



SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

HEARING CHARTER

“The State of Scientific Publishing: Assessing Trends, Emerging Issues, and Policy Considerations”

April 15, 2026

10:00 a.m.

2318 Rayburn House Office Building

Purpose

This hearing will examine the current state of scientific publishing, including open access policies, the current state of peer review, conflict of interest policies, data access and reproducibility, as well as the emergence of predatory journals, paper mills, and “publish or perish” incentive systems that prioritize publication quantity over quality. The hearing will also consider how technologies like machine learning, large language models, and artificial intelligence are influencing the quality of science, scientific integrity, scientific misconduct, and the advancement of gold-standard science.

Witnesses

- **Carl Maxwell**, Senior Vice President, Public Policy, Association of American Publishers
- **Kate Travis**, Managing Editor, Retraction Watch
- **Dr. Jason Owen-Smith**, Executive Director, Institute for Research on Innovation & Science, University of Michigan

Overarching Questions

- How can Congress ensure transparency in publishing costs, peer review, and journal practices for federally funded research?
- What are the financial and operational impacts of open access mandates on institutions, researchers, and federal grants?
- What steps can strengthen competition in the academic publishing market and improve efficiency for taxpayers?
- What policies support alternative publishing models that maintain quality, reduce costs, and expand access?

- What steps can publishers and institutions take to mitigate the risks associated with the rise and increased use of artificial intelligence in scientific research and publishing?

Background

Scientific publishing is the cornerstone of modern research dissemination, validation, and public trust. However, the ecosystem is undergoing rapid transformation due to evolving funding models, digital platforms, and increasingly competitive academic incentives. These shifts have introduced new efficiencies but also new vulnerabilities. Concerns have grown regarding transparency, reproducibility, conflicts of interest, and the proliferation of low-quality or deceptive publishing practices. Rising publication costs, uneven access to research, and evolving open access mandates have intensified tension among researchers, institutions, publishers, and funders.

The publishing ecosystem is increasingly characterized by fragmentation and experimentation, with traditional subscription journals, open access platforms, preprint servers, and community-led initiatives coexisting. A study from *Nature Human Behaviour* highlights that competing pressures—accessibility, quality control, equity, and sustainability—require careful oversight to ensure reforms, such as open science initiatives, data-sharing mandates, and alternative evaluation metrics, achieve long-term effectiveness.¹ Absent such oversight, reforms risk producing unintended consequences that undermine research quality and accountability. These issues are further exacerbated by the rise of paper mills and predatory journals, particularly in countries such as the People’s Republic of China, whose research may be cited by or even published in well-respected Western journals.

A central challenge is academic incentive structures that reward publication volume over quality. Over time, the scientific system has evolved into a complex quasi-marketplace involving universities, federal agencies, and private publishers. Academic incentive structures, often described as “publish or perish” structures, increasingly tie career success to publication quantity and journal placement.² This dynamic can distort researcher behavior, incentivizing speed and volume at the expense of rigor and reproducibility. Instances of compromised peer review,

¹ Abubakari Ahmed et al., The Future of Academic Publishing, *NATURE HUMAN BEHAVIOR* (July 13, 2023), <https://www.nature.com/articles/s41562-023-01637-2> [<https://doi.org/10.1038/s41562-023-01637-2>].

² Zul M, *The State of Academic Publishing Today: What’s Broken, What’s Changing, and What’s Next*, PUBLISHINGSTATE.COM (June 5, 2025), https://publishingstate.com/the-state-of-academic-publishing-today-whats-broken-whats-changing-and-whats-next/2025/#google_vignette; Clive Baldock, *The future of scientific publishing: challenges and a vision for change*, 48 *PHYS ENG SCI MED* 961, (2025), [https://doi.org/10.1007/s13246-025-01642-;](https://doi.org/10.1007/s13246-025-01642-) AGU Editorial Network, *Challenges facing scientific publishing in the field of Earth & space sciences*, 5 *AGU ADVANCES* 4, (2024), <https://doi.org/10.1029/2024AV001334>; KELLY ALAN, *THE HISTORY AND FUTURE OF SCIENTIFIC PUBLISHING, HOW SCIENTISTS COMMUNICATE: DISPATCHES FROM THE FRONTIERS OF KNOWLEDGE* 10-13 (Oxford Academic 2020), <https://doi.org/10.1093/oso/9780190936600.003.0002>; Mark A. Hanson, Pablo Gómez Barreiro, Paolo Crosetto & Dan Brockington, *The strain on scientific publishing*, 5 *QUANTITATIVE SCIENCE STUDIES*, (2024) https://doi.org/10.1162/qss_a_00327.

including fake reviewer identities, fabricated reports, and coordinated editorial influence, further weaken the reliability of peer review as a cornerstone of scientific validation.³

Each of these issues becomes increasingly alarming with the rapid advancement of machine learning, large language models, and artificial intelligence (AI). As AI systems grow more powerful and the incentives and pressures to publish increase, the risk of using these technologies to fabricate or manipulate research has risen significantly.⁴ AI lowers the cost and technical barrier to generating plausible but unreliable scientific content at scale.⁵ Although AI offers valuable tools for enhancing scientific productivity and innovation, it is imperative that authors, publishers, and institutions mitigate the risks associated with its misuse in scientific research and development.

Reproducibility Crisis

The reproducibility crisis refers to growing evidence that many scientific studies cannot be reliably repeated, raising concerns about the strength of findings that inform federally funded research, innovation, and policy decisions. While reproducibility is widely considered a core principle of scientific validity, exact replication can be difficult due to unavoidable differences in methods, data, and conditions.⁶ Nonetheless, large-scale replication efforts in fields such as

³ Leslie Eastman, *Paper Mills, Sham Journals, and Stolen Reputation: Fraud and Greed are Poisoning Science*, LEGAL INSURRECTION (Sep. 2, 2025), <https://legalinsurrection.com/2025/09/paper-mills-sham-journals-and-stolen-reputation-fraud-and-greed-are-poisoning-science/>; Robin McKie, 'The Situation has Become Appalling': Fake Scientific Papers Push Research Credibility to Crisis Point, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>; Retraction Watch, *Top 10 most highly cited retracted papers*, (last accessed Apr. 7, 2026) <https://retractionwatch.com/the-retraction-watch-leaderboard/top-10-most-highly-cited-retracted-papers/>; Emilie Le Beau Lucchesi, *How the Alzheimer's Research Scandal Set Back Treatment 16 Years*, DISCOVER (Oct. 11, 2022), <https://www.discovermagazine.com/false-alzheimers-study-could-set-research-back-16-years-44171>.

⁴ Paul Baier, *Scientific Publishing Is Being Rewritten By AI*, FORBES (Mar. 15, 2026), <https://www.forbes.com/sites/paulbaier/2026/03/15/scientific-publishing-is-being-rewritten-by-ai/>; Leslie Eastman, *Paper Mills, Sham Journals, and Stolen Reputation: Fraud and Greed are Poisoning Science*, LEGAL INSURRECTION (Sep. 2, 2025), <https://legalinsurrection.com/2025/09/paper-mills-sham-journals-and-stolen-reputation-fraud-and-greed-are-poisoning-science/>; Robin McKie, 'The Situation has Become Appalling': Fake Scientific Papers Push Research Credibility to Crisis Point, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>.

⁵ Paul Baier, *Scientific Publishing Is Being Rewritten By AI*, FORBES (Mar. 15, 2026), <https://www.forbes.com/sites/paulbaier/2026/03/15/scientific-publishing-is-being-rewritten-by-ai/>; Leslie Eastman, *Paper Mills, Sham Journals, and Stolen Reputation: Fraud and Greed are Poisoning Science*, LEGAL INSURRECTION (Sep. 2, 2025), <https://legalinsurrection.com/2025/09/paper-mills-sham-journals-and-stolen-reputation-fraud-and-greed-are-poisoning-science/>; Robin McKie, 'The Situation has Become Appalling': Fake Scientific Papers Push Research Credibility to Crisis Point, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>; Clive Baldock, *The future of scientific publishing: challenges and a vision for change*, 48 PHYS ENG SCI MED 961, (2025), <https://doi.org/10.1007/s13246-025-01642->; AGU Editorial Network, *Challenges facing scientific publishing in the field of Earth & space sciences*, 5 AGU ADVANCES 4, (2024), <https://doi.org/10.1029/2024AV001334>.

⁶ Fiona Fidler, *Reproducibility of Scientific Results*, STANFORD (Dec. 3, 2018), <https://plato.stanford.edu/entries/scientific-reproducibility/>.

psychology and biomedicine have found that a substantial share of studies fail to produce consistent results, suggesting systemic weaknesses in research practices.⁷

The causes of irreproducibility are multifaceted and largely structural rather than the result of individual misconduct. Common drivers include weak study design, small sample sizes, and misuse of statistical methods, which can lead to false or exaggerated findings.⁸ These issues are compounded by publication bias and incentive systems that reward novel, positive results over careful validation, discouraging replication studies.⁹ A lack of transparency, particularly shown through a limited access to underlying data, code, and methodologies, further restricts the ability of researchers to verify results.¹⁰

In addition, workforce pressures within federally funded research environments, especially among early-career scientists, can incentivize speed and output over rigor.¹¹ At the same time, research suggests that scientists do not rely solely on replication to evaluate findings but also use professional judgment and trust based on methodological quality and consistency with existing knowledge.¹² Irreproducible research may reduce the return on federal research investments, complicate the development of technical standards, and undermine public confidence in science.¹³ The National Association of Scholars further argues that unreliable scientific findings can affect regulatory and policy decisions, increasing the risk of reliance on uncertain evidence.¹⁴ The reproducibility crisis reflects both technical and institutional challenges within modern science. Addressing it will require coordinated efforts to improve transparency, realign incentives, and strengthen research practices, thereby ensuring that federally funded science remains reliable, credible, and effective in supporting national priorities.

Open Access

Open access policies aim to make federally funded research freely available to the public, often requiring immediate or near-immediate access to publications and underlying data. While

⁷ *Id.*

⁸ Zhiwei Chen et al., *The Reproducibility Crisis in Scientific Research: Causes and Solutions*, RESEARCHGATE (2020),

https://www.researchgate.net/publication/384056479_The_Reproducibility_Crisis_in_Scientific_Research_Causes_and_Solutions.

⁹ *Id.*

¹⁰ Tatiana Chakravorti et al., *Reproducibility and replicability in research: What 452 professors think in Universities across the USA and India*, PUBMED CENTRAL Vol. 20(3) (Mar. 26, 2025),

<https://pmc.ncbi.nlm.nih.gov/articles/PMC11940819/>.

¹¹ *Id.*

¹² Michael Calnan et al., *Understanding and tackling the reproducibility crisis – Why we need to study scientists' trust in data*, J. PHARMACOLOGICAL RESEARCH Vol. 199 (2024),

<https://www.sciencedirect.com/science/article/pii/S1043661823003997>.

¹³ *Id.*

¹⁴ David Randall et al., *Understanding and tackling the reproducibility crisis – Why we need to study scientists' trust in data*, NAT'L ASS'N OF SCHOLARS (2026), https://www.nas.org/wp-content/uploads/2026/04/Irreproducibility_Report_Summary_.pdf.

expanding access to knowledge is a broadly shared goal, the mechanisms used to achieve it raise important economic, security, and quality-control concerns.

There are several types of open access journals. “Gold” open access journals publish articles that are immediately accessible to readers without restrictions.¹⁵ “Green” open access journals publish a version of a researcher’s manuscript in a publicly available repository, typically after an embargo period.¹⁶ Open access models frequently rely on article processing charges (APCs), shifting costs from subscribers to researchers, institutions, and federal grant funding.¹⁷ This cost-shifting model risks increasing overall research costs borne by taxpayers, disadvantages smaller institutions and independent researchers with fewer resources, and creates incentives for publishers to prioritize volume over quality.¹⁸ Expansion of open access, particularly APC-funded models, is projected to surpass traditional subscriptions, signaling a fundamental restructuring of the research publishing economy.¹⁹

Open access offers some benefits, including expanded public access to knowledge, increased research visibility and impact, accelerated scientific discovery, greater global research participation, improved transparency and reproducibility, economic and innovation benefits, and educational advantages.²⁰ These benefits can be particularly relevant for federally funded research, where public accessibility is a key policy objective.

However, while open access publishing aims to democratize research, it also presents several significant drawbacks. Numerous open access journals charge article processing fees, which can be prohibitively expensive for early-career researchers, underfunded institutions, or scholars in developing regions, creating barriers to who can publish.²¹ Prestige hierarchies persist, as high-impact journals often remain subscription-based, influencing career advancement and funding opportunities.²² Hybrid journals that charge both subscription fees and Article Processing

¹⁵ Falcon Scientific Editing, *The Future of Scientific Publishing: Trends and Innovations* (Sep. 6, 2023), <https://falconediting.com/en/blog/the-future-of-scientific-publishing-trends-and-innovations/>.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ American Journal Experts, Open Access: The Good, the Bad, and the Ugly, BITE SIZE BIO (Oct. 4, 2024), <https://bitesizebio.com/34520/open-access-good-bad-ugly/>; Zul M, Revisiting the Pros and Cons of Open Access, PUBLISHINGSTATE.COM (June 6, 2025), https://publishingstate.com/the-state-of-academic-publishing-today-whats-broken-whats-changing-and-whats-next/2025/#google_vignette; John Frank, Rosemary Foster, & Claudia Pagliari, Open access publishing – noble intention, flawed reality, 317 SOCIAL SCIENCE & MEDICINE, (2023), <https://doi.org/10.1016/j.socscimed.2022.115592>; Hong Zhou, *The Top Ten Challenges, Needs, and Goals of Publishers – and How AI Can Help in Digital Transformation and the Open Science Movement*, THE SCHOLARLY KITCHEN (Nov. 5, 2024), <https://scholarlykitchen.sspnet.org/2024/11/05/the-top-ten-challenges-needs-and-goals-of-publishers-and-how-ai-can-help-in-digital-transformation-and-the-open-science-movement/>.

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

Charges for open access can potentially allow for “double dipping,” a practice where publishers charge authors and institutions twice for the same content, raising ethical and financial concerns.²³ Furthermore, making research freely available does not guarantee readership, discoverability, or impact, and the pressure to publish more articles under APC-driven models may compromise research quality.²⁴ The open access model has also contributed to a rise in predatory publishers who exploit authors by charging fees without providing rigorous peer review or editorial oversight, undermining trust in scholarly communication.²⁵ Overall, these challenges highlight that, despite its ideals, open access publishing can undermine trust in the broader scientific enterprise.

Publish-or-Perish Incentive Systems

The scientific publishing ecosystem is influenced by structural and commercial pressures. Trends in an article from *Dynamic Ecology* show that publication volume is growing faster than the number of active researchers.²⁶ “Publish or perish” incentive policies in higher education reflect an effort to increase faculty productivity and enhance an institution’s competitiveness, but they also create important concerns about accountability, scientific rigor, and proper incentives.²⁷ When institutions place excessive emphasis on publication volume, particularly in niche or low-impact journals, these policies encourage redundant or low-quality research.²⁸ This dynamic diverts attention and resources away from teaching and ultimately reduces the return on investment for students and taxpayers.

Paper Mills and Predatory Journals

Global research integrity challenges compound domestic concerns. Paper mills, which are companies producing primarily fraudulent or manipulated manuscripts, have emerged as a

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.*

²⁶ Brian McGill, *The state of academic publishing in 3 graphs, 6 trends, and 4 thoughts*, DYNAMIC ECOLOGY (Apr. 29, 2024), <https://dynamicecology.wordpress.com/2024/04/29/the-state-of-academic-publishing-in-3-graphs-5-trends-and-4-thoughts/>.

²⁷ Zul M, *The State of Academic Publishing Today: What’s Broken, What’s Changing, and What’s Next*, PUBLISHINGSTATE.COM (June 5, 2025), https://publishingstate.com/the-state-of-academic-publishing-today-whats-broken-whats-changing-and-whats-next/2025/#google_vignette; Clive Baldock, *The future of scientific publishing: challenges and a vision for change*, 48 PHYS ENG SCI MED 961, (2025), <https://doi.org/10.1007/s13246-025-01642-;> AGU Editorial Network, *Challenges facing scientific publishing in the field of Earth & space sciences*, 5 AGU ADVANCES 4, [pincite] (2024), <https://doi.org/10.1029/2024AV001334>; KELLY ALAN, *THE HISTORY AND FUTURE OF SCIENTIFIC PUBLISHING, HOW SCIENTISTS COMMUNICATE: DISPATCHES FROM THE FRONTIERS OF KNOWLEDGE* 10-13 (Oxford Academic 2020), <https://doi.org/10.1093/oso/9780190936600.003.0002>; Mark A. Hanson, Pablo Gómez Barreiro, Paolo Crosetto & Dan Brockington, *The strain on scientific publishing*, 5 QUANTITATIVE SCIENCE STUDIES, (2024) https://doi.org/10.1162/qss_a_00327.

²⁸ *Id.*

significant threat to credibility.²⁹ These operations exploit centralized publication incentives, pressuring researchers to meet quotas and sometimes encouraging deliberate misconduct.³⁰ Such practices produce misleading research, threaten the credibility of scientific literature, and may compromise U.S. research funding and outcomes.³¹ Fraudulent publications can misdirect U.S. research funding, distort scientific understanding, and undermine trust in taxpayer-supported research.

Paper Mills

These operations, termed “paper mills,” are companies whose goal is to produce, sell, or facilitate the authorship of academic papers on a faster timeline than traditional methods.³² According to available reports, articles based on fabricated data from paper mills are appearing in American academic journals with increasing frequency.³³ In some cases, U.S. research grants may even be awarded to individuals who collaborate with CCP-affiliated funding sources or who rely on falsified research originating from CCP paper mills.³⁴ Paper mills thrive under the CCP’s centralized system of academic incentives, which pressures researchers to continually publish papers to secure, maintain, or advance their positions.³⁵

The proliferation of paper mills is not unique to China, and as their presence continues to increase, the scientific community and American publishers must be careful. In 2023 alone, Wiley, a prominent American academic publisher, retracted over 8,000 fabricated papers from one of its subsidiaries after uncovering widespread manipulation tied to paper mill operations.³⁶ This scandal ultimately led to the subsidiary’s collapse.³⁷ Wiley’s discovery of fraudulent papers

²⁹ Leslie Eastman, *Paper Mills, Sham Journals, and Stolen Reputation: Fraud and Greed are Poisoning Science*, LEGAL INSURRECTION (Sep. 2, 2025), <https://legalinsurrection.com/2025/09/paper-mills-sham-journals-and-stolen-reputation-fraud-and-greed-are-poisoning-science/>.

³⁰ *Id.*

³¹ *Id.*; *Publications Output: U.S. Trends and International Comparisons*, NSF (Dec. 11, 2023), <https://nces.nsf.gov/pubs/nsb202333/publication-output-by-region-country-or-economy-and-by-scientific-field>.

³² Leslie Eastman, *Paper Mills, Sham Journals, and Stolen Reputation: Fraud and Greed are Poisoning Science*, LEGAL INSURRECTION (Sep. 2, 2025), <https://legalinsurrection.com/2025/09/paper-mills-sham-journals-and-stolen-reputation-fraud-and-greed-are-poisoning-science/>.

³³ *Id.*

³⁴ Ryan Lovelace, *Taxpayer-funded Research Projects Didn’t Check for Scientists Taking Money from China*, THE WASHINGTON TIMES (June 10, 2022), <https://www.washingtontimes.com/news/2022/jun/10/nih-funded-researchers-broke-rules-failing-require/>; Robin McKie, *‘The Situation has Become Appalling’: Fake Scientific Papers Push Research Credibility to Crisis Point*, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>.

³⁵ Isobel Cockerell, *China’s ‘Paper Mills’ are Grinding Out Fake Scientific Research at an Alarming Rate*, CODA STORY (Nov. 9, 2020), <https://www.codastory.com/disinformation/china-fake-scientific-research/>; Smriti Mallapaty, *China Bans Cash Rewards for Publishing Papers*, NATURE (Feb. 28, 2020), <https://www.nature.com/articles/d41586-020-00574-8>.

³⁶ Robin McKie, *‘The Situation has Become Appalling’: Fake Scientific Papers Push Research Credibility to Crisis Point*, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>.

³⁷ *Id.*

across its broader portfolio showcases the concerning level of paper mill proliferation in American journals and publishing companies.³⁸ Further, estimates suggest that more than 400,000 published studies worldwide likely originate from such disreputable sources.³⁹ This pervasive corruption pollutes scientific databases, compromises peer review, and misleads researchers who must rely on credible findings to advance genuine science.

Predatory Journals

Predatory journals are exploitative or low-quality publishers that charge authors fees without providing legitimate peer review or editorial oversight.⁴⁰ These journals often target researchers under pressure to publish, exploiting “publish or perish” incentives. Predatory journals undermine scientific credibility, introduce unreliable research into the literature, and mislead policymakers, funders, and the public.⁴¹ These journals often mimic reputable publications, making it difficult for researchers and institutions to distinguish legitimate venues from fraudulent ones.⁴² The proliferation of predatory journals is exacerbated by the rise of APC-funded open access models, where revenue is tied to publication volume rather than quality.⁴³

China

A disproportionately high number of retracted papers, often due to issues such as data fabrication, plagiarism, or image manipulation, have been linked to authors affiliated with Chinese institutions.⁴⁴ CCP-linked incentives, including cash rewards for publications, have fueled a market for fabricated research that sometimes enters respected Western journals.⁴⁵

³⁸ *Id.*

³⁹ Abalkina A. *Commercialization of Scientific Misconduct: The Challenge of Paper Mills*. EUR. J PUBLIC HEALTH, 2024 Oct 28;34(Suppl 3):ckae144.679 (2024), <https://pmc.ncbi.nlm.nih.gov/articles/PMC11517752/> [doi: 10.1093/eurpub/ckae144.679].

⁴⁰ Arturo Casadevall et al., *The Changing Roles of Scientific Journals*, 15 MBIO e02515-24 (2024), <https://doi.org/10.1128/mbio.02515-24>; Mark A. Hanson, Pablo Gómez Barreiro, Paolo Crosetto & Dan Brockington, *The strain on scientific publishing*, 5 QUANTITATIVE SCIENCE STUDIES, (2024) https://doi.org/10.1162/qss_a_00327; *The Future of Scientific Publishing: 7 Trends to Watch in 2024*, PUBLISHING RESEARCH CONSORTIUM, <https://publishingresearchconsortium.com/the-future-of-scientific-publishing/> (last visited Apr. 6, 2026); Paul Baier, *Scientific Publishing Is Being Rewritten By AI*, FORBES (Mar. 15, 2026), <https://www.forbes.com/sites/paulbaier/2026/03/15/scientific-publishing-is-being-rewritten-by-ai/>.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ Isobel Cockerell, *China's 'Paper Mills' are Grinding Out Fake Scientific Research at an Alarming Rate*, CODA STORY (Nov. 9, 2020), <https://www.codastory.com/disinformation/china-fake-scientific-research/>; Smriti Mallapaty, *China Bans Cash Rewards for Publishing Papers*, NATURE (Feb. 28, 2020), <https://www.nature.com/articles/d41586-020-00574-8>; Emerging Technology from the arXiv, *The Truth about China's Cash-for-Publication Policy*, MIT TECH. REV. (July 12, 2017), <https://www.technologyreview.com/2017/07/12/150506/the-truth-about-chinas-cash-for-publication-policy/>; Ryan Lovelace, *Taxpayer-funded Research Projects Didn't Check for Scientists Taking Money from China*, THE WASHINGTON TIMES (June 10, 2022), <https://www.washingtontimes.com/news/2022/jun/10/nih-funded-researchers-broke-rules-failing-require/>.

⁴⁵ *Id.*

Despite reforms banning direct publication rewards, enforcement gaps and cultural pressures persist. A feature of the CCP's "publish or perish" culture is the propensity for Chinese researchers to intentionally violate ethical and legal standards by deliberately fabricating data and findings.⁴⁶ For instance, a survey of medical residents at hospitals in southwest China found that 46.7% admitted to buying or selling papers, ghostwriting for others, or hiring ghostwriters to meet publication requirements.⁴⁷

The CCP has apparently taken steps in recent years to address these issues, such as banning cash incentives tied directly to publications, strengthening research integrity regulations, increasing penalties for misconduct, and promoting domestic, high-quality journals.⁴⁸ While these reforms appear to signal progress, questions remain about the seriousness of this effort, and therefore the challenges the CCP represents remain unchanged. According to the *MIT Technology Review*, Chinese universities awarded authors an average of \$44,000 per paper published in the journals *Science* or *Nature* in 2016, with various smaller incentives for lesser-known journals.⁴⁹ These rewards fuel a market for fabricated research, much of which has found its way into respected Western journals.⁵⁰ With such questionable publications among the most prolific and frequently cited, the rise of CCP-linked paper mills poses a serious threat to American research advancement.⁵¹

China has also been identified as a major hub for paper mills, which produce fabricated or manipulated research manuscripts for a fee. These operations can generate falsified data, images, and authorship credentials, undermining the credibility of scientific literature. Although these practices are not limited to China, the scale and organization of some networks there have drawn heightened scrutiny.

Agency Response to Concerns

On February 4, 2026, this Committee sent letters to its agencies of jurisdiction. These letters focused on concerns regarding the effects of paper mills and fabricated research on American

⁴⁶ *Supra* note 40.

⁴⁷ EASTMAN, *supra* note 5.

⁴⁸ Isobel Cockerell, *China's 'Paper Mills' are Grinding Out Fake Scientific Research at an Alarming Rate*, CODA STORY (Nov. 9, 2020), <https://www.codastory.com/disinformation/china-fake-scientific-research/>; Smriti Mallapaty, *China Bans Cash Rewards for Publishing Papers*, NATURE (Feb. 28, 2020), <https://www.nature.com/articles/d41586-020-00574-8>.

⁴⁹ Emerging Technology from the arXiv, *The Truth about China's Cash-for-Publication Policy*, MIT TECH. REV. (July 12, 2017), <https://www.technologyreview.com/2017/07/12/150506/the-truth-about-chinas-cash-for-publication-policy/>.

⁵⁰ See e.g. WILEY, <https://www.wiley.com/en-us/> (last visited Oct. 7, 2025); Robin McKie, *'The Situation has Become Appalling': Fake Scientific Papers Push Research Credibility to Crisis Point*, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>.

⁵¹ Robin McKie, *'The Situation has Become Appalling': Fake Scientific Papers Push Research Credibility to Crisis Point*, THE GUARDIAN (Feb. 3, 2024), <https://www.theguardian.com/science/2024/feb/03/the-situation-has-become-appalling-fake-scientific-papers-push-research-credibility-to-crisis-point>.

research and development. Briefings revealed that agencies are developing policies to combat these threats, including award conditions that, if unmet, can lead to suspension, termination, or debarment from future funding.

Current trends suggest that the scientific publishing system is becoming more expansive, commercialized, and complex, with incentives that may not always align with high-quality research, educational outcomes, or taxpayer value. These developments underscore the importance of congressional oversight to ensure that federal research investments are managed in a manner that promotes transparency, competition, and scientific integrity.