

Responsible Conduct of Research

NIST O 5201.00
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PURPOSE

This directive describes the requirements and responsibilities under the NIST Policy for Responsible Conduct of Research. It describes NIST-wide principles to guide and ensure that the scientific research conducted at NIST or supported by NIST is undertaken with the highest regard for an unadulterated research record and protection of the interests of everyone involved in that research.

APPLICABILITY

This directive is applicable to all NIST staff members (Federal and Associates), political appointees, trainees, interns, and advisory committee members in their capacity as special government employees, engaged in research activities at or for NIST, to the extent allowed by law and the terms of the Associate's agreement.

REFERENCES

- 15 CFR Part 14 [Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, Other Non-Profit and Commercial Organizations, as codified by the Department of Commerce](#)
- [2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#)
- 7 United States Code 54 §2131-2156 [The Animal Welfare Act, as amended](#)
- 42 U.S.C. Part 6A §201 [Health Research Extension Act of 1985](#)
- Federal Research Misconduct Policy [Office of Science and Technology Policy \(2000\)](#)
- Department of Commerce [Standard Terms and Conditions for Financial Assistance](#) effective at the time of award or incorporated by amendment.
- NIST P 5200.00 [Responsible Conduct of Research Policy](#)
- NIST PR 5201.01 Reporting and Resolving Allegations of Research Misconduct
- Supplemental References – See Appendix A

DEFINITIONS

Research misconduct - The fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. It does not include honest error or differences of opinion.

Fabrication - Making up data or results and recording or reporting them.

Falsification - Manipulating research materials, equipment, or processes or changing or omitting data or results such that the research is not accurately represented in the research record.

Plagiarism - The appropriation of another person's ideas, processes, results, or words without giving appropriate credit.¹

Good faith allegation - An allegation made with the honest belief that research misconduct may have occurred. An allegation is not in good faith if it is made with reckless disregard for or willful ignorance of facts that would disprove the allegation.

PRINCIPLES AND REQUIREMENTS

Advances in science, engineering, and all fields of research depend on the reliability of the research record, as do the benefits associated with them in areas such as commerce and national security. Sustained public trust in the research enterprise also requires confidence in the research record, in the processes involved in its ongoing development, and in the ethical treatment of everyone involved in that research. Research conducted or supported by NIST must be conducted in a manner that instills confidence in research findings, underscores the reliability of research findings, and protects the interests of individuals and organizations who participate in the research. This directive establishes the scope of NIST's interest in the accuracy and reliability of the research record, the processes involved in its development, and the ethical treatments of the subjects of that research. It contains a definition of research misconduct and delineates the responsibilities for ensuring scientific research excellence and responsible conduct of research conducted or supported by NIST.

To create an environment where research is conducted responsibly:

- NIST shall examine, resolve, and report all reasonable allegations of research misconduct. The processes shall protect the rights and privacy of every individual accused.
- NIST shall protect human and animal subjects who are involved in NIST conducted or NIST supported research.

¹ Note: NIST staff members should record and disclose when, why, and how any software tools, including those containing artificial intelligence algorithms, are knowingly used in developing and communicating research.

- Everyone conducting research at or for NIST shall report observed, suspected, or apparent research misconduct to their line management and/or the NIST Scientific Integrity Officer (SIO). If an individual is unsure whether a suspected incident falls within the definition of research misconduct, they consult with the SIO to discuss the suspected research misconduct informally, which may include discussing it anonymously and/or hypothetically.
- Everyone conducting research at or for NIST shall cooperate with their institutional officials in the review of allegations and the conduct of inquiries and investigations.
- NIST shall limit disclosure of the identity of respondents and claimants to only individuals who need to know in order to carry out a thorough, competent, objective, and fair research misconduct proceeding.
- NIST shall protect staff members who have made good faith allegations of research misconduct from prohibited personnel practices.
- NIST shall protect staff members who have been accused of research misconduct from prohibited personnel practices.
- No one subject to this directive shall retaliate in any way against claimants, witnesses, or committee members. Any alleged or apparent retaliation against claimants, witnesses or committee members shall be reported immediately to the SIO, who shall review and, as necessary, refer the matter. The SIO shall make all reasonable and practical efforts to counter any potential or actual retaliation and protect and restore the position and reputation of the person against whom the retaliation is directed.
- NIST shall make all reasonable and practical efforts to protect or restore the reputation of persons alleged to have engaged in research misconduct, but against whom no finding of research misconduct is made.
- Throughout the research misconduct proceeding, NIST shall review the situation to determine if there is any threat of harm to public health, federal funds and equipment, or the integrity of the NIST supported research process. In the event of such a threat, NIST shall take appropriate interim administrative actions to protect against any such threat.

A finding of research misconduct requires that:

- There be a significant departure from accepted practices of the relevant research community; and
- The misconduct be committed intentionally, knowingly, or recklessly; and
- The allegation must be proved by a preponderance of evidence.

Protection of intellectual property rights, scientific integrity, and the safety of NIST staff members are treated in separate directives.

Authorship is addressed differently by different professional societies. It should not be assumed that all individuals who contribute to a scientific document will have the same perception as to the level of contribution that warrants credit as an author. Authorship disputes are not covered by this policy unless they involve plagiarism. More information on Authorship is found in NIST Guidance 5201.01.

Responsible Conduct of Research Requirements:

Allegation Handling

The procedures for addressing allegations of research misconduct are described in NIST PR 5201.01, Reporting and Resolving Allegations Regarding Research Misconduct. The SIO shall bear primary responsibility for adjudicating allegations regarding research misconduct for NIST employees. Allegations against NIST Associates shall be referred to their home institution.

Training

Training for responsible conduct of research shall be included in the Scientific Integrity Program training. This training is intended to provide an overview of the principles of responsible conduct of research but may not provide the level of detail required by some funding agencies. In those situations, researchers may be required to complete additional training as required by the funder.

Reporting

As part of an annual Scientific Integrity Program report, the SIO shall report the number of formal administrative assessments, investigations and appeals involving alleged or actual research misconduct and the number of investigations and pending appeals.

The annual report may also include anonymized individual closed research misconduct case summaries. These summaries can be posted in a timely manner after completion of investigations and/or incorporated into the annual report. The identities of complainants, respondents, witnesses, and others involved in the investigations shall be protected.

RESPONSIBILITIES

NIST Director

- Sets NIST Policy for responsible conduct of research.

NIST Associate Director for Laboratory Programs (ADLP)

- Authorized by the NIST Director to determine how the NIST Policy for responsible conduct of research is implemented to meet expectations and create the desired environment for Laboratory Programs.
- Ensures the implementation of notices, orders, procedures, and guidance related to responsible conduct of research in the Directives Management System.

- Monitors the institutional environment to address suspected incidents of research misconduct.
- Administers processes and procedures that address allegations of research misconduct.
- Appoints the NIST SIO.
- Serves as the Deciding Official (DO) for research misconduct investigations. This role may be delegated to another NIST executive with appropriate scientific expertise relevant to the case.

NIST Scientific Integrity Officer (SIO)

- The SIO has primary responsibility for implementation of the institution's Scientific Integrity Program which includes responsible conduct of research and scientific integrity policies and procedures.
- Reports to the ADLP on all matters related to responsible conduct of research.
- Coordinates with other institutions when allegations arise that involve NIST and non-NIST staff.
- Leads training and outreach initiatives to facilitate employee awareness and understanding of this policy.
- Takes all reasonable and practical steps to foster a research environment that promotes the responsible conduct of research, research training, and activities related to that research or research training, discourages research misconduct, and deals promptly with allegations or evidence of possible research misconduct.
- Consults confidentially with persons uncertain about whether to submit an allegation of research misconduct.
- Conducts an initial assessment of allegations and submitted materials following established procedures, to determine whether the allegations pertain to research misconduct and the appropriate handling of said allegations. Provides oversight of agency responses to allegations of research misconduct referred for an investigation, including:
 - Reviewing agency-submitted reports of allegations and their disposition; and
 - Maintaining a status report of responses to allegations as a means of monitoring the progress toward resolution.
- Coordinates with the Office of the Chief Counsel (OCC), Office of Inspector General (OIG), the Department of Commerce Ethics Law and Programs Office, the Office of Human Resources Management, Public Affairs Office, the Chief Information Officer, and other offices, as necessary.

- Reports any potentially criminal behavior to OIG that is uncovered while responding to an allegation of research misconduct and coordinate as appropriate related to the referral provided to OIG.
- Maintains records in accordance with 44 U.S.C. Chapters 29 (Records Management by the Archivist of the United States and by the Administrator of the General Services) and 33 (Disposal of Records). All NIST files will follow the guidance outlined in the Comprehensive Records Schedule found [here](#).
- Prepares an annual report for the Scientific Integrity Program.
- Develop and provide Scientific Integrity Program training, which includes an overview of Responsible Conduct of Research. New staff members will receive training within their first full performance cycle after they are hired. Current staff members will receive training within one year of this Order approval.

Office of Information Systems Management (OISM) Director

- Supports sequestration and analysis of electronic records during an inquiry or investigation.

Office of Acquisition and Agreements Management (OAAM) Director

- Ensures that NIST contracts, interagency agreements, grants, cooperative agreements, and other agreements that require research or activities performed at NIST facilities include appropriate terms and conditions that require compliance with this NIST directive.

Technology Partnerships Office (TPO) Director

- Informs domestic guest researchers of their need to comply with the NIST Policy on responsible conduct of research as found in NIST P 5200.00.

Office of International and Academic Affairs (OIAA) Director

- Informs foreign guest researchers of their need to comply with the NIST Policy on responsible conduct of research as found in NIST P 5200.00.

OU Directors, Managers and Supervisors

- Ensures implementation of, compliance with, and accountability for responsible conduct of research within the OU-by-OU staff members.
- Provides leadership in support of responsible conduct of research.
- Report any knowledge of potential research misconduct to the SIO.
- Consult with OHRM or sponsor host organizations regarding disciplinary procedures or remedial actions as necessary.
- Consult as appropriate with the SIO.

NIST Staff members (Federal and Associates), Political Appointees, Trainees, Interns, and Advisory Committee Members in Their Capacity as Special Government Employees

- Adhere to the procedures and principles related to responsible conduct of scientific research
- Direct all internal or external allegations of research misconduct to the NIST SIO.

DIRECTIVE OWNER

604 – Research Protections Office

APPENDICES

Appendix A: Supplemental References

Appendix B: Revision History

APPENDIX A

SUPPLEMENTAL REFERENCES

Nothing in this order shall be interpreted in a manner that is inconsistent with topics covered in Department of Commerce policies and federal laws listed below:

- Department of Commerce
 - DAO 202-751, Discipline
 - DAO 219-1, Public Communications
 - DAO 218-1, Legislative Activities
 - DAO 218-2, Congressional Correspondence and Inquiries
 - DAO 218-3, Reports to Congress Required by Law
 - DAO 219-4, Publications and Audiovisuals Control System
 - DAO TBD, Scientific Integrity
- Information Quality Act (Pub. L. 106-554)

APPENDIX B

REVISION HISTORY

| Revision | Date | Responsible Person | Description of Change |
|---------------|------------|------------------------|--|
| Initial Draft | 11 June 12 | Richard Cavanagh (OSP) | First Draft |
| Draft | 2014 | Richard Cavanagh | Vetted by team Henry Wixon Nicholas Barbosa Timothy Burns Michael H. Kelley Michael Moore Sheila Nichols David Yashar Nikolai Zhitenev |
| Rev .01 | 11/19/2014 | Dan Cipra | Incorporated all DRB changes |
| Rev. .02 | 2/18/2015 | Dan Cipra | Incorporated OCC Interim Review comments based on DO approval |
| Rev 1.0 | 7/20/2023 | Anne Andrews | Periodic updates to be consistent with changes related to Scientific Integrity policy updates |
| Rev 2.0 | 2/12/2024 | Anne Andrews | Incorporated DRB review comments |