# SPRINGER NATURE

Springer Nature comments on the **Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan NSF-2025-OGC-0001.**

May 29, 2025

Attention:

Faisal D'Souza

National Coordination Office (NCO)

Networking and Information Technology Research and Development (NITRD)

National Science Foundation

2415 Eisenhower Avenue

Alexandria, VA 22314

Submitted by:

Nicole Grobauer



Springer Nature is a publisher of journals and books.

Springer Nature advances discovery by publishing trusted research, supporting the development of new ideas and championing open science. We are committed to playing our part in accelerating solutions to address the world's urgent challenges. Springer Nature is proud to publish a significant proportion of the high-quality research funded by the US federal agencies across all disciplines. The federal agencies are a leading stakeholder in the global research ecosystem, and we are committed to providing funded researchers with a range of publication opportunities in our journals.

Our role is to maintain the integrity of the scientific record and as a leading stakeholder in this endeavour, we welcome the opportunity to provide feedback on the Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan (NSF-2025-OGC-0001). As an academic publisher committed to the responsible use of AI, Springer Nature welcomes the opportunity to consider revisions that support R&D and innovation in the US and shape a strategic plan that addresses the ethical, societal, and environmental implications of AI technologies.

AI continues to play a critical role in US technological leadership on a global scale. To maintain this position, without undermining trust in the integrity of the scientific record, the US government should invest in basic AI research and the ethical, human-centered development of AI, coupled with robust copyright and IP protections that facilitate the growth of US-based commercial entities, including the US publishing and creative industries.

**Strategies to Revise:**

In its **Strategy 5** (Develop Shared Public Datasets and Environments for AI Training and Testing) the previous administration's National Artificial Intelligence Research and Development Strategic Plan (2023 Update) they set out a data strategy and plan to establish a national repository of AI training data. However, this strategy does not make adequate reference to intellectual protections and the usage of licensing agreements to acquire access to copyrighted material.

While we support the development of shared datasets, we urge caution to ensure that these datasets do not include copyrighted materials that can be accessed without proper authorization. The plan should include clear guidelines for the ethical use of copyrighted materials in AI training and testing.

**Strategy 8** (Expand Public-Private Partnerships to Accelerate Advances in AI): We support the expansion of public-private partnerships but recommend that these partnerships include provisions for protecting copyright and intellectual property rights, in addition to clear guidelines related to attribution and provenance disclosures. These guidelines should be consistently applied across all such partnerships. All entities engaged in AI R&D should adhere to the same standards which will ensure that the framework for collaboration is transparent and does not inadvertently lead to the misuse of copyrighted materials.

**Strategies to Develop Further:**

The previous administration's **Strategy 1** (Make Long-Term Investments in Fundamental and Responsible AI Research) should be further developed. We support the emphasis on long-term

investments in AI research, particularly in areas that ensure ethical and responsible AI development. This includes research on scalable general-purpose AI systems and federated learning approaches that respect data privacy and copyright protections.

Furthermore, it is paramount to continue developing and investing in the points of **Strategy 3** (Understand and Address the Ethical, Legal, and Societal Implications of AI). We commend the focus on understanding and addressing the ethical, legal, and societal implications of AI. This strategy aligns with our commitment to ethical AI development and the protection of intellectual property rights.

**Key Recommendations:**

1. **Robust Copyright Protections**: We strongly advocate for the inclusion of robust copyright protections in the strategic plan. Copyright protections are essential for a thriving research and publishing ecosystem, ensuring that authors and publishers can continue to produce high-quality, trustworthy, and innovative content. This includes safeguarding the intellectual property rights of researchers and publishers, which is critical for fostering innovation and maintaining the integrity of the scientific record.
2. Use of the V**ersion of Record (VOR)**: We would also emphasize that AI applications operating on scholarly content should use the **final published article** (the Version of Record) because that is the most thoroughly vetted form of a research publication and gets updated over time. Corrections, errata and retractions are an important part of the updating process and serve an essential role in keeping the scholarly record clean can take place when serious issues are unearthed in a published article, which then gets updated with a clear revised status. In cases of a retraction, the record for the work remains publicly available as a placeholder but contains information as to the retraction along with a link to the retraction notice. Versions that are not the Version of Record often do not get this update, remain available without any cautionary notice, and could still be ingested by and erroneously influence AI models even after the findings they report have been discredited. **These are some of the reasons why use of the Version of Record is an essential condition to ensure the scholarly community, and the public, can trust AI outputs as accurate and reliable.**
3. **Transparency and Accountability**: We recommend clear guidelines for the disclosure of AI usage in research, as well as the disclosure of AI use in research grant proposals and evaluation. Transparency in AI processes and accountability for AI-generated outcomes are crucial for maintaining trust in scientific research and ensuring that the work is reproducible. The plan should also include measures to ensure that AI systems do not infringe on copyright protections.
4. **Privacy and Data Governance**: The strategic plan's emphasis on privacy and data governance is essential. Protecting personal privacy and adhering to data protection laws are critical for responsible AI use. We suggest that the plan also address the need for copyright protections in data governance frameworks, ensuring that copyrighted materials are used ethically and legally.

5. **Consultation**: We strongly recommend that as the Agency heads develop their action plans to achieve the Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan, they take into account the policies and practices of commercial and non-commercial stakeholders such as publishers and professional societies, ideally in the form of an RFI.
6. **Continuous Monitoring and Adaptation**: The strategic plan should establish mechanisms for continuous monitoring and adaptation of AI policies as AI technologies evolve. This ensures that AI policies evolve alongside the technology and in line with ethical standards and societal expectations. We recommend that the plan include provisions for monitoring the use of copyrighted materials in AI systems to prevent unauthorized use and ensure compliance with copyright laws.

**Conclusion:**

As an academic publisher committed to the responsible use of AI, Springer Nature welcomes the opportunity to shape a strategic plan that addresses the ethical, societal, and environmental implications of AI technologies.

We believe that a strategic plan grounded in ethical principles and robust copyright protections will uphold trust in scientific integrity and foster innovation while safeguarding societal well-being and existing proprietary rights protections. By addressing the key recommendations and strategies outlined above, the revised plan can ensure that AI technologies are developed and deployed responsibly, benefiting the research community and society at large.

Springer Nature is committed to supporting the responsible development and deployment of AI technologies.

Thank you for considering our recommendations.