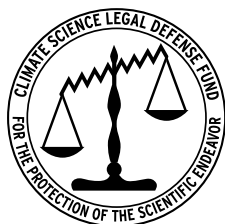


A QUICK GUIDE TO THE SCIENTIFIC INTEGRITY POLICY AT THE

National Aeronautics and Space Administration (NASA)



Brought to you by
the Climate Science
Legal Defense Fund

Table of Contents

1	INTRODUCTION	1
2	SUMMARY	2
3	WHAT DOES THE POLICY GOVERN?	2
4	WHO DOES THE POLICY GOVERN?	5
5	WHAT IS THE PROCESS FOR FILING A COMPLAINT?	6
6	WHAT HAPPENS AFTER A COMPLAINT IS FILED?	7
7	WHAT HAPPENS AFTER THE INVESTIGATION ENDS?	8
8	ADDITIONAL RELEVANT POLICIES AND RESOURCES	9
9	REPRESENTATIVE CASES AND OUTCOMES	10

A Quick Guide to the NASA Scientific Integrity Policy

Scientific integrity principles are indispensable to the missions and the functions of scientific federal agencies in the United States. Conducting sound and unbiased scientific research is essential to maintaining public trust in these agencies. For scientists employed at these agencies, understanding these principles—both how to abide by them, and what to do if they are violated—is a core job function.

Many scientific agencies adopted scientific integrity policies following a 2009 memorandum issued by President Obama, and a subsequent memorandum issued in 2010 by the White House Office of Science and Technology Policy. These policies clarify how individual agencies interpret scientific integrity. In many cases, a policy also describes how a scientist should report a loss of scientific integrity, how the agency will investigate such claims, and the rights of both a complainant and a person alleged to have committed a violation.

This guide examines the National Aeronautics and Space Administration (NASA) scientific integrity policy. The guide is designed to help NASA scientists understand how the policy applies to them, what rights they have under the policy, and how they can avail themselves of these.

The NASA policy could be significantly strengthened to provide clearer enforcement mechanisms, penalties, and rights of appeal. But it is still crucial for agency scientists to know their rights and responsibilities in respect to scientific integrity, as well as the strengths and weaknesses of the policy.

While this guide helps NASA scientists understand the agency's scientific integrity policy, it is not a substitute for legal advice regarding a particular situation. The Climate Science Legal Defense Fund offers **free, confidential consultations to scientists** with questions about scientific integrity.

Contact us at
(646) 801-0853

Or send an email to
lawyer@cslddf.org

2

SUMMARY

NASA's scientific integrity policy, [Ensuring Scientific Integrity at the National Aeronautics and Space Administration](#) (referred to as the policy and SIP in this guide), states in its introductory statement that scientific integrity is a high priority for the agency, and “NASA policies in support of scientific integrity are robust and have been in place for many years.” However, the policy falls short in that it merely indicates how other existing agency policies incorporate the principles of scientific integrity, and fails to provide any specific details about how NASA ensures these principles are upheld.

Instead, the policy consists mainly of a brief discussion of the scientific integrity principles raised in the White House memoranda and links to other NASA policies that support these principles. This means that the agency's scientific integrity policy incorporates a substantial amount of information under its umbrella, but it also makes the policy hard to understand and navigate—especially because, as of the date of this writing, many of the links on the NASA website the policy includes are not correct and site visitors must track them down elsewhere on the site. The policy also fails to put the concept of scientific integrity into context as it relates to these varied policies and does not provide guidance as to how the linked policies interact.

The way the policy addresses public access to scientific data is relatively strong compared to the way some other scientific agencies' policies handle this issue, highlighting NASA's commitment to ensuring such access in a laudable way. Yet NASA addresses many other important principles of scientific integrity only at a basic level, and provides little structure for the oversight or enforcement of those principles. NASA does not appear to have appointed a Scientific Integrity Officer to oversee scientific integrity, rather it incorporates other existing policies and their corresponding oversight roles.

3

WHAT DOES THE POLICY GOVERN?

The NASA policy on scientific integrity does not define the term “scientific integrity.” Instead, it primarily summarizes how the concepts NASA considers central to scientific integrity are addressed in other NASA policies, which do not themselves actually discuss scientific integrity. This makes it hard to understand what constitutes a violation of scientific integrity and whether a violation of one of these NASA policies also constitutes a violation of the scientific integrity policy.

This lack of clarity is made worse by the fact that, to the extent NASA's scientific integrity policy points to any procedures for filing and addressing a complaint, those procedures relate only to research misconduct and do not address the broader concept of scientific integrity. This could mean there is no recourse for scientific integrity violations that may fall outside of the narrower definition of research misconduct.

Research Misconduct

The NASA policy refers to a provision in the Code of Federal Regulations (CFR), 14 CFR § 1275 – [Research Misconduct](#), which describes the procedures NASA uses to handle allegations of fabrication, falsification, or plagiarism in proposing, performing, or reviewing research or in reporting research results for any research funded or supported by NASA.

Research misconduct is defined in the section as “fabrication, falsification, or plagiarism in proposing, performing, or reviewing research or in reporting research results. Research misconduct does not include honest error or differences of opinion.”

Conflicts of Interest

According to the policy, NASA civil servants are bound by federal restrictions against conflicts of interest and, as with most federal civil servants, NASA scientists must file annual financial disclosure reports and have annual conflict of interest and ethics trainings (SIP at § I.2(c)). The policy also states that scientists participating in NASA peer reviews and NASA research, be they NASA employees or external scientists, must follow documented standards for conflicts of interest. It lists several policies relating to conflicts of interest that apply to some or all NASA employees. Links to these policies are included in Section 8 of this guide.

Political Interference

The results of NASA-funded research must be made available to the scientific community and the public at no cost to them (SIP at § I.3). This is also supported by several additional linked policies). The policy additionally requires scientific and technical information to be “accurate and unfiltered,” and 1) prohibits public affairs staff from editing public information products in ways that change scientific data or the meaning of their content, 2) prohibits political officials from suppressing or altering scientific or technological findings, and 3) prohibits public affairs officers from asking or directing federal scientists to alter scientific findings (SIP § II).

Threats and Intimidation

NASA's policy does not address threats or intimidation to science or scientists.

Use of Science In Agency Decision-Making

The NASA policy is focused on the dissemination of information rather than policy-making. But it states that one of its goals for strengthening the actual and perceived credibility of government research is “ensuring that data and research used to support policy decisions undergo independent peer review by qualified experts” (SIP § I.2(b)).

Science Communication

Timeliness: The NASA policy does not specifically reference the need for timeliness in the dissemination of scientific information.

Press: The policy states that NASA is committed to promoting and maximizing openness with the media and NASA information must be made publicly available unless a determination is made that public dissemination of information must be prohibited or restricted (SIP § II). NASA press policies are detailed in 14 CFR § 1213: [Release of Information to News and Media](#). Details can be found in the CFR, but in summary these include:

- NASA will offer articulate and knowledgeable spokespersons who can best serve the needs of the media and the public.
- NASA employees may, but are not required to, speak to the media about their work.
- An employee who wishes to speak to the media is required notify their immediate supervisor and coordinate with the public affairs office in advance of interviews (wherever possible), or immediately afterwards.
- Employees are encouraged to have a public affairs officer present for interviews, whose role is intended to be to support the employee.
- Scientific and technical information about agency programs will be accurate and unfiltered. Edits made by public affairs staff should be done only to ensure public information products are well written and appropriate for the intended audience; they must not change scientific or technical data or content.

Social media: NASA's policy does not mention social media use by employees, and there is no reference to a separate social media policy.

Testifying before Congress: While the policy does not explicitly state that agency scientists have a right to testify before Congress, that right is protected elsewhere in federal law.

Right of scientists to review and/or correct agency communications: NASA's policy does not address scientists' right to review or correct agency communications or publications referencing their work or attributing them as authors.

Publishing and lecturing: The policy emphasizes the importance of sharing scientific findings. It encourages NASA scientists to publish in peer-reviewed, professional, and scholarly journals. It also encourages them to present research findings at professional meetings (SIP § IV.1 and IV.2. These sections also point to additional NASA policies concerning the requirements of NASA scientists to publish and present their work).

NASA scientists are allowed to serve as editors or editorial board members for professional or scholarly journals; this type of service is considered part of their official job duties and, with approval from supervisor, can be carried out as part of their job (SIP § IV.3).

Scientific societies: NASA allows scientists to fully participate in professional societies (SIP § VI.4).

Opinion statements: NASA's policy does not directly address agency scientists' ability to make public statements of their own opinions. However, the section of the CFR on Release of Information to News and Information

Media implies that scientists have the right to communicate their personal opinions publicly when it states that “NASA employees who present personal views outside their official area of expertise...must make clear that they are presenting their individual views—not the views of the Agency...” (14 CFR § 1213.105(d)).

Hiring practices

According to the policy, NASA is committed to “[e]nsuring that the selection of candidates for scientific positions is based primarily on their scientific and technological knowledge, credentials, experience, and integrity” (SIP § I.2). The section of the scientific integrity policy that addresses hiring practices also links to other policies that bolster this commitment by requiring that NASA fill positions available only to internal candidates through competition and on the basis of merit, and also use competitive practices for outside hiring.

Federal Advisory Committees

Unlike some other scientific agencies, NASA’s policy explicitly addresses federal advisory committees as part of scientific integrity (SIP § III). While the policy does not dictate specific procedures for the functioning of the committees or the selection of committee members, it does emphasize that selection of members should be based on expertise, knowledge, and contribution to the relevant subject area. It further contains some provisions aimed at ensuring the advisory committees function transparently; it requires, for example, that member vacancies should generally be announced widely so as to include the public in the process, and that professional biographical information about members should be made public, as should instances in which a member is granted a conflict-of-interest waiver.

Whistleblower Protections

The NASA policy states that NASA is committed to implementing existing whistleblower protections in the Whistleblower Protection Act and the Whistleblower Protection Enhancement Act (SIP § I.2(d)). NASA has also developed a [Whistleblower Protection Plan](#) that spells out alternative reporting procedures and lists educational opportunities for employees regarding whistleblower protections. This is further than quite a few other scientific agencies go, demonstrating that this is an area of concern for NASA.

4

WHO DOES THE POLICY GOVERN?

The NASA policy itself does not specify who it governs, a significant omission. The different policies it links to do each specify who they apply to; the most relevant example are the rules for dealing with allegations of research misconduct. Those rules apply to research funded wholly or partially by NASA which “includes any research conducted by a NASA installation and any research conducted by a public or private entity receiving NASA funds or using NASA facilities, equipment or personnel” (14 CFR § 1275.100(b)). This may offer some guidance as to who is bound by the requirements of the scientific integrity policy.

This guide is not a substitute for legal advice about any specific situation. If you are considering filing a scientific integrity complaint, or are the subject of a complaint, please contact the Climate Science Legal Defense Fund or another attorney for advice about your particular circumstances. Nonetheless, we will provide below general information about what the process may entail.

NASA's policy does not provide any details on the process of filing a complaint regarding a loss of scientific integrity, another significant omission. The closest it comes is referencing the rules regarding research misconduct, spelled out in 14 CFR § 1275. However, these rules are specific to research misconduct and do not address scientific integrity violations more broadly. The scientific integrity policy does not summarize or explicitly incorporate these rules, and it is therefore not clear to what extent they would be applied to a scientific integrity complaint.

The rules in the CFR are also not easy to understand, inviting considerable confusion for scientists about how to file a scientific integrity complaint. Nonetheless, below we discuss the processes for filing and addressing claims of research misconduct at NASA, as detailed in 14 CFR § 1275, since they are the closest analog that may shed light on how claims of scientific integrity violations are handled.

Who can make a claim under the policy?

The provisions for handling a claim of research misconduct do not specify who may make a claim.

Where and how can a scientist make a claim?

Allegations of research misconduct concerning NASA research may be made by mail to the NASA Office of Inspector General (OIG), via the OIG hotline, or the OIG cyber hotline. Allegations concerning awardee institutions may be made directly to that organization or to the OIG.

What should a complaint contain?

The provisions do not specify what a complaint should contain.

Is there a deadline for filing a complaint?

The provisions do not specify how long the person making the complaint (known as the complainant) has after learning of the alleged research misconduct to file a complaint.

Who investigates?

NASA's scientific integrity policy does not specify who should investigate a claim that there has been a loss of scientific integrity. Again, the closest analog that may shed some light on what the investigation process should entail is NASA's policy on addressing claims of research misconduct. That policy specifies that OIG should handle claims of research misconduct. It does not specify whether a panel should be convened to review a complaint, or how such a panel should be constituted.

When a complaint is made, the OIG must begin by determining whether the complaint has described an allegation of research misconduct that falls under its jurisdiction; that is, the OIG must determine whether the allegation: 1) concerns either NASA research or research being conducted by an awardee institution/in collaboration with another institution, and 2) meets the definition of research misconduct (14 CFR § 1275.102 (a)).

If those threshold requirements are met, the OIG should conduct a preliminary inquiry to determine whether a formal investigation is necessary. This inquiry should be completed within 60 days. The policies on handling research misconduct provide essentially no details as to what this inquiry should consist of or how it should be conducted (14 CFR § 1275.104).

Depending on what the inquiry shows, the OIG may launch a formal investigation. When the OIG decides to initiate an investigation, it must promptly notify the individual or institution to be investigated (known as the respondent). The investigation may involve the review of files, documents and other evidence, interviews with parties and witnesses, and the participation of outside consultants and experts (14 CFR § 1275.105).

At the conclusion of the investigation proceedings, the OIG must issue a report that includes recommended findings as to whether research misconduct has occurred. If the OIG recommends a finding that research misconduct occurred, it must also make recommendations for appropriate administrative actions (14 CFR § 1275.105 (e) and (f)).

The policies regarding research misconduct also contain provisions describing how the OIG should proceed if allegations concern research conducted at other institutions. In general, in this case, the OIG should defer any internal investigation or inquiry pending an investigation by the external institution involved. The OIG must receive a report of such an external investigation, and determine whether to accept the investigation and its determination in whole or in part. The OIG must make this determination within 45 days. If the OIG chooses not to accept the external determination, it must initiate its own investigation (14 CFR § 1275.102 (c) and (d)).

Is the confidentiality of the parties protected?

To the extent possible, the identity of sources who wish to remain anonymous are to be kept confidential, and files are to be treated in such a way as to exempt them from disclosure under the Freedom of Information Act (14 CFR § 1275.104(e)).

How long will the investigation take?

An investigation report should be issued within 120 days of the start of the investigation (14 CFR § 1275.105(a)).

Do the parties have a right to a hearing?

If the OIG initiates a formal investigation into alleged research misconduct, that investigation may include “an opportunity for the respondent to be heard.” Such an opportunity does not appear to be guaranteed, and there is no provision for an opportunity for the complainant to be heard (14 CFR § 1275.105(b)(6)).

Do the parties have a right to respond to the findings of the investigation?

The OIG should provide a draft of the investigation report to the respondent, who can submit comments within 20 days of receiving the draft. Any comments submitted by the respondent will receive full consideration in the final investigation report (14 CFR § 1275.105(d)).

7

WHAT HAPPENS AFTER THE INVESTIGATION ENDS?

The investigation report and recommended actions are sent to the NASA Adjudication Officer. The Adjudication Officer may then initiate further actions, which may include offering the respondent another opportunity to comment before issuing a decision about the case. The Adjudication Officer may also return the investigation report to the OIG with a request for further fact finding or analysis.

Upon review, based on a preponderance of the evidence, the Adjudication Officer shall issue a decision as to whether research misconduct has taken place and, if so, the appropriate administrative actions to take. The Adjudication Officer must issue the decision within 30 days of receipt of the investigation report (14 CFR § 1275.107).

If a loss of scientific integrity is found, who decides what the resolution/remedy should be?

The Adjudication Officer issues the recommendation for appropriate administrative actions to be taken by NASA.

Do the parties have the right to appeal if initial decision is not in their favor?

The Adjudication Officer's decision is sent to the respondent and, if appropriate, to the complainant (although there is no indication of when it is or is not appropriate to send the decision to the complainant).

The respondent may appeal the decision by notifying the NASA Appeals Official (who is generally the NASA Deputy Administrator) within 30 days of receiving the decision. There is no procedure for the complainant to appeal a finding of no misconduct.

The NASA Appeals Official must notify the respondent of their decision to affirm, overturn, or modify the decision of the Adjudication Official within 30 days of receiving the appeal (14 CFR § 1275.108 (a) and (b)).

What are the penalties for misconduct?

Section 1275.106(a) of the CFR contains recommendations for administrative actions that may be necessary to correct research misconduct. These include:

- A letter of reprimand
- Requiring special prior approval from NASA for activities
- Requiring an official certify the accuracy of reports
- Restricting activities under a research award
- Requiring approval for requests for funding from affected the individual, department, or institution to ensure steps have been taken to prevent a repeat of the misconduct
- Suspending or terminating an active award
- Debarring or suspending an individual, department, or institution from participating in NASA programs for a specified period of time

8

ADDITIONAL RELEVANT POLICIES AND RESOURCES

The policy incorporates a significant number of other relevant policies including, but not limited to:

- NASA Policy Directive (NPD) 1000.0A: [NASA Governance and Strategic Management Handbook](#)
- NPD 1080.1: [Policy for the Conduct of NASA Research and Technology](#)
- NPR1080.1, [Requirements for the Conduct of NASA Research and Technology](#)
- 14 CFR § 1275: [Research Misconduct](#)
- NPR 3335.1: [Internal Placement of NASA Employees](#)
- 5 CFR § 300.102: [Employment Practices](#)
- NPD 1000.0A: [NASA Governance and Strategic Management Handbook](#)
- NPR 7120.8: [NASA Research and Technology Program and Project Management Conduct](#)
- NPR 2200.2: [Requirements for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information](#)

- 14 CFR § 1213: [Release of Information to News and Information Media](#)
- [Guidebook for Proposers Responding to a NASA Research Announcement or Cooperative Agreement Notice](#)
- Science Mission Directorate Policy Document (SPD)-01: [Handling Conflicts-of-Interest for Peer Reviews](#)
- SPD-05: Preventing Financial Conflicts for IPA Employees (not publicly available)
- Human Research Program (HRP)-47053: [Science Management Plan](#)

9

REPRESENTATIVE CASES AND OUTCOMES

Unlike some other scientific agencies, NASA does not appear to make the outcomes of past cases public.

While this guide helps NASA scientists understand the agency's scientific integrity policy, it is not a substitute for legal advice regarding a particular situation. The Climate Science Legal Defense Fund offers **free, confidential consultations to scientists** with questions about scientific integrity.

Contact us at
(646) 801-0853

Or send an email to
lawyer@csldf.org

NOTES

The Climate Science Legal Defense Fund produced this guide to help scientists understand their rights under federal agency scientific integrity policies. This guide concerns only U.S. laws, and nothing in it should be construed as legal advice for your individual situation.

CSLDF provides free counsel to scientists with legal questions pertaining to their work. Contact us at **(646) 801-0853** or email lawyer@csldf.org to arrange a free and confidential consultation with an attorney.



The Climate Science Legal Defense Fund (CSLDF) works to protect the scientific endeavor by helping defend climate scientists against politically and ideologically motivated attacks. CSLDF is a non-profit organization under section 501(c)(3) of the Internal Revenue Code.

This guide was made possible by the generous support of the Common Sense Fund, the Energy Foundation, the David and Lucile Packard Foundation, and CSLDF donors.

Mailing Address

475 Riverside Drive
Suite 244
New York, NY 10115

Website

csldf.org

Twitter

[@ClimSciDefense](https://twitter.com/ClimSciDefense)

© February 2020

Climate Science Legal
Defense Fund

Find this guide online at:

csldf.org/resources/scientific-integrity