As agencies implement the scientific integrity directive, UCS will be monitoring implementation in three major areas:

A. **Protecting Government Scientists** – the directive strengthens the broken federal whistleblower protection system and ensures that scientists who report political interference in their work may do so without fear of retaliation.

B. **Making Government More Transparent** – the directive opens up federal science and decision making to scrutiny from Congress and the public is an important, and inexpensive, means of revealing and ending political interference in science.

C. **Scientific Information and Advice** – the directive strengthens federal monitoring programs, the federal scientific advisory committee system and ethics rules governing federal decision makers.

The following represent what agencies should include in their implementation of this directive:

**A. Protecting Government Scientists**

The Scientific Integrity Directive can provide federal scientists and researchers with certain rights and protections so they can fulfill their responsibility to the U.S. public. One frontline defense against political interference in science is to specifically affirm that scientists who report such abuses are protected from retaliation.

A.1. **Agencies should protect whistleblowers and refrain from retaliation through reassignments, demotions, or terminations.** In the spirit of the directive, agency heads are encouraged to issue a statement that encourages staff to speak out internally about concerns—especially those involving an abuse of science—and state that the agency values their input.

A.2. **Agencies should proactively educate federal scientists and researchers regarding their rights and protections.** This includes mandatory briefings for new hires, requirements for posting educational information in workplaces, and in-service trainings.

A.3. **Agency managers who retaliate against whistleblowers should be punished.**

**B. Making Government More Transparent**

The Scientific Integrity Directive can increase transparency and public access to federal science through better disclosure of regulatory decision making, wider use of information technology, and the reform of agency communication policies to allow scientists and researchers to freely share their expertise. Opening up federal science and decision making to scrutiny from Congress and the public is an important and inexpensive means of revealing and ending political interference in science.
B.1. Agencies should ensure free and open communication between scientists and researchers, and the media, policy makers, and the public. Agencies must adopt the following principles:

- **Scientists and researchers may freely express their personal views.** Scientists and researchers, as any federal employees, can express their personal views outside of a few narrow restrictions (such as releasing classified or proprietary information). Provided that a scientist makes an explicit disclaimer that he or she is speaking as a private citizen and is not seeking to represent official agency policy, he or she is allowed to speak freely about his or her research and to offer his or her scientific opinions—even in situations where the research may be controversial or have implications for agency policy. Agency policies governing communication with the media should make this option clear and explicit to employees.

- **Scientists and researchers have the right to review, amend, and comment publicly on the final version of any document or publication that significantly relies on their research, identifies them as an author or contributor, or purports to represent their scientific opinion.** While editing by non-scientists is often necessary and useful, final review by scientific experts is essential to ensuring that accuracy has been maintained in the clearance process.

- **Agency employees have clearly defined responsibilities in working with the media.** Employees are responsible for the accuracy and integrity of their communications and should not represent the agency on issues of politics or policy without prior approval from the agency’s public affairs officer (PAO). Employees are also responsible for working with the PAO to make significant research developments accessible and comprehensible to the public.

- **PAOs have clearly defined roles, such as responding promptly to media inquiries and providing journalists and agency staff with accurate information, but not acting as “gatekeepers.”** Scientists and researchers should not be required to obtain pre-approval from the PAO before responding to a media request about their research. However, requiring scientists and researchers to give the PAO prior notice of such interactions when possible, and to recap the interview afterward, is appropriate.

- **Employees who leave federal service are not required to sign non-disclosure agreements that restrict disclosure beyond classified or proprietary information.**

- **Public affairs staff are responsible for disseminating the media policy to agency scientists and researchers and for conducting trainings in effective media communication that emphasize scientific openness.** The official agency media policy should be publicly available on the agency website.

B.2. Agencies and departments should have policies on the clearance of official and non-official publications, presentations, and other information. Information sharing is an essential component of the scientific process. While the broad direction of federal research is dictated by agency missions and funding priorities, federal scientists and researchers are free to conduct that research and publish findings without fear of retaliation. The science adviser is responsible for developing minimum guidelines to ensure the free flow of scientific information and the president should encourage agency heads to adopt policies (or modify
existing policies) consistent with these guidelines, including:

B.2.1. **Agencies should affirm that scientific peer review is the appropriate standard for ensuring the quality of agency scientific information, and agencies should require that only qualified and non-conflicted scientists are involved in peer review of scientific publications.** Agencies are responsible to the public for providing accurate information and may adopt stricter peer review standards than those found in the private sector—including requirements that both official and non-official materials (e.g., papers submitted to scientific journals by agency employees) be peer reviewed. However, agencies should also have the flexibility to adopt peer review processes that best fit their needs. OSTP should consult with the Office of Management and Budget (OMB) to prevent the adoption of over-prescriptive “one-size-fits-all” policies on peer review.

B.2.2. **For non-official materials, authors should have the option of bypassing any policy review and publishing the work with a disclaimer that it does not represent agency policy.** A timely and transparent policy review is appropriate and recommended for official agency documents and reports.

B.2.3. **Agencies should set reasonable time limits for review and clearance of scientific publications and presentations.** The supervisor or other reviewing official shall provide to the author written clearance on the condition of specified changes being made, not later than 30 days after submission. If this deadline is not met, the author may proceed to submit the article for publication or presentation with an appropriate disclaimer stating that the article does not represent agency views or policies.

B.2.4. **Agencies should periodically make draft versions of official agency documents available to the public.** A draft version should be released if a document has been completed by agency technical staff yet held up in the policy or interagency review process for longer than six months.

B.2.5. **Scientific work done on an employee’s personal time should not be required to be submitted to an internal review process, even if the employee identifies his or her employer, provided that the work includes an appropriate disclaimer.**

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B.3. **Agencies should provide more information to the public.**

B.3.1. **Agencies to disclose more information about how a regulation was developed.** The rule-making docket should contain:

- A stated scientific rationale for any decision informed by science.
- All scientific studies in an agency’s possession related to a proposed regulation, regardless of whether the study was directly cited or whether it directly informed the ultimate proposal.
- Completed and peer-reviewed drafts of agency documents prepared by scientific or technical staff before they are subjected to White House or interagency review.
- A minority report voicing any significant dissenting scientific evidence or opinions and an explanation of how the agency resolved such differences of opinion.
- All official interagency communications regarding rules under review, including those from the White House.
- Identification by name of each official and employee who participated in the decision.

(Similar transparency requirements have already been incorporated into the FDA Amendments Act of 2007, and should be adapted for other federal agencies.)

**B.3.2. Agencies should** www.regulations.gov to make it a truly consumer-oriented and user-friendly portal for information about proposed, pending and final regulations. This website is a first step toward bringing rule making into the information age; improving its search and browsing functionality will help it live up to its full potential.

**B.3.3. Agencies should use interactive technology to engage the public in the regulatory process.** Individual agencies can innovate better methods for communicating information to the public and receiving feedback on proposed regulations.

**B.3.4. Agencies should develop a regulatory tracking system that provides information on regulatory proposals earlier in the rule-making process.** The OMB currently only produces twice-yearly reports on the president’s regulatory agenda and the status of any rules in preparation. A regularly updated tracking system will provide the public with more accurate and timely information about pending regulations and any associated paperwork requirements.

**B.4. Agencies should institute a transparency policy for meetings with outside entities.** The directive should require that the agency post on its website a complete record of all meetings with outside entities including for-profit and not-for-profit organizations, other agencies, and individuals (with the exception of meetings related to national security). The database should include the names and affiliations of meeting attendees as well as the date, time, location, and subject of the meeting.

**C. Scientific Information and Advice**

**C.1. The directive should describe how OSTP will coordinate efforts to strengthen the various federal monitoring programs.** Such programs include air pollution monitoring networks, satellite observations of Earth systems, and the collection of workplace injury statistics. The OSTP’s role should be to identify data gaps, restore important monitoring systems that have been downsized, and convene advisory committees to identify monitoring needs to ensure that policy makers have the proper data needed to make decisions.
C.2. Agencies should reform and strengthen the process by which they receive independent scientific advice. The Federal Advisory Committee Act became law in 1972 to ensure, among other goals, that the nation has access to the best objective scientific advice. Unfortunately, the integrity of many scientific advisory committees has been compromised in recent years. Strengthening the scientific advisory system should be a priority for the administration.

C.2.1. Agencies should ensure that inappropriate criteria such as party affiliation and political opinions are never a part of the process for selecting members of scientific committees. Agencies should select members of advisory committees based solely on their experience and technical qualifications in the topic the committees should address.

C.2.2. The process for selecting advisory committee members should be made more transparent through the following reforms:

- Agencies should publicly announce their intent to form a new scientific advisory committee, or to select a new member for an existing committee.
- Agencies should publish criteria for selecting committee members and should solicit nominations for committee membership.
- Agencies should call for public comment on the charge to the committee.
- After the selection process is complete, the agency should make basic information on committee members easily available to the public. This information should describe each member’s qualifications and background, and disclose past employers and funding sources.

C.2.3. Agencies should follow establish guidelines for conflicts of interest on federal advisory committees. These guidelines should address the following issues:

- Agencies should specify which advisory committees are expressly scientific and which are designed to gather stakeholder input.
- Agencies should clarify their criteria for appointing advisory committee members as “special government employees” (SGEs) or “representatives,” and ensure that the proper level of scrutiny of conflicts of interest occurs. (SGEs are subject to greater scrutiny than representatives, who are assumed to be stakeholders with special interests.)
- The Office of Governmental Ethics (OGE) should be expected to work with agencies to explicitly define the type and magnitude of financial ties that constitute a conflict of interest, and it should establish transparent guidelines on the degree to which a conflict of interest should disqualify nominees from participating in a particular committee.
- For committees whose mission is purely to provide objective scientific advice (as opposed to committees designed to gather input from stakeholders), committee members should be appointed as SGEs and should be entirely free of financial conflicts of interest.
- Scientists and researchers with conflicts of interest may provide their expertise to scientific advisory committees, but agencies should take steps to ensure that they do not have decision-making roles on those committees, and that their participation is limited to making presentations and responding to questions.
• Scientists who have taken public positions on issues should not be excluded from an advisory committee because of concerns about bias. Having a point of view does not preclude an objective assessment of the information presented to a committee. A scientist’s membership in a scientific association should not be considered evidence of bias, even if that association has a stated policy agenda.

C.2.4. Agencies should track the work of their scientific advisory committees and respond to their findings and recommendations.
• Agencies should clearly state what product they require of each advisory committee, and set a timeline and work plan for creating that product.
• Agencies should establish and enforce clear policies for how to incorporate committee findings and recommendations into agency decision making. Agencies should also publicly document any decision to overrule the recommendations of a scientific advisory committee, and provide a legitimate explanation of the decision.
• Agencies should review which scientific research and peer review work is being handled by outside contractors, with the goal of institutionalizing the input of independent advisory committees whenever feasible.

C.3. The directive should reveal progress on how the OGE will improve conflict-of-interest policies for government employees.

C.3.1. The OGE should be restructured to:
• Establish clear conflict-of-interest guidelines for federal employees.
• Serve as a central clearinghouse of public records on executive branch ethics rules, violations, and complaints.
• Act as an enforcement entity for federal government ethics rules.

C.3.2. Government employees involved in the writing or enforcement of regulations should disclose all conflicts of interest and any previous employment ties that might affect or be perceived as affecting their ability to do their job in an independent manner. These disclosures should be made in writing, publicly available, and required in all cases.

C.3.3. Employees with significant conflicts of interest may still contribute to a project, but agencies should bar them from holding decision-making authority or other positions where they can influence policy outcomes. Any conflict-of-interest waivers should stipulate the parameters of permitted participation.

C.3.4. Whenever possible the president should avoid appointing agency heads and high-level officials with recent financial ties to the industries regulated by that agency.

C.3.5. Federal employees should be required to recuse themselves from decisions involving a former employer, whether or not they have current financial ties to that employer.