Responsible Conduct of Research Order

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 those involved in that research.

APPLICABILITY

This directive is applicable to all NIST employees and Associates 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
- 15 CFR Part 24 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments, as codified by the Department of Commerce
- 15 CFR Part 27 The Common Rule for the Protection of Human Subjects, as codified by the Department of Commerce
- 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 (2017)
- NIST P 5200.00 NIST Responsible Conduct of Research Policy
- NIST O 6104.00 NIST Investigating Suspected Misuse of IT Resources
- NIST O 6103.00 Access and Use of IT Resources
- International Ethical Guidelines for Health-related Research Involving Humans (Council for International Organizations of Medical Sciences, 2016)

DEFINITIONS

Adjudication - The reviewing of recommendations and determination of appropriate corrective actions.

Allegation - Any written statement, having a self-identified author, describing possible research misconduct and given to the NIST Responsible Conduct Officer (RCO).

Claimant(s) - A person who makes an allegation of research misconduct.

Deciding Official (DO) - The NIST official who makes the final determination on allegations of research misconduct and any responsive institutional actions.

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.

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.

Human Subject - A living individual about whom a research investigator (whether professional or student) conducting research obtains: 1) data through intervention or interaction with the individual, or 2) identifiable private information.

Humane care and treatment of Animals in Research - Encompasses the caring for and use of animals in ways judged to be scientifically, technically, and humanely appropriate.

Inquiry - The assessment of whether an allegation of research misconduct has substance and if an investigation is warranted. The purpose of the inquiry is not to reach a final conclusion with respect to a finding of research misconduct.

Inquiry Committee – A committee consisting of individuals who do not have unresolved personal, professional, or financial conflicts of interest with those involved with the inquiry and should include individuals with the appropriate scientific expertise to evaluate the evidence and issues related to the allegation, interview the principals and key witnesses, and conduct the inquiry.

Inquiry Official - Identified by the Research Conduct Officer (RCO) for each inquiry and is the lowest level line manager to whom either both the respondent and claimant report, or is a line manager to whom neither the respondent nor claimant report.

Investigation - The formal development of a factual record, and the examination of that record leading to dismissal of the case or to a recommendation for a finding of research misconduct or other appropriate remedies. The investigation will also determine whether

there are additional instances of possible misconduct that would justify broadening the scope beyond the initial allegations.

Investigation Committee - A committee consisting of individuals who do not have unresolved personal, professional, or financial conflicts of interest with those involved with the investigation and should include individuals with the appropriate scientific expertise to evaluate the evidence and issues related to the allegation, interview the respondent and claimant and conduct the investigation. Individuals appointed to the investigation committee may also have served on the inquiry committee.

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

Research Conduct Officer (RCO) - The institutional official responsible for assessing allegations of research misconduct and determining when such allegations warrant inquiries and for overseeing any inquiries and investigations.

Research Record - Comprises data or results that embody the facts resulting from scientific inquiry and technological development, and includes, but is not limited to, research proposals and grant applications (funded or not), laboratory records and prototypes (both physical and electronic), computer files and printouts, computer programming codes, progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.

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.

Respondent(s) - The person(s) against whom an allegation of research misconduct is directed or the person whose actions are the subject of the inquiry or investigation.

Retaliation - Any action that adversely affects the employment or other status of an individual that is taken by an institution or an employee because the individual has, in good faith, made an allegation of research misconduct or of inadequate institutional response thereto, or has cooperated in good faith with an investigation of such 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 those 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 will examine, resolve, and report all reasonable allegations of research misconduct. The processes will protect the rights and privacy of those accused.
- NIST will protect human and animal subjects who are involved in NIST conducted or NIST supported research.
- All those conducting research at or for NIST will report observed, suspected, or apparent research misconduct to their line management and/or the NIST RCO. If an individual is unsure whether a suspected incident falls within the definition of research misconduct, he or she may meet with or contact the RCO to discuss the suspected research misconduct informally, which may include discussing it anonymously and/or hypothetically.
- All those conducting research at or for NIST will 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 those who need to know in order to carry out a thorough, competent, objective, and fair research misconduct proceeding.
- No one subject to this directive may retaliate in any way against claimants, witnesses, or committee members. Any alleged or apparent retaliation against claimants, witnesses or committee members should be reported immediately to the RCO, who shall review and, as necessary, refer the matter, and who 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.
- As requested and as appropriate, 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 will 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 will 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, or 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 and Associates are treated in separate directives.

Authorship is addressed differently by different professional societies. It should not be assumed that all those 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 (see OSTP 2000). More information on Authorship is found here.

RESPONSIBILITIES

NIST Director

- Sets NIST Policy for responsible conduct of research.

NIST Associate Director for Laboratory Programs

- 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.
- Serves as the Deciding Official (DO) for NIST regarding NIST research misconduct matters.
- Appoints the NIST RCO.
- Has written policies and procedures for responding to allegations of research misconduct, as required by NIST O 5201.00.

Deciding Official (DO)

- The DO will receive the investigation report and, after consulting with the RCO and/or other NIST officials, decide the extent to which NIST accepts the findings of the investigation and, if research misconduct is found, decide what, if any, institutional administrative actions are appropriate.

Inquiry Official (IO)

- The IO will receive the inquiry report and after consulting with the RCO and/or other institutional officials, decide whether an investigation is warranted.
- Any finding that an investigation is warranted must be made in writing by the IO. If it is found that an investigation is not warranted, the IO and the RCO will ensure that detailed documentation of the inquiry is retained according to the NIST record retention schedule.

NIST Research Conduct Officer (RCO)

- The RCO has primary responsibility for implementation of the institution's policies and procedures on responsible conduct of research.
- Coordinates with other institutions when allegations arise that involve NIST and non-NIST staff.
- Informs institutional members about its research misconduct policies and procedures and NIST's commitment to compliance with those policies and procedures.
- Takes appropriate interim action during a research misconduct proceeding to protect public health, federal funds and equipment, and the integrity of the NIST supported research processes.
- 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.
- Receives allegations of research misconduct.
- Assesses each allegation of research misconduct to determine if an inquiry is warranted as a result of the allegation falling within the definition of research misconduct, being within the jurisdictional criteria of NIST P 5200. 00, and being sufficiently credible and specific so that potential evidence of research misconduct may be identified.
- Appoints an IO for each allegation that is found to be sufficiently credible and specific to warrant an inquiry.
- Convenes an Investigation Team when warranted by an IO. Ensures that an Investigation Report is issued for each investigation.
- In cooperation with other institutional officials, takes all reasonable and practical steps to protect or restore the positions and reputations of good faith claimants, witnesses, and committee members and to counter potential or actual retaliation against them by respondents or other institutional members.
- Makes all reasonable and practical efforts, if requested and as appropriate, 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.
- Promptly takes all reasonable and practical steps to obtain custody of all research records and evidence needed to conduct the research misconduct proceeding, inventory the records and evidence, and sequester them in a secure manner.
- Takes all reasonable and practical steps to ensure the cooperation of respondents and other NIST staff and Associates with research misconduct proceedings, including, but not limited to, their providing information, research records and evidence.
- Provides confidentiality to those involved in the research misconduct proceeding as

required by applicable law, and NIST policy.

- Determines whether each person involved in handling an allegation of research misconduct has a personal, professional or financial conflict of interest and takes appropriate action, including recusal, to ensure that no person with such a conflict is involved in the research misconduct proceeding.
- Keeps the DO and others who need to know informed of the progress of the review of the allegation of research misconduct.
- Assists the DO in implementing his/her decision to take administrative action against any claimant, witness, or committee member determined by the DO not to have acted in good faith.
- 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
- Ensures that administrative actions taken by NIST are enforced and takes appropriate action to notify other involved parties, such as sponsors, law enforcement agencies, professional societies, and licensing boards, of those actions.
- Follows procedures for responding to allegations of research misconduct, as required by NIST PR 5201.01.
- Complies with written policies (NIST P 5200.00) and procedures (NIST PR 5201.01) and the requirements of NIST O 5201.00.

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 all NIST contracts, grants, cooperative agreements, and other agreements contain appropriate provisions to ensure that research supported by NIST is conducted according to the principles of the NIST policy.

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.

NIST Line Management

- Ensures implementation of, compliance with, and accountability for responsible conduct of research at NIST and by NIST staff.

- Provides leadership in support of responsible conduct of research.
- 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.
- Ensures that all NIST contracts, grants, cooperative agreements, and other agreements contain appropriate provisions to ensure that research supported by NIST is conducted according to the principles of the NIST policy.

NIST Employees

- Adhere to the procedures and principles related to responsible conduct of scientific research in the NIST Directives Management System
- Notify NIST management of suspected incidents of research misconduct.
- Cooperate with institutional responses to allegations of research misconduct.
- Direct all internal or external allegations of research misconduct to the NIST RCO.

NIST Associates

- Adhere to the procedures and principles related to responsible conduct of scientific research in the NIST Directives Management System, as specified in written agreements with NIST.
- Cooperate with institutional responses to allegations of research misconduct.

Claimant

- The claimant is responsible for making allegations in good faith, maintaining confidentiality, and cooperating with the inquiry and investigation. As a matter of good practice, the claimant should be interviewed at the inquiry stage and given the transcript or recording of the interview for correction. The claimant must be interviewed during an investigation, and be given the transcript or recording of the interview for correction.

Respondent

- The respondent is responsible for maintaining confidentiality and cooperating with the conduct of an inquiry and investigation.

DIRECTIVE OWNER

Associate Director for Laboratory Programs

APPENDICES

Appendix A: Supplemental References

Appendix B: Revision History

APPENDIX A

SUPPLEMENTAL REFERENCES

Nothing in this order will 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 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 203-26 "Department of Commerce Grants Administration"
- 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	Nicholas Barbosa	Vetted by team
		Timothy Burns	
		Richard Cavanagh	
		Michael H. Kelley	
		Michael Moore	
		Sheila Nichols	
		Henry Wixon	
		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