as the nation's premier and largest funder of biomedical research, adopt and implement a plan that will foster access to accurate, peer-reviewed, reliable scientific information, while also helping to limit the potential for unintended proliferation of poor-quality or unreliable scientific content. Public access for its own sake, without the safeguards provided by professional scientific societies like AAI (as described herein) and other responsible publishers, could increase public distrust of science, delay scientific advancement, damage public health, and/or undermine the competitive edge the U.S. has long had in scientific research and development. In addition to the comments below, AAI calls to NIH's attention important comments submitted by the Federation of American Societies for Experimental Biology (FASEB).

1. How to best ensure equity in publication opportunities for NIH-supported investigators.

The NIH Public Access Plan aims to maintain the existing broad discretion for researchers and authors to choose how and where to publish their results. Consistent with current practice, the NIH Public Access

Plan allows the submission of final published articles to PubMed Central (PMC) (in cases where a formal agreement is in place) to minimize the compliance burden on NIH-supported researchers and also maintains the flexibility of NIH-supported researchers to submit the final peer-reviewed manuscript. NIH seeks information on additional steps it might consider taking to ensure that proposed changes to implementation of the NIH Public Access Policy do not create new inequities in publishing opportunities or reinforce existing ones.

AAI supports the intent of the NIH Public Access Plan to maintain the existing broad discretion that allows authors to choose how and where to publish their research. Until recently, this was in fact the author's choice: authors could use their grant (or other) funds to publish in the journal best suited to their needs and their research findings. However, the White House Office of Science and Technology Policy (OSTP) memorandum on "Ensuring Free, Immediate, and Equitable Access to Federally Funded Research" ("Nelson memo"), published on August 25, 2022, has accelerated a trend set by European funders and a small group of U.S.-based funders: requiring authors to publish only in journals with specific open access models. As a result, fewer authors are submitting to hybrid or subscription-only journals, many of which are owned and/or published by not-for-profit professional scientific societies, and some of which could be in financial jeopardy as a result of this impending policy. This "thumb on the scale" by the federal government has left researchers and authors in a bind: they may no longer be able to choose the journal that might best support them as authors or showcase their work as broadly and responsibly as they would like. Instead, they must find a publisher that satisfies their funder requirements, based on the model of the journal or a contractual agreement and not necessarily on its quality, mentoring, publication record, or any other feature.

AAI does not believe that authors should be required to publish in journals with specific business models. As a not-for-profit professional society, AAI's scholarly journals offer two different models (*The JI* is hybrid, *IH* is open access) and a shared commitment to peer review and mentoring. In keeping with AAI's educational mission and in order to maintain the integrity of AAI journals' scientific content, all AAI reviewers are Ph.D.-level scientists conducting active research in their fields. AAI staff scientists use a database of thousands of potential reviewers to find subject matter experts to serve as reviewers for each manuscript submission. This database, developed and maintained at AAI expense, includes but is not limited to members' self-identified areas of expertise and information about the perceived usefulness and timeliness of past reviews. In the past five years, AAI secured more than 12,000 reviewers who were qualified and available to undertake a review. AAI also invests in preventing both real and apparent conflicts of interest (COI) with respect to research activities and collaborative or personal interactions. The careful solicitation of reviewers, managing the peer-review process, ensuring research integrity, and avoiding COI are essential steps toward ensuring that reviews are scientifically sound, impartial, professional, and equitable to all submitting authors. These activities require extensive time commitments from AAI staff as well as access to expensive software and tools.

Unlike most publishers, AAI peer reviews 94% of submissions; only articles considered out-of-scope are rejected before peer review. Offering this peer review is part of the AAI educational mission and ensures that high-quality peer review is available to virtually all immunological researchers regardless of laboratory, university/institution, or country of origin. It may be particularly helpful to early career scientists, some of whom may have little or no relevant mentoring at their institutions, who learn how to prepare a scientific paper for publication and are able to publish in a respected scholarly journal, which is necessary for career advancement.

Beyond funder restrictions is the matter of publication costs. AAI urges NIH to develop clear guidance on all ways in which investigators may charge these costs. In addition to allowing authors to charge

reasonable publication costs to the direct portion of their grants, NIH should develop novel ways and funding mechanisms, and work with academia and institutions to consider alternatives, including the use of indirect funds, that do not require researchers to utilize grant funds intended for research. NIH should also acknowledge, and consider solutions for, the fact that using direct grant funding for publishing costs reduces the available funding for necessary research costs (including support for personnel, equipment and supplies, funding for experiments, etc.), which may decelerate scientific discovery and will almost certainly place an additional burden on less well-funded investigators and/or institutions. The NIH Public Access Plan's removal of the 12-month embargo period, resulting in a fully open-access model, will likely cause publication fees to increase, perhaps dramatically, disproportionately and negatively impacting under-resourced investigators and institutions, especially those that do not have libraries with the means to enter into transformative agreements or other arrangements that would not require authors to pay publication costs from the direct portions of their grants. NIH should monitor, and provide guidance on addressing, disparities in publishing opportunities.

NIH should consider ways to alleviate the potential increase in administrative burden that investigators will face if they become responsible for ensuring their publications are publicly and freely available (e.g., deposition of manuscripts to PubMed). Currently, this service is often provided by the publisher. With regard to *The JI*, AAI has deposited manuscripts on the author's behalf since 2011, a service that may have to be discontinued without the support of revenue currently received from subscriptions. Similarly, NIH should acknowledge and address the fact that not-for-profit scientific societies that publish scholarly journals, which provide tremendous value to the biomedical ecosystem, do not have the same resources as large publishers; NIH should assist these societies during and after the transition to ensure their continued ability to serve their authors, the federal government, and taxpayers, including reviewing and validating the accuracy and rigor of federally funded scientific research.

Finally, although not addressed in this RFI, AAI strongly supports the ability of authors to choose the copyright license that best suits the needs of their funders and themselves. A copyright license that restricts the reuse of derivatives maintains the scientific integrity of a researcher's work that could be misconstrued or misunderstood if presented in partial form. In addition, a copyright license that restricts the reuse for commercial purposes ensures that the work is not misappropriated.

## 2. Steps for improving equity in access and accessibility of publications.

Removal of the currently allowable 12-month embargo period for NIH-supported publications will improve access to these research products for all. As noted in the NIH Public Access Plan, NIH also plans to continue making articles available in human and machine-readable forms to support automated text processing. NIH will also seek ways to improve the accessibility of publications via assistive devices. NIH welcomes input on other steps that could be taken to improve equity in access to publications by diverse communities of users, including researchers, clinicians and public health officials, students and educators, and other members of the public.

All scientists and physicians conducting (or training to conduct) research in immunology or related fields are welcome to apply for membership in AAI. Members receive immediate access to *The JI* (and like the public, can access *IH* at no cost online). Nonmember scientists, physicians, and public health officials who wish to view *The JI* content before the 12-month embargo period ends often access it at their institution's (or government) library. As the most highly cited journal in the field, *The JI* is widely available, and as a publication of a not-for-profit professional society, it is reasonably priced and affordable to smaller institutions.

AAI is acutely aware of the importance of sharing scientific and medical information with the general public but believes that immediate and free dissemination of full-length scholarly journal articles is not the most effective or efficient way to accomplish this goal. (Scientific journal articles are tailored to experts in a specific field and are sometimes not well understood even by experts in a different subdiscipline of the same field, much less by a lay audience.) AAI has a long track record of programs intended to accomplish the goal of making scientific content accessible to the public. AAI develops educational materials for the public and for Congress and offers immediate and free online access to abstracts of all scholarly articles published in AAI's journals. Furthermore, AAI has invested in developing accessibility tools like "Key Points" (three-sentence lay summaries) and visual abstracts (lay-friendly graphic representations of the main points of articles) for published articles, free of charge and publicly available on The JI website (https://journals.aai.org/jimmunol/issue).

Additionally, AAI was a responsible contributor to the sharing of critically important scientific information throughout the COVID-19 pandemic and intends to respond with equal commitment to any future public health emergency. Most recently, the association launched a new initiative through which AAI members have explained the importance of vaccination and how it works to protect from illness, among other immunology topics, on television, radio, social media, and in print media.

AAI has been able to provide these important services to the public only because of the revenue generated by the AAI journal subscription model. Should AAI lose revenue as a result of the new public access policy, the association may not be able to continue to provide programs and services that expand access and information to both scientists and the public.

# 3. Methods for monitoring evolving costs and impacts on affected communities.

NIH proposes to actively monitor trends in publication fees and policies to ensure that they remain reasonable and equitable. NIH seeks information on effective approaches for monitoring trends in publication fees and equity in publication opportunities.

AAI supports NIH's effort to monitor and share information regarding trends in publication fees. However, AAI recommends against any action that may inadvertently lead to inequities in publishing opportunity, favor high-volume rather than high-quality publishing, and/or negatively affect the quality of publications. Peer review, in which AAI heavily invests and which is essential to upholding scientific integrity, cannot be undertaken or accomplished at no cost, and any model that does not sufficiently compensate for providing peer review and ensuring other critical aspects of scientific integrity (e.g., ethics, rigor, reproducibility, etc.) will inevitably lead to a reduction in publication quality and will ultimately slow, or could even reverse, the very scientific progress that NIH wishes to speed.

### 4. Early input on considerations to increase findability and transparency of research.

Section IV of the NIH Public Access Plan is a first step in developing the NIH's updated plan for persistent identifiers (PIDs) and metadata, which will be submitted to OSTP by December 31, 2024. NIH seeks suggestions on any specific issues that should be considered in efforts to improve use of PIDs and metadata, including information about experiences institutions and researchers have had with adoption of different identifiers.

AAI encourages all authors to provide an ORCID ID, a unique, persistent identifier that can be obtained free of charge by researchers, with their article submission. In an effort to successfully capture AAI authors' funding information, AAI further customized – at additional expense – the AAI manuscript submission system to include funder(s), grant reference numbers, and investigators' name.

At considerable expense, AAI also added digital object identifiers (DOIs) to nearly 100,000 articles from its journal archive, dating back to 1916, and continues to utilize them for all publications. A DOI is a unique and never-changing alphanumeric string assigned to online journal articles, which makes it easier to search for and retrieve published works, and makes content more accessible to researchers, clinicians and public health officials, students and educators, and other members of the public. AAI supports the adoption of DOIs for NIH grants; this would allow for efficient and consistent tracking of investigators' grants, publications, and research data.

AAI appreciates that NIH is asking about, and urges NIH to allow continued use of, persistent identifiers (PIDs) and metadata that have been commonly used by scholarly scientific societies. This is important to avoid unnecessary disruption, confusion, and cost.

### Conclusion

AAI appreciates NIH's willingness to hear the concerns of scholarly scientific societies that wish to continue publishing high-quality, peer-reviewed scientific articles designed for experts in their discipline, and to engage in an iterative process to achieve a policy with broad consensus. AAI believes that there is a way forward to address the widespread desire for more public access to needed scientific information that can still preserve the unique and essential role of scholarly scientific society publishers to conduct the necessary review, editing, dissemination, monitoring (including corrections and retractions), and archiving of the manuscripts/articles that AAI publishes. AAI looks forward to continuing to work with NIH to ensure that that the association can continue to advance the field of immunology through publication and other educational activities in the years to come.