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Publish and Perish

Confusing and Contradictory Policies Governing the Ability of Federal Scientists to Publish in Their Fields

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The ability of federal scientists to publish in their field is a way to ensure the free flow of scientific and technical information. In this way, the federal research investment more fully serves the public. In addition, the ability to publish also facilitates federal scientists' professional development.

Publication free from political censorship is an important tool of transparency and an effective check against the proliferation of "alternative facts."

Despite various congressional and presidential proclamations about the importance of federal scientists being able to publish in peer-reviewed journals, there are still no clear, overarching rules to secure this outlet. Nor do scientists have legal avenues to challenge agency decisions to block publication.

Instead, publishing protocols for employees in science-based federal agencies vary from agency to agency. Some agencies lack publication policies entirely, leaving scientists uncertain about what they may do. This uncertainty can act as a deterrent to pursuing publication, functioning as a "soft" gag order.

Some agencies require approval for all publications, while others require approval for any work-related publications. Some agencies have internally inconsistent rules, while a few agencies prohibit certain types of publications altogether.

By contrast, other agencies explicitly provide for publication without official prior review or approval from the agency.

Agencies that Prohibit Certain Publications

Some agencies, on one hand, encourage publication, but *prohibit specific* publications. For example, the **U.S. Department of Agriculture** (**USDA**) expresses a desire for scientists to

communicate their scientific findings in various sections of their Scientific Integrity Policy. However, the Policy explains that if the communication is for non-USDA media it must follow agency technical review procedures but does not elaborate on what these are.

The Policy specifies that –

"USDA scientists should refrain from making or publishing statements that could be construed as being judgments of, or recommendations on, USDA or any other Federal Government policy, unless they have secured appropriate prior approval to do so."

This purports to give USDA the ability to quash any publication that has public policy implications.

Other agencies differentiate between publications containing classified material and other work. The **Office of the Director of National Intelligence** encourages publication if the work is "fundamental in nature and can be clearly separated from classified applications."²

Similarly, the **Department of Defense** policy is to support the professional development of its scientists by encouraging peer-reviewed publication of fundamental research subject to national security restrictions.³

Agencies Without Publishing Policies

Notably, the Scientific Integrity Policy for the **U.S. Environmental Protection Agency** emphasizes the importance of transparency in science and suggests that agency scientists may freely express their views and engage in professional development through publication. However, the Policy does not have clearance procedures enabling scientists to know when they may speak or publish. Its promises the creation of "an Agency-wide framework for the approval of scientific communications" but such a clearance procedure has yet to be written. Despite the Policy's encouragement of publication, it lacks any operational implementation.

Similarly, the Scientific Integrity Policy for the **Department of the Interior** expresses a goal to "facilitate the free flow of scientific information"⁵ but is silent on the process for publishing

¹ U.S. DEPARTMENT OF AGRICULTURE, DEPARTMENTAL REGULATION 1074-001 (Nov. 18, 2016) https://www.ocio.usda.gov/document/departmental-regulation-1074-001.

² MEMORANDUM FROM THE DIRECTOR OF NATIONAL INTELLIGENCE TO DIRECTOR OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY ON SCIENTIFIC INTEGRITY.

 $[\]underline{https://www.ucsusa.org/sites/default/files/legacy/assets/documents/scientific_integrity/Director-of-Intelligence-SI-policy-1.pdf.}$

³ DEPARTMENT OF DEFENSE, INSTRUCTION, SCIENTIFIC AND ENGINEERING INTEGRITY (July 26, 2012). https://fas.org/irp/doddir/dod/i3200 20.pdf.

⁴ Footnote 4 https://www.epa.gov/sites/production/files/2014-02/documents/scientific integrity policy 2012.pdf

⁵DEPARTMENT OF THE INTERIOR, DEPARTMENTAL MANUAL CHAPTER 3: INTEGRITY OF SCIENTIFIC AND SCHOLARLY ACTIVITIES, 305 DM 3 (Dec. 16, 2014).

https://www.doi.gov/sites/doi.gov/files/elips/documents/305%20DM%203 %20Handbook%20-%20Scientific%20Integrity%20Procedures.pdf.

material. That Policy states that scientific findings may not be altered by public affairs officers, but it does not address publishing the work in a peer-reviewed journal.

The **Social Security Administration's (SSA)** Scientific Integrity Policy is included in the Statement of Commitment to Scientific Integrity by Principal Statistical Agencies document.⁶ The Policy declares that each agency should be impartial and independent but contains the caveat that the agency has authority over publication of information. Significantly, this Policy does not address the ability of individuals within the agency to publish independently without official approval.

By contrast, the **Office of Management and Budget** does not have a Scientific Integrity Policy at all.

Agencies Requiring Approval for All Publications

Some agencies encourage publication in peer-reviewed journals but require supervisory approval before this publication can occur. The **Department of Energy** expressly requires prior approval from a supervisor before a federal employee is able to publish their research.⁷

The **Department of Homeland Security** encourages publishing in peer-reviewed journals but requires that this publication be in coordination with the Office of Public Affairs (OPA) and the Office of General Counsel.⁸ The OPA is tasked with controlling what information is disseminated by the agency. The OPA also facilitates scientists speaking with media, provided there is coordination with a supervisor.

The **National Aeronautics and Space Administration (NASA)** also encourages employees to publish research and includes "Requirements for Documentation, Approval, and Dissemination of NASA Technical Information." These requirements stipulate that "journal articles will be reviewed via the DAA prior to release for external peer reviews" DAA review determines whether certain documents are restricted or confidential, and, if so, to whom.

NASA's requirements apply to both civil servants and contractors. ¹¹ Because of the sensitive nature of NASA technical information, certain information is also subject to OMB review as

⁶ Statement of Commitment to Scientific Integrity by Principal Statistical Agencies. *see also* OMB, Statistical Policy Directive No. 1: Fundamental Responsibilities of Federal Statistical Agencies and Recognized Statistical Units, 79 FR 71609 (Dec. 2, 2012), https://www.federalregister.gov/documents/2014/12/02/2014-28326/statistical-policy-directive-no-1-fundamental-responsibilities-of-federal-statistical-agencies-and.

⁷ The Secretary of Energy, Secretarial Policy Statement on Scientific Integrity (March 23, 2012). https://www.energy.gov/sites/prod/files/2017/01/f34/DOE%20Scientific%20Integrity%20Policy%2001112017.PDF Department of Homeland Security, Directive No. 026-07 Scientific Integrity (April 12, 2012)

https://obamawhitehouse.archives.gov/sites/default/files/dhs_scientific_integrity.pdf.

9 Ensuring Scientific Integrity at the National Aeronautics and Space Administration (Dec. 16, 2011).

⁹ Ensuring Scientific Integrity at the National Aeronautics and Space Administration (Dec. 16, 2011) ¹⁰ NASA Procedural Requirements, 6.4.1.3 (Sept. 7, 2015).

https://www.nasa.gov/pdf/611201main NASA SI Policy 12 15 11.pdf.

¹¹ NASA's Scientific and Technical Information/Document Availability Authorization Process (No Date), https://science.gsfc.nasa.gov/earth/gcdc/content/uploadFiles/highlight files/STI-DAA presentation.pdf

defined in OMB's "Information Quality Bulletin for Peer Review" guidance as well as a period of public comment.¹²

The **Department of Commerce** draws a distinction between oral and written communications. Its Scientific Integrity Policy supports scientists' participation in professional organizations and states that scientists may "engage in oral fundamental research communications" with the media without prior approval. It also includes written electronic communications, but only if they "are the equivalent of a dialogue." It also notes that these communications that need no prior approval must be based on official work.

At the same time, Commerce Department Administrative Order 219-1 provides that:

"Section 7.01 Approval of Materials. Based on the operating unit's internal procedures, all written and audiovisual materials that are, or are prepared in connection with, a Fundamental Research Communication, must be submitted by the researcher, before the communication occurs, to the head of the operating unit, or his or her designee(s), for approval in a timely manner. These procedures may not permit approval or non-approval to be based on the policy, budget, or management implications of the research. The head of the operating unit, or his or her designee(s), is responsible for ensuring that, if appropriate, advance notice is provided to that unit's public affairs office." ¹⁴

This prior official review is supposed to be limited in time and scope and is subject to an internal appeal procedure.

A further wrinkle is that this prior review provision does not apply to the employees represented by the National Weather Service Employees Organization as it violates their collective bargaining agreement.¹⁵

Agencies Requiring Approval for Work-Related Publications

Some agencies differentiate between work-related and non-work-related publications. For example, the **State Department** requires that scientists get prior approval from public affairs offices before publishing any unofficial work (private writing done outside of government work) that is of official concern (writing related to current responsibilities or programs). ¹⁶ If the unofficial work is not of official concern, this prior approval is not necessary.

¹² https://www.sti.nasa.gov/techreviewguidance.pdf

¹³ Memorandum from Cameron F. Kerry, General Counsel of the United States Department of Commerce, For All Chief Counsels and General Counsels, on Implementation of Administrative Policy on Scientific Integrity (Dec. 16, 2011). https://2010-

 $[\]underline{2014.commerce.gov/sites/default/files/documents/2012/april/scientific_integrity_memorandum_dtd_2011-12-16.pdf.$

¹⁴DAO-219-1 http://www.osec.doc.gov/opog/dmp/daos/dao219 1.html

¹⁵ https://www.peer.org/assets/docs/noaa/1 7 09 NOAA gag e-mail.pdf

¹⁶ Department of State, 11 FAM 820 Scientific Integrity (March 20, 2018). https://fam.state.gov/FAM/11FAM/11FAM0820.html.

The **National Institute of Standards and Technology** requires that "all official writing . . . must be reviewed by an internal Editorial Review Board."¹⁷

Similarly, the **National Institute of Health** requires that writing by an employee "on a work-related subject" must be reviewed and approved. ¹⁸ The **Department of Health and Human Services** notes that work disseminated by HHS is subject to extensive review, both at "inception and pre-dissemination." ¹⁹

The **Department of Education** also includes language that suggests supervisory review is required before an agency scientist may publish with the agency.²⁰

Agencies with Internally Inconsistent Policies

The Scientific Integrity Policy for the **National Oceanic and Atmospheric Administration** (**NOAA**) calls for a culture of transparency where employees are "provided information to ensure [employees] are aware of their rights regarding publication of research...." NOAA encourages publication and even emphasizes a scientist's ability to express personal viewpoints, provided they provide a disclaimer that these are not the opinions of NOAA. 22

Yet, as part of the Department of Commerce, NOAA employees (except for members of the National Weather Service Employees Organization) are subject to the Commerce Department rule requiring advance official review and approval for written Fundamental Research Communications.

In addition, the NOAA policies require that employee publications "must be consistent with NOAA policies and procedures related to peer review, the Open Government Directive (Office of Management and Budget, 2009b), NOAA's information quality guidelines, and other legislative and policy mandates."²³ Since the Policy does not itemize which "other legislative policies and mandates it is referencing, this language functions as an open-ended restriction on the above-referenced employee "rights regarding publication of research."

Two agencies inside the Department Health and Human Services also appear to have open publication policies. The **Center for Disease Control (CDC)** encourages publishing work and even suggests non-CDC publications as acceptable mediums.²⁴

¹⁷ Summary Report on Scientific Integrity, NIST. P 110.01 (Dec. 16, 2011), https://obamawhitehouse.archives.gov/sites/default/files/nist_scientific-integrity-policy.pdf.

¹⁸ NIH Employee Procedures for Complying with NIH Public Access Policy, NIH.

P 110.01 (Dec. 16, 2011), https://obamawhitehouse.archives.gov/sites/default/files/nist-scientific-integrity-policy.pdf.

¹⁹ U.S. Department of Health & Human Services, Policies and Principles for Assuring Scientific Integrity (March 30, 2012). https://www.hhs.gov/sites/default/files/open/pres-actions/scientifc-integrity-principles-12-19-11.pdf.

²⁰ U.S. Department of Education, Departmental Directive (Dec. 16, 2014). https://ies.ed.gov/pdf/EDScientificIntegrityPolicy.pdf.

²¹ NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, NAO 202-735D: SCIENTIFIC INTEGRITY (Dec. 7, 2011). https://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_202/202-735-D.html²² Id.

²³ Id.

²⁴ Center for Disease Control Guidance on Scientific Integrity Version 2.1 (April 2016).

The **Food and Drug Administration** also encourages publishing. Its Scientific Integrity Policy states that "the policy makes it clear that scientists within the agency are free to publish or present their findings even when they are not in agreement with the agency on the findings, conclusions, or policy implications in the article or speech, provided they identify the findings, conclusions, or policy implications as their own and follow all statutes and regulations applicable to such activities."²⁵

However, both agencies are part of HHS which requires review of all publications both at "inception and pre-dissemination."

Agencies Explicitly Allowing Publication without Official Prior Review

One agency that does permit publication without official prior review is the **U.S. Fish and Wildlife Service**. Its Manual has a chapter devoted to requirements for employees publishing their science in any outlet.²⁶ The Manual requires that the author include a disclaimer and that the employee make sure their supervisor is aware of the publication, but there is no provision for supervisory review or approval.

The Manual contains a notable exception for –

"Scientific information we publish as official Service positions or policy, such as findings in Federal Register notices, rulemakings, official reports from Program offices, Service Manual chapters, etc. These types of documents undergo extensive Service review for policy implications that we define elsewhere."²⁷

It is not clear whether this bars publication of any scientific information contained in Service official documents or whether it bars publication of unofficial versions of official documents.

The **U.S. Agency for International Development** encourages publishing, the only limitation being that the author must adhere to "professional standards for authoring, peer review and responsibly publishing results."²⁸

Similarly, the **Marine Mammal Commission** authorizes it scientists to publish "to the extent consistent with their job responsibilities and applicable ethics laws."²⁹

The **Department of Labor** also encourages publication in peer-reviewed journals as long as it is consistent with the law.³⁰ Both the **Department of Transportation** and the **Office of Science**

https://www.cdc.gov/od/science/docs/cdcsiguide_042516.pdf.

²⁵ U.S. Food and Drug Administration, FDA's Key Principles of Scientific Integrity. see also Scientific Integrity at FDA, FDA STAFF MANUAL GUIDES VOL. 4, SMG 9001.1 (Feb. 3, 2012), https://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/StaffManualGuides/UCM290169.pdf.

²⁶ Fish and Wildlife Service Information and Expression, Part 117 Communicating Scientific Information, Ch. 1 Policy Review Guidance for Scientific Publications (Dec. 26, 2010). https://www.fws.gov/policy/117fw1.html. ²⁷ *Id.*

²⁸ USAID Scientific Integrity Policy. https://www.usaid.gov/scitech/integrity.

²⁹ Memorandum from Timothy J. Ragen to John P. Holdren on Scientific Integrity at the Marine Mammal Commission (Feb. 14, 2012). https://www.mmc.gov/wp-content/uploads/sci_integrity_policy.pdf.

³⁰ Department of Labor, Scientific Integrity: Statement of Policy. https://www.dol.gov/asp/ideascale/si-policy-for-comment.pdf.

and Technology echo this language but include that publication must also be consistent with "policies regarding political appointees." ³¹

The **Department of Justice** Scientific and Research Integrity Policy also provides that the agency encourages publications of research, with no mention of prior review.³²

Other agencies have seemingly open publication guidelines that a bit vague or unclear. The **Department of Veterans Affairs** (VA) encourages investigators to publish their work. Yet, the agency puts restrictions on the independent promotion of VA work through media but does not include the "publication of scientific and technological findings in the peer reviewed scientific literature" under this limitation.³³

The **National Science Foundation** does not expressly encourage outside publication, but it does stipulate that employees have the right to approve of any publications that relies on their research or for which they were the author.³⁴ Its policy specifies that no staff may alter any findings of employees.³⁵

Conclusion

The policies governing publication for employees of science-based federal agencies vary greatly. While most agency policies address the need for professional development and the ability to freely disseminate information through publications, many have policies that limit this ability to publish in one way or another. Even among the agencies that do not have express limitation on the right to publish, very few have explicit, clear guidelines on the right to publish in peer-reviewed journals or similar sources without some sort of prior review or approval.

There is often no rationale expressed by the agencies that explain these differences. In some instances, scientists working on the same issue but in different agencies would face either a barrier or a clear path to publication of their research results.

In 2007, Congress directed that all agencies adopt principles and supporting actions to "ensure the communication and open exchange of data and results of research" undertaken by scientists in civilian agencies, consistent with Federal laws, regulations, and Presidential directives.³⁶

In a March 9, 2009 directive to all Federal agencies, President Obama declared: "The public must be able to trust the science and scientific process informing public policy decisions.

³¹ Memorandum from John D. Porcari, The Deputy Secretary of Transportation, to Heads of Operating Administrations and Secretarial Officers on Implementation of Departmental Scientific Integrity Policy (April 10, 2012). https://www.transportation.gov/sites/dot.gov/files/docs/mission/administrations/assistant-secretary-research-and-technology/282391/scientificintegritypolicy.pdf; MEMORANDUM FROM JOHN P. HOLDREN, ASSISTANT TO THE PRESIDENT FOR SCIENCE AND TECHNOLOGY AND DIRECTOR OF THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES ON SCIENTIFIC INTEGRITY (Dec. 17, 2010).

³² U.S. Department of Justice Scientific and Research Integrity Policy.

https://www.justice.gov/sites/default/files/open/legacy/2013/07/29/doj-scientific-integrity-policy.pdf.

³³ DEPARTMENT OF VETERANS AFFAIRS, SCIENTIFIC INTEGRITY (MARCH 27, 2012). https://www.va.gov/vapubs/viewPublication.asp?Pub ID=635&FType=2.

³⁴ NSF Scientific Integrity Policy. https://www.nsf.gov/bfa/dias/policy/si/sipolicy.pdf.

³⁶ Section 1009 of the America COMPETES Act (P.L. 110-69)

Political officials should not suppress or alter scientific or technological findings and conclusions. If scientific and technological information is developed and used by the Federal Government, it should ordinarily be made available to the public."³⁷

Notwithstanding these past enactments and directives, there remains conflicting, vague, and unenforceable agency actions that fail to guarantee all scientists, engineers, and other specialists in civilian agencies the ability to disseminate information, findings, and analysis through publication or other public presentation.

It appears that Congress would need to enact a clear, uniform, self-executing, and enforceable statute in order to ensure needed informational transparency in federally-funded scientific and technical research.

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³⁷ MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES SUBJECT: Scientific Integrity