Department of Homeland Security (DHS)
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SCIENTIFIC INTEGRITY

I. Purpose

This Directive establishes Department of Homeland Security (DHS) policies and procedures to promote Scientific Integrity. This Directive replaces Directive 026-07 and implements the January 27, 2021, Presidential Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking.

II. Background

Science and engineering play a critical role in the Department's mission to protect the homeland. From the development and deployment of technologies to support our operators, to the development of evidence-based policy, scientific integrity is critical to ensuring the Department serves the American people.

The responsibility for upholding scientific integrity lies with the entire homeland security enterprise workforce. To ensure the Department meets its expectations, DHS has designated a Scientific Integrity Official (SIO) to lead and oversee the implementation of this policy. The SIO is empowered with the independence necessary to support the review and assessment of scientific integrity concerns and enforce corrective and administrative actions. The SIO, in conjunction with the Chief Science Officer (CSO), shall advocate for appropriate engagement of scientific leadership in decision-making.

III. Scope

The policy set forth in this Directive applies to all scientific activity conducted, funded, or otherwise supported by DHS ("DHS-sponsored"). Scientific integrity is the responsibility of the entire DHS workforce. For this reason, this policy applies to all DHS personnel, political appointees, trainees, interns, and advisory committee members, when they propose, conduct, or review DHS-related science or communicate about DHS science and scientific activities, and to all levels of DHS personnel who manage or supervise scientific activities and use scientific information in decision-making.

The Scientific Integrity Policy set forth in this Directive also applies to DHS contractors, cooperators, partners, co-regulators, permittees, lessees, grantees, and volunteers when conducting or supporting DHS's scientific activities.[1]

[1] DHS will develop and require inclusion of express scientific integrity standards and requirements in all contracts and agreements, which shall be issued via policy or guidance following issuance of this Directive.

To instill in the DHS research community at large a culture of scientific integrity and maintain the visibility of scientific integrity Department-wide, DHS will: (i) post this Directive prominently on its website; (ii) educate DHS employees, contractors, and collaborators who conduct or support DHS scientific activities on their rights and responsibilities related to scientific integrity; (iii) conduct town halls on scientific integrity; and (iv) issue related policies and guidance.

IV. Policy

It is DHS policy to create and support a culture of scientific integrity across all fields and disciplines of research, development, testing, and evaluation (RDT&E). The federal definition of "scientific integrity" is "adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity."[2]

This policy focuses on the following key areas:

A. **Promoting a Culture of Discovery and Integrity**

Freedom of inquiry, open discussion, and public access to data are critical to a healthy scientific ecosystem. Science and public trust in science thrive in an environment free from political and otherwise inappropriate influence. It is the policy of the Department to:

1. Promote free and open discourse about DHS-sponsored research unless prohibited by law, national security concerns, or Executive Order.

2. Encourage the publication of scientific research in open literature, when appropriate, while ensuring correct attribution of contributions to scientific work.[3]

3. Encourage open discussion of scientific work and research (whether in a scientific or a public forum or with the media) and publication of scientific findings. Those covered by this policy are free to discuss their personal opinions on scientific and technical subject matter, provided they do not represent their personal views as those of DHS or the U.S. Government.

4. Prohibit political interference and other types of inappropriate

[2] *A Framework for Federal Scientific Integrity Policy and Practice*, January 2023. Available at https://www.whitehouse.gov/wp-content/uploads/2023/01/01-2023-Framework-for-Federal-Scientific-Integrity-Policy-and-Practice.pdf

[3] OSTP Memorandum on Ensuring Free, Immediate, and Equitable Access to Federally Funded Research, August 25, 2022. Available at https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf

influence in the design, proposal, funding, conduct, review, management, evaluation, and reporting of DHS scientific activities and the use of DHS scientific information.

5. Prohibit restrictions (unless enumerated by federal law, national security concerns, or Executive Order) that limit or reduce the availability of DHS science and scientific products outside of normal budgetary or priority-setting processes.

6. Require that DHS personnel and others covered by this policy represent their contributions to DHS scientific work fairly and accurately and neither accept nor assume unauthorized and/or unwarranted credit for another's accomplishments. To be named as an author, contributors must make a substantial intellectual contribution to a scientific work (whether through writing or editorial revision of critical intellectual content) and must approve and agree to be accountable for all aspects of the work.

7. Ensure independent review of scientific facilities, methodologies, and other scientific activities as appropriate to ensure scientific integrity.

8. Prohibit research misconduct and the use of improper methods or processes in conducting research.[4, 5]

9. Require that DHS personnel covered by this policy adhere strictly to federal ethics laws and standards, disclose potential financial and impartiality conflicts to DHS or Component ethics counsel, and follow the advice of the cognizant ethics counsel with regard to whether recusals, disclaimers, or other ethics actions will address potential conflicts of interest.

10. Require that non-federal individuals and entities covered by this policy adhere to conflict-of-interest provisions in DHS contracts and agreements, and to other applicable federal law, regulations, and policies, including the DHS policy set forth in this Directive.

11. Require that all research involving the participation of human subjects, their data, or their biospecimen and the use of non-human animals, is conducted in accordance with established laws,

[4] *Federal Policy on Research Misconduct*, Notification of Final Policy, Office of Science and Technology Policy, 65 Fed. Reg. 76,260 (December 6, 2000). Available at https://www.federalregister.gov/documents/2000/12/06/00-30852/executive-office-of-the-president-federal-policy-on-research-misconduct-preamble-for-research

[5] DHS Directive 069-01, "Research Misconduct." Available at https://www.dhs.gov/sites/default/files/publications/mgmt/knowledge-creation-and-management/mgmt-dir_069-01-research-misconduct_revision-00.pdf

regulations, DHS policies, and the ethical considerations addressed therein.

12. Ensure recognition and prompt action to address and prevent Scientific Integrity Policy violations that have a disproportionate impact on underrepresented groups or undermine the equitable delivery of Federal Government programs.

13. Ensure that DHS personnel and contractors receive scientific integrity guidance and/or training as part of new employee orientation so they are aware of their responsibilities under this Scientific Integrity Policy. DHS also will provide periodic scientific integrity training to DHS personnel and contractors who propose, review, conduct, manage, use the results of, and communicate about DHS science and scientific activities biannually. This training will be conducted in coordination with the DHS Compliance Assurance Program Office (CAPO) and will be tracked to ensure completion by all those covered by this policy.

B. **Professional Development for Scientists**

The Department is committed to supporting and facilitating, as permitted by law, the professional development of its federal scientists and engineers. It is the policy of the Department to:

1. Encourage timely publication of research in peer-reviewed, professional, scholarly journals, DHS technical reports, and publications or other appropriate outlets.

2. Support attendance and presentation of research at professional meetings including workshops, conferences, and symposia.

3. Promote service on editorial boards, as peer reviewers, or as editors of professional or scholarly journals.

4. Encourage participation in professional societies, committees, task forces, and other specialized bodies of professional societies.

5. Permit government scientists to receive honors and awards for contributions to scientific activities to the extent allowed by law, and discoveries, and to accrue the professional recognition of such honors or awards.

6. Perform outreach and engagement activities, such as speaking to community and student groups, as part of their official duties.

C. Supporting Decision-making Processes

To support the decision-making process, it is the policy of DHS to:

1. Ensure the quality, accuracy, and transparency of scientific information used to support policy and decision-making including:

    a. Use scientific information that is subject to well-established scientific processes.

    b. Ensure that scientific data and research used to support policy decisions undergo review by qualified experts, where feasible and appropriate, and consistent with law.

    c. Adhere to the Office of Management and Budget Final Information Quality Bulletin for Peer Review.[6] When independent peer reviews of scientific products are conducted by contractors, a conflict-of-interest review shall be conducted for all reviewers.

    d. Reflect scientific information appropriately and accurately and ensure that it is free of misinformation; and make scientific findings or conclusions considered or relied on in policy decisions publicly available online and in open formats, to the extent practicable.

2. Where legally permissible and appropriate, enable scientists to directly participate in policy and management decisions for which they are the agency subject matter expert in order to ensure that the science is accurately represented and interpreted.

3. Ensure the accuracy of communication of the science upon which a policy decision is based.

4. Ensure that the SIO, with input from other scientific officials, develops a transparent mechanism for DHS employees and others covered by this policy to express differing scientific opinions. When an agency employee, who is substantively engaged in the science informing an agency policy decision, disagrees with the scientific data, interpretations, or conclusions that are to be relied upon for that decision, the employee is encouraged to express that opinion complete with rationale and in writing. If differing scientific opinions are not resolved during internal deliberations, they can be part of

[6] Office of Management and Budget. "Final Information Quality Bulletin for Peer Review." *Federal Register*. Doc. 05-769, January 14, 2005. Available at: https://www.federalregister.gov/documents/2005/01/14/05-769/final-information-quality-bulletin-for-peer-review

peer review charge questions with the results publicly available. When there is no peer review, the differing opinion will be represented in the agency deliberative documents for the decision maker's consideration.

D. **Protections**

It is DHS policy to assure the protection of DHS scientists and others covered by this policy from retribution, retaliation, or reprisal and, in consultation with the DHS Office of the General Counsel (OGC), to:

1. Select and retain candidates for scientific and technical positions based on the candidate's scientific and technical knowledge, credentials, experience, and integrity, and hold them and their supervisors to the highest standards of professional and scientific ethics.

2. Promote diversity, equity, inclusion, and accessibility in the scientific workforce and to create safe workspaces that are free from harassment and discrimination. Support scientists and researchers including, but not limited to, Black, Latino, Indigenous and Native American persons, Asian Americans and Pacific Islanders, and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality; and advance the equitable delivery of Federal programs.

3. Protect from prohibited personnel practices (as defined in 5 U.S.C. 2302(b)), individuals who (i) in good faith report allegations of compromised scientific integrity, and (ii) (in the absence of a finding that the individual compromised scientific integrity) agency employees and others covered by this policy alleged to have compromised scientific integrity.

4. Prevent supervisors, managers, and any other agency leadership from intimidating or coercing scientists or others covered by this policy from proposing scientific research topics or, once selected, altering scientific data, findings, or professional opinions or inappropriately influencing scientific advisory boards.

5. Comply with whistleblower protections, specifically:

    a. By protecting employees from prohibited personnel practices (as defined in 5 U.S.C. 2302(b)), especially

those who in good faith uncover and report allegations of loss of scientific integrity, as well as those DHS employees alleged to have compromised scientific integrity in the absence of a finding that the individual compromised scientific integrity.

b. By complying with the requirements of (i) the Whistleblower Protection Act of 1989, and its expanded protections enacted by PL 103-424 and the Whistleblower Protection Enhancement Act of 2012; (ii) the National Defense Authorization Act's expansion of certain whistleblower protections to employees of federal government contractors, subcontractors, and grant recipients. 41 USC 4712; and (iii) Presidential Policy Directive 19, which prohibits supervisors from taking, failing to take, or threatening to take or fail to take any action affecting an employee's eligibility for access to classified information in reprisal for making a protected disclosure.

E. Ensuring the Free Flow of Scientific Information

DHS shall facilitate the free flow of scientific and technological information and support scientific integrity in the communication of its scientific activities, findings, and products. DHS will disseminate its scientific and technological information to the extent allowed by national security requirements, privacy policies, and classification standards, and in a responsible manner. It is the policy of DHS to:

1. Ensure that scientific findings and products are not suppressed, unreasonably delayed, or altered for political purposes and are not subjected to inappropriate influence.

2. Ensure that the work and conclusions of agency scientists and the work and conclusions of work funded/supported by the federal government are accurately represented in agency communications. If documents significantly rely on a scientist's research, identify them as an author, or represent their scientific opinion, the scientist(s) shall be given the option to review the scientific content of proposed documents.

3. Ensure that agency scientists may communicate their scientific activities objectively without political interference or other inappropriate influence, while at the same time complying with agency policies and procedures for planning and conducting scientific activities, reporting scientific findings, and reviewing and releasing scientific products within the law. Scientific products

(e.g., manuscripts for scientific journals, presentations for workshops, conferences, and symposia) shall adhere to agency technical review procedures.

4. Require that technical review and clearance processes include provisions for timely clearance and expressly forbid censorship, unreasonable delay, and suppression of objective communication of data and results without scientific justification.

5. Ensure that scientific information is accurately represented in responses to congressional inquiries, DHS personnel testimony, and other requests.

6. Accurately represent the work and conclusions of agency scientists in agency social media communications and that agency scientists are appropriately guided on use of social media, which includes but is not limited to blogs, social networks, forums, and micro blogs, consistent with the Department's communication policies.

   a. When communicating on social media in their personal capacities, subject to limitations of government ethics rules and obligation to protect nonpublic information, DHS scientists may express their personal views and opinions and may name their agency, in the context of biographical information, as long as it is clear in context that they are not speaking on behalf of, or as a representative of, the Department.

   b. If those covered by this policy choose to disclose their position at or relationship with DHS on their personal social media, a disclaimer clarifying that the account or communication represents personal views may be appropriate.

   c. Social media managers are responsible for correction of any errors pointed out by DHS scientists whose work is represented in DHS social media.

F. **Ensuring Accountability**

To ensure accountability, it is the policy of DHS to:

1. Ensure correction of the scientific record, implementation of recommendations to prevent loss of scientific integrity in the future, and enforcement of administrative actions when findings substantiate allegations of a loss of scientific integrity, through the

SIO, the Scientific Integrity Committee, or other appropriate means.

2. Encourage and facilitate early informal or formal consultation with the SIO to seek advice on preventing a situation of concern, to determine if it is a potential violation of the Scientific Integrity Policy, and to ascertain if it should be referred elsewhere in the agency for resolution.

3. Provide clear guidance on how to formally and confidentially report concerns and allegations of Scientific Integrity Policy violations. Those who report concerns and allegations need not be directly involved or witness a violation.

G. Federal Advisory Committees

Federal Advisory Committees (FACs) are an important tool for supporting the credibility, quality, and transparency of the Department's research portfolio. The Department shall adhere to the Federal Advisory Committee Act and develop policies, in coordination with the General Services Administration and consistent with the guidance on lobbyists serving on FACs. This includes Management Directive (MD) 2300 on Committee Management.[7] The Committee Management Office (CMO) exercises control and lends oversight to all DHS Federal Advisory Committees and related committees.

V. Procedures

DHS procedures focus on prevention by encouraging employees to identify situations early that could lead to losses of scientific integrity. All DHS employees and others covered by this policy are encouraged to contact the SIO to request advice and assistance with any questions related to potential losses of scientific integrity. The SIO will hold office hours to provide advice and assistance and can also be contacted at Scientific_Integrity@hq.dhs.gov.

If advice and assistance does not resolve the issue, an allegation may be filed. To report an allegation of the loss of scientific integrity, submit it in writing to the SIO or the Office of the Inspector General (OIG) (https://www.oig.dhs.gov/hotline or 1-800-323-8603). The SIO will coordinate with OIG if there are any allegations of losses of scientific integrity.

Reporting Allegations

Allegations may be submitted by individuals or entities, internal or external to DHS. An initial notice of an allegation of a loss of scientific integrity reported to the SIO or OIG should contain the following information:

[7] DHS Management Directive 2300, "Committee Management." Available at https://www.dhs.gov/sites/default/files/2022-03/Management%20Directive%202300.pdf

- The name and organization of the person(s) submitting the allegation and the name and organization of the person(s) alleged to have committed the misconduct or actions leading to the loss of integrity.
    - A description of the alleged loss of scientific integrity that includes:
        - Date
        - Circumstances
        - Location
- An explanation of how the allegation relates to the loss of scientific integrity and that demonstrates the impact of the alleged loss of integrity.
- A statement explaining any personal or professional extenuating circumstances, non-scientific disagreements or conflict(s) of interest the person making the allegation has with the subject(s), entity(ies), or situation(s), named in the allegation.

Notification Upon Receipt of an Allegation of Research Misconduct

Upon receipt of an allegation, the SIO will refer the allegation to the OIG. If the OIG receives the allegation directly, OIG will contact the SIO to discuss the allegation, as appropriate. The OIG will inform the SIO about its decision regarding disposition of losses of scientific integrity. OIG will also inform the SIO of the status of any OIG action being investigated on a quarterly basis. OIG will coordinate with the SIO and Scientific Integrity Committee as needed to improve scientific integrity policies and processes.

VI. Authorities

A. Title 6, United States Code, Section 182(10-14), “Responsibilities and Authorities of the Under Secretary for Science and Technology.”

B. Presidential Memorandum of January 27, 2021, “Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking,” 86 FR 8845 (February 10, 2021).

C. Presidential Memorandum of March 9, 2009, “Scientific Integrity,” 74 FR10671 (March 11, 2009).

D. National Science and Technology Council, *Protecting the Integrity of Government Science*, January 2022. Available at https://www.whitehouse.gov/wp-content/uploads/2022/01/01-22-Protecting_the_Integrity_of_Government_Science.pdf

E. Office of Science and Technology Policy Memorandum of December 17, 2010, “Scientific Integrity”. Available at http://www.whitehouse.gov/sites/default/files/microsites/ostp/scientific- integrity-memo-12172010.pdf

F. Office of Science and Technology Policy Memorandum of August 25,2022, “Ensuring Free, Immediate, and Equitable Access to Federally Funded

Research". Available at https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf

G. Office of Science and Technology Policy, "Federal Research Misconduct Policy," 65 FR 76260 (December 6, 2000).

H. DHS Directive 069-01, "Research Misconduct."

I. DHS Designation 00-10005, "Designation of the Chief Science Officer."

J. DHS Designation 00-10006, "Designation of the Scientific Integrity Official."

VII. Definitions

A. ***Allegation***: A formal accusation of a suspected loss of scientific integrity.

B. ***Conduct of Science***: The formulation of hypotheses, study design, testing, data collection, systematic review, statistical analysis, interpretation, findings, conclusions, and peer review.

C. ***Decision-making/policy-making***: The (1) development of policies or making determinations about policy or management; (2) making determinations about expenditures of Federal agency funds; (3) implementing or managing activities that involve, or rely on, scientific activities.[8]

D. ***Engineer***: An individual whose responsibilities include the application of mathematical, physical, and engineering sciences to solve problems. This includes, but is not limited to, Federal engineers, contractors, and trainees. It does not refer to individuals with scientific and technical training whose primary job functions are in non-scientific roles (e.g., policymakers, communicators).

E. ***Ethical behavior***: Conduct that complies with the applicable federal law, standards, and policies given the context, including those governing research ethics, federal employee ethics, contractor conflicts of interest and procurement integrity, protection of human subjects, and humane use and treatment of non-human animals in research. In the context of this Scientific Integrity Policy, it means honesty, lawfulness, equity, and professionalism in connection with DHS conducted, funded, or sponsored research.

F. ***Inclusivity***: The practice of intentionally ensuring full participation of all people and all groups, including marginalized, underserved, and underrepresented

[8] This definition is consistent with that used in the Report "Protecting the Integrity of Government Science," and was adapted from the definition of "Decision-makers" in NOAA's Scientific Integrity Policy (see https://www.noaa.gov/organization/administration/nao-202-735d-2-scientific-integrity).

contributors, without bias or prejudice. Full participation is enabled through equitable access and fair treatment in the organization. Inclusivity also means asking questions and conducting scientific activities that serve diverse constituencies and contribute to the equitable delivery of Government services. For example, in the context of human subjects research, full participation happens when researchers, oversight committees, and human subjects themselves have equal access to and treatment in research studies, no matter the individual's role. Inclusivity happens when the perspectives of those persons who are studied are accounted for in the design and execution of research studies. Particularly in situations when human subjects may be recruited from marginalized, underserved, or underrepresented populations, their voices should be heard to deflect any concerns about exploitation or unfairness.

G. ***Inappropriate influence***: The attempt to shape or interfere in scientific activities or the communication about or use of scientific activities or findings against well-accepted scientific methods and theories or without scientific justification.[9,10]

H. ***Interference***: Inappropriate, scientifically unjustified intervention in the conduct, management, communication, or use of science. It includes censorship, suppression, or distortion of scientific or technological findings, data, information, or conclusions; inhibiting scientific independence during clearance and review; scientifically unjustified intervention in research and data collection; and inappropriate engagement or participation in peer review processes or on federal advisory committees.

I. ***Loss of Scientific Integrity***: The failure to comply with the Scientific Integrity Policy or to adhere to the principles of honesty, objectivity, and transparency, professional practices, or ethical behavior when conducting, managing, using results of, and communicating about science and scientific activities.

J. ***Misinformation***: Incorrect, misleading, or misattributed information.

K. ***Objectivity***: The quality of being explicit, unbiased, honest, and impartial.

L. ***Policy***: Laws, regulations, procedures, administrative actions, incentives, or voluntary practices of governments and other institutions.

[9] Examples may include 1) suppressing a decisionmaker's ability to offer the best judgment based on scientific information; 2) preventing the use of best available science; 3) insisting on preclearance of a scientific product for purposes other than providing advance notification or opportunity to review for technical merit; 4) suppressing, altering or delaying the release of a scientific product for any reason other than technical merit or providing advance notification; or 5) removing or reassigning scientific personnel for the purposes of undermining the science; 6) using scientific products that are not representative of the current state of scientific knowledge and research (for example because of a lack of appropriate peer review, poor methodology, or flawed analyses) to inform decision-making and policy formulation; or 7) misrepresenting the underlying assumptions, uncertainties, or probabilities of scientific products. This is not intended to be an exhaustive list.

[10] Differences of scientific opinion do not rise to the level of inappropriate influence.

M. ***Political interference***: Interference conducted by political officials and/or motivated by political considerations.

N. ***Professional practices***: Conducting oneself with the qualities that are characterized by skill, competence, professional ethics, and courtesy.

O. ***Quality assurance***: The systematic monitoring and evaluation of scientific activities to ensure that standards of quality, information security, and scientific integrity are being met.

P. ***Research misconduct***: Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results or ordering, advising, or suggesting that subordinates engage in research misconduct. Research misconduct does not include honest effort or differences of opinion.[11]

Q. ***Retaliation***: Per 5 U.S.C. § 2302(b)(8), the taking or failing to take or threatening to take or failing to take a personnel action with respect to any employee or applicant for employment because of any disclosure of information that the employee or applicant reasonably believes evidences any violation of any law, rule, or regulation or gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety if such disclosure is not specifically prohibited by law and if such information is not specifically required by Executive Order to be kept secret in the interest of national defense or the conduct of foreign affairs. Per Pub. L. 112-199 § 110

R. ***Science***: The full spectrum of scientific endeavors, including basic science, applied science, evaluation, engineering, technology, economics, social sciences, and statistics, as well as the scientific and technical information derived from these endeavors.

S. ***Science communication***: Communicating science and scientific activities to a lay audience.

T. ***Scientific activities***: Activities that involve the application of well-accepted scientific methods and theories in a systematic manner, and includes, but is not limited to, data collection, inventorying, monitoring, statistical analysis, surveying, observations, experimentation, study, research, integration, economic analysis, forecasting, predictive analytics, modeling, technology development, and scientific assessment.

U. ***Scientific integrity***: The adherence to professional practices, professional ethics, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and

[11] This definition is consistent with that contained in OSTP, Federal Policy on Research Misconduct, December 6, 2000. See https://www.govinfo.gov/content/pkg/FR-2000-12-06/pdf/00-30852.pdf.

scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.

V. ***Scientific Integrity Official***: A senior career employee designated as an agency's lead to oversee implementation and iterative improvement of scientific integrity policies and processes consistent with the provisions of authorities enumerated above.

W. ***Scientist***: An individual whose responsibilities include collection, generation, use, or evaluation of scientific and technical data, analyses, or products. This includes, but is not limited to, Federal scientists, contractors, and trainees. It does not refer to individuals with scientific and technical training whose primary job functions are in non-scientific roles (e.g., policymakers, communicators).

X. ***Transparency***: Ensuring all relevant data and information used to inform a decision made or action taken is visible, accessible, and consumable by affected or interested parties, to the extent allowable by law.

VIII. Responsibilities

A. The ***Under Secretary for Science and Technology (USST)*** is responsible for promoting a culture of Scientific Integrity. The USST:

1. Provides leadership for the Department on scientific integrity by leading through example, upholding scientific integrity principles, and regularly communicating the importance of scientific integrity.

2. Ensures that Department activities associated with scientific and technological processes are conducted in accordance with the policy through training, coordination, and awareness of scientific integrity.

3. Ensures all supervisors and managers comply with the Scientific Integrity Policy and ensure accountability for those who do not.

4. Designates a senior agency career employee with demonstrated, senior-level technical expertise in scientific methods and practices, agency-appropriate qualifications, and scientific credentials for the role of CSO to serve as an advisor on scientific issues.

5. Ensures that the Scientific Integrity Policy considers, supplements, and supports agency plans for forming evidence-based policies, including the evidence-building plans required by 5 U.S.C. 312(a) and the annual evaluation plans required by 5 U.S.C. 312(b).

6. Provides adequate resources and funding to implement this policy including staffing, monitoring, evaluation and reporting, and training.

7. Supports and respects the SIO's independence, recommendations, and designation of and agency compliance with corrective scientific actions when violations of this policy are substantiated.

B. The ***Chief Science Officer (CSO)*** serves as the senior advocate and advisor for science, technology, and engineering. The CSO:

1. Serves as the principal advisor to the USST on scientific issues and ensures that the agency's research programs are scientifically and technologically well-founded, of operational relevance to DHS, and conducted with scientific integrity.

2. In cooperation with the SIO, oversees the implementation and improvement of policies and processes affecting the integrity of research conducted, funded, overseen, or otherwise sponsored by the agency, as well as policies affecting the Federal scientists who support the research activities of the agency.

3. Supports the SIO's designation of and agency compliance with corrective scientific actions when violations of this policy are substantiated.

C. The ***Scientific Integrity Official (SIO)*** is a non-political, senior level DHS employee (e.g., Scientific Professional or Senior Executive Service) with demonstrated technical expertise in scientific methods and practices who is responsible for coordinating, implementing, and ensuring compliance with the policies and procedures established in this Directive. In exercising this responsibility, the SIO:

1. Is a designated, full-time equivalent, career employee who holds a permanent tenured appointment and has agency appropriate scientific credentials.

2. Reviews all DHS allegations of potential losses of scientific integrity.

3. Convenes and chairs the Scientific Integrity Committee.

4. Coordinates with the Office of Public Affairs (OPA) to develop public communications guidance to promote transparency and free flow of scientific and technological information, consistent with privacy, security, ethics, research compliance, and proprietary considerations.

5. Oversees implementation and improvement of scientific integrity policies and processes. Serves as the primary Department contact for questions regarding scientific integrity and ensuring scientific integrity activities and outcomes are appropriately reviewed and adjudicated.

6. Leads training and outreach initiatives to facilitate employee awareness and understanding of this policy.

7. Serves as a neutral point of contact for receiving scientific integrity questions, concerns, and allegations of compromised scientific integrity.

8. Ensures allegations of a loss of scientific integrity and supporting materials are received by OIG, as necessary, and maintains a status report of responses to allegations as a means of monitoring the progress toward resolution.

9. Leads efforts to update this policy at least every two years and any accompanying guidance, as appropriate.

10. Reports to the USST and coordinates directly with the CSO for matters involving scientific integrity.

11. Coordinates with the DHS OGC (Technology Programs Law Division and Ethics and Compliance Law Division), OIG, CAPO, Office of Human Capital, OPA, Office of the Chief Information Officer, and other offices, as necessary.

12. Reports potential criminal conduct and apparent waste, fraud, or abuse uncovered during the course of investigating an allegation of compromised scientific integrity.

13. Keeps the CSO and the USST informed on the status of the implementation of this policy and any compliance concerns, as warranted.

14. Delegates responsibilities to other scientific integrity officials in subcomponents of DHS and its Components, as allowed, and chairs regular meetings of all DHS scientific integrity officials.

15. Publishes an annual scientific integrity report, described below.

16. Ensures that DHS and its Components establish, as necessary, clear administrative actions for substantiated violations of scientific integrity policies, designating responsibility for each aspect of the administrative actions to ensure accountability.

D. The ***Scientific Integrity Committee*** is an *ad hoc* committee convened by the SIO to oversee implementation and iterative improvement of scientific integrity policies and practices. It will include representatives from OGC, the Chief Human Capital Office, the Evaluation Officer, the Chief Data Officer, the Statistical Official, applicable Compliance Assurance Program Office Manager

(portfolio-based equities), Component subject matter experts, and outside subject matter experts as deemed necessary by the SIO. Members of the Scientific Integrity Committee:

1. Coordinate with the SIO in implementing the Department's scientific integrity policies and processes.

2. Act as liaison between the committee and their respective organizational units.

3. Coordinate with the relevant DHS office to correct the scientific record in accordance with any OIG findings, if required.

4. Assist with training and policy assessments, updates, and amendments.

E. ***DHS Component Heads*** ensure Component compliance with the policies and procedures in this Directive. Each DHS component:

1. Designates a representative to serve on the Scientific Integrity Committee, at the request of the SIO, and ensures Component cooperation as needed.

2. In selecting candidates for scientific positions, ensures that the selection is based upon their scientific and technological knowledge, credentials, experience, and integrity.

F. ***DHS Program Managers*** facilitate and promote publication and dissemination of scientific and technological findings for DHS projects, consistent with privacy, security, ethics, research compliance, and proprietary considerations.

G. The ***Office of Public Affairs (OPA)*** is responsible for coordinating and responding to media interview requests about the scientific and technological dimensions of the Department's work. OPA:

1. Ensures DHS scientists and engineers are permitted to speak to the media and the public in an official capacity, consistent with ethics rules and DHS policy, about scientific and technology matters based upon their official work when there is appropriate coordination with their immediate supervisor and OPA.

2. Facilitates the free flow of scientific and technological information, consistent with privacy, security, ethics, research compliance, and proprietary considerations.

3. In response to media interview requests about the scientific and

technological dimensions of the Department's work, identifies spokespersons who can, in an objective and nonpartisan fashion, describe and explain these dimensions to the American people.

4. Provides training for DHS scientists to interact with the media and in training scientists in scientific communication for the public, including the use of social media.

5. Provides written explanations and an appeal mechanism for any denials of requests of DHS scientists to communicate their work in an official capacity.

6. Responds to all requests from DHS scientists and media contacts in a timely manner consistent with the requirements from the specific request.

H. The ***Evaluation Officer***, the ***Chief Data Officer***, and the ***Statistical Official*** are responsible for incorporating scientific integrity principles into the Department's data governance and evaluation approaches. The statutory positions required to be designated by agencies by the Foundations for Evidence-Based Policymaking Act of 2018 (Public Law 115-435) include the Evaluation Officer, the Chief Data Officer, and the Statistical Official. Specifically, the Evaluation Officer:

1. Oversees or conducts assessment of the coverage, quality, methods, effectiveness, objectivity, scientific integrity, and balance of the portfolio of evaluations, policy research, and ongoing evaluation activities of the agency, in consultation with other methodologists, such as the Statistical Official, when appropriate.

2. Oversees or conducts management of agency-wide evaluation standards and requirements to ensure the scientific integrity of the agency's evaluation activities.

I. ***Managers and supervisors*** will:

1. Comply with and ensure that DHS and its employees comply with the Scientific Integrity Policy; listen, advise, and report allegations of compromised scientific integrity; and take action as appropriate.

2. Be aware of and uphold the principles and requirements in this policy. Lead through example by upholding scientific integrity principles and communicating the importance of doing so.

3. Report any knowledge of potential losses of scientific integrity to the SIO, OIG, or other scientific integrity officials.

4. Refrain from committing prohibited personnel practices (as defined in 5 U.S.C. 2302(b)) against agency employees and others subject to this policy who in good faith uncover and report allegations of compromised scientific integrity, as well as agency employees alleged to have compromised scientific integrity in the absence of a finding that the individual compromised scientific integrity.

5. Consult, as appropriate depending upon the nature of the allegation, with the SIO, human resources officer, contracting and grant personnel, ethics officer, OIG, OGC, the Privacy Office, CAPO, and the Office of Civil Rights and Civil Liberties.

6. Ensure that all media requests for government scientists receive a timely response.

J. ***Employees*** shall:

1. Be aware of the principles contained in this policy and how the policy applies to their duties.

2. Comply with this policy.

3. Adhere to accepted standards of professional ethics and practices of the relevant research/scientific communities so as to ensure scientific integrity.

4. Consider reporting to the SIO, OIG, or any scientific integrity officials any knowledge of compromised scientific integrity.

IX. Monitoring and Evaluating Scientific Integrity Activities and Outcomes

DHS will develop and implement an evaluation plan to regularly measure, monitor and evaluate ongoing scientific integrity activities and outcomes. The plan shall include, at a minimum, the expected metrics to collect and report on activities, outcomes, and critical metrics for regular assessment and iterative improvement.

The SIO, with input from the Scientific Integrity Committee and other science integrity points of contact as appropriate, is responsible for generating and making prominently available on the agency's public facing website an annual report to DHS leadership on the status of scientific integrity within the Department. The report shall highlight scientific integrity successes, accomplishments, or progress

across the Department such as any new scientific integrity hires, training, enhancements to scientific integrity policies, etc., identify areas for improvement and develop a plan for addressing critical weaknesses, if any. It will include the number of formal administrative investigations, informal requests for assistance, inquiries, and appeals involving alleged or actual deviations from the Scientific Integrity Policy and the number of investigations and pending appeals. Annual Reporting will also include anonymized individual closed scientific integrity case summaries. These summaries can be posted in a timely manner after completion of inquiries and/or incorporated into the annual report. The identities of complainants, respondents, witnesses, and others involved in the investigations shall be protected.

X. Reporting Allegations

If a DHS employee or other person covered by this Directive believes that someone has been inappropriately and/or politically influenced to alter or suppress DHS-related scientific or technological data, findings, or conclusions, they have the right to file a complaint of loss of scientific integrity.

A. All allegations of losses of scientific integrity shall be reported to the OIG via the OIG hotline (https://www.oig.dhs.gov/hotline or 1-800-323-8603).

B. The OIG will receive the allegation and investigate the alleged loss of scientific integrity.

C. If the OIG investigates and substantiates allegations of a loss of scientific integrity, it will notify the SIO and Scientific Integrity Committee, as needed, provide its findings to the appropriate personnel for correction of the data, findings, or conclusions, and refer the matter to the supervisor of the individual who engaged in the loss of scientific integrity for appropriate action.

D. Retaliation against DHS personnel or others covered by this Directive for reporting information on potential loss of scientific integrity is prohibited.

E. Disputes that may arise regarding whether DHS should participate in interviews and other public information-related activities pertaining to scientific integrity will be resolved using OPA dispute resolution procedures developed in accordance with this Directive.

XI. Related Policies

Diversity, Equity, Inclusion, and Accessibility (DEIA) in Addressing and Strengthening Scientific Integrity and the Disproportional Impact of Scientific Integrity Policy Violations on Underrepresented Groups. Policies, practices, and agency culture to promote diversity, equity, inclusion, and accessibility in the scientific workforce and Federal

workforce at large and to create safe workspaces that are free from harassment and discrimination are foundational for achieving a culture of scientific integrity. Because of existing power structures, racism, sexism, discrimination, and other forms of bias in the workplace, scientific integrity and DEIA policies may intersect in many places. Similarly, scientific integrity entails greater transparency into research processes and policy-making outcomes. The agency will review and address potential Scientific Integrity Policy violations that have a disproportionate impact on underrepresented groups or weaken the equitable delivery of agency programs.

Public Access. Policies and practices that help to ensure that publications, data, and other outputs of government-funded research are equitably and publicly available to other researchers, innovators, students, and the broader public, including underserved communities, consistent with the 2022 OSTP Memorandum on Ensuring Free, Immediate, and Equitable Access to Federally Funded Research.

Human and Animal Subject Protections. For the protection of human subjects engaged in socio-behavioral and clinical research, requirements and ethical principles for Federal departments or agencies (conducting or supporting such research) as applicable, are set forth in the Federal Policy for Protection of Human Research Subjects (the Common Rule) set forth at Title 6 C.F.R. Part 46, the Belmont Report[12], and the FDA Policy for the Protection of Human Subjects set forth at Title 21 C.F.R. §§ 50, 56, 312, and 812.

To protect the welfare of animals used in research or other activities conducted or supported by federal departments or agencies, compliance with the Federal regulations and policies governing animal care and use is required, including regulated species under the United States Department of Agriculture Animal Welfare Act (AWA) and regulations (AWAR), the Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy) administered by the National Institutes of Health, Office of Laboratory Animal Welfare, and the Guide for the Care and Use of Laboratory Animals.

Scientific Integrity with Research Security. Scientists are encouraged to interact with the broader scientific community as well as to engage with collaborators with a commitment to a shared research environment of openness, transparency, honesty, equity, fair competition, objectivity, and democratic values. However, some foreign governments are working vigorously in contradiction with these values to acquire, through both licit and illicit means, U.S. research and technology. Research security policies, such as the National Security Presidential Memorandum 33 (NSPM-33) and subsequent Guidance for Implementing NSPM-33, must harmonize with scientific integrity policies by both guarding against foreign abuses and protecting intellectual property rights, while ensuring the scientists maintain honesty, objectivity, transparency, and professional and ethical behaviors.

Foundations for Evidence-Based Policymaking Act ("Evidence Act"). Scientific integrity is a foundational component of Federal policies and data infrastructure investments supporting information quality, access, protection, and evidence building and use. The

[12] The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (April 18, 1979).

Evidence Act, also anchored in scientific integrity, called on agencies to strategically plan and organize evidence building, data management, and data access functions to ensure an integrated and direct connection to data and evidence needs. Title II of the Act – the OPEN Government Data Act - requires federal agencies to make public data assets available online, using open standards, machine-readable, open formats, and without restrictions (other than intellectual property rights) that would impede use. The metadata associated with open government data assets is made available through the Federal Data Catalogue at data.gov. Title III – the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2018 - requires agencies to enable statistical agencies to uphold their fundamental responsibilities to provide timely, relevant, credible, and objective data and statistics and to maintain public trust. Agencies should consult OMB's implementing guidance, (including OMB M-19-23, OMB M-20-12, and OMB M-21-27, and Statistical Policy Directive 1) to ensure that scientific integrity policies and procedures complement and reinforce related requirements of the Evidence Act. Agency Learning Agendas and Annual Evaluation Plans, required by the Evidence Act, are posted on agency websites, and linked at Evaluation.gov.

Notification and Federal Employee Antidiscrimination and Retaliation Act ("No FEAR Act"). Federal agencies are required to be held accountable for violations of antidiscrimination and whistleblower protection laws. Under the No FEAR Act, agencies must pay for settlements, awards, or judgments against them in whistleblower and discrimination cases out of their own budgets.

Dual Use Research of Concern. The United States Policy for Oversight of Life Sciences Dual Use Research of Concern stipulates that additional review is required for scientific research that could be directly misapplied to pose a significant threat with broad potential consequences to public health and safety, agricultural crops and other plants, animals, the environment, materiel, or national security.

XII. Questions

Any questions or concerns about this Directive should be addressed to the SIO or the Associate General Counsel for Technology Programs Law Division.