

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

DEPARTMENTAL REGULATION		Number: DR 1074-001
SUBJECT: Scientific Integrity	DATE: May 10, 2013	
	OPI: Office of the Chief Scientist	

Section

- 1 Purpose
- 2 Special Instructions/Cancellation
- 3 Background
- 4 References
- 5 Policy
- 6 Responsibilities
- 7 Definitions
- 8 Abbreviations
- 9 Procedures
- 10 Appendix A - Code of Scientific Ethics

1. PURPOSE

This Directive establishes the U.S. Department of Agriculture's (USDA) Scientific Integrity Policy and provides instruction and guidance to Departmental leadership, employees, and contractors to ensure the highest level of integrity in all aspects of the executive branch's involvement with scientific and technological processes and analyses.

2. SPECIAL INSTRUCTIONS/CANCELLATION

This is a new regulation, superseding Secretary's Memorandum 1074-001 dated August 5, 2011.

3. BACKGROUND

This policy includes guidance to decision makers as they develop public policies informed by sound science relevant to food, agriculture, natural resources, rural development, and related issues. This information will ensure public confidence by articulating the principles of scientific integrity and roles and responsibilities of all USDA employees, including career staff and political appointees, in maintaining these principles within USDA. It will help ensure that services to USDA clients are backed by

sound science and that the actions of employees and contractors are conducted with integrity.

The policy directs employees, political and career, on both the proper use of scientific findings and the principles of conducting scientific activities consistent with the Presidential Memorandum on Scientific Integrity dated March 9, 2009; the Office of Science and Technology Policy (OSTP) 2010 guidance on scientific integrity; the Office of Management and Budget (OMB) Information Quality Guidelines¹; SM -1074-001; and the 2004 OMB Final Information Quality Bulletin for Peer Review.²

4. REFERENCES

This directive must be used in conjunction with:

- a. [5 USC 301, Departmental Regulations](#)
- b. [7 CFR 2.21\(a\)\(11\) Related to Scientific Integrity](#)
- c. [7 CFR 2.69, Establishment of the Office of the Chief Scientist](#)
- d. [PL 106-554, The Information Quality Act](#)
- e. [PL 103-354, Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994](#)
- f. [Statistical Policy Directive No. 3, Compilation, Relevance, and Evaluation of Principal Federal Economic Indicators](#)
- g. [Statistical Policy Directive No. 4, Release and Dissemination of Statistical Products Produced by Federal Statistical Agencies](#)
- h. [65 FR 76260-76264, Federal Policy of Research Misconduct](#)
- i. [DR 2401-001, USDA Intramural Research Misconduct Policies and Guidelines](#)
- j. [7 CFR 3022 \(Jan. 1, 2011\), Research Institutions Conducting USDA-Funded Extramural Research; Research Misconduct](#)
- k. [5 USC 1221, Whistleblower Protection Act of 1989](#)
- l. [5 USC Appendix 2, Federal Advisory Committee Act](#)
- m. [DR 1041-001, Advisory Committee Management](#)
- n. [DR 1410-001, Publications Review/Clearance Policy](#)
- o. [DR 1495-001, New Media Roles, Responsibilities, and Authorities](#)
- p. [5 CFR 735, Employee Responsibilities and Conduct](#)
- q. [5 CFR 2635, Standards of Ethical Conduct for Employees of the Executive Branch](#)
- r. [DR 4070-735-001, Employee Responsibilities and Conduct](#)
- s. [Ethics Issuance No. 09-1, Ethics Issues Related to USDA Scientists](#)

¹Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 2002;
<http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

²On December 16, 2004, OMB, in consultation with the Office of Science and Technology Policy (OSTP), issued its Final Information Quality Bulletin for Peer Review to the heads of departments and agencies (available at <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf>).

This Regulation shall not be interpreted to conflict with the rights of an employee under the law, including:

- The Federal Service Labor-Management Relations Statute (5 U.S.C. 7101-7135)
- Various collective bargaining agreements;
- Those provisions of Chapter 75 of Title 5 of United States Code relating to disciplinary action of employees; and
- The Whistleblower Protection Act of 1989 (5 U.S.C. 1213).

Additionally, this Regulation shall not be interpreted to conflict with any rights accorded a union representative under the Federal Service Labor-Management Relations Statute when communicating as a union representative.

5. POLICY

Pursuant to the Presidential Memorandum on Scientific Integrity dated March 9, 2009, and complying with applicable statutes, regulations, trade agreements, and/or international protocols, Executive Orders, or Presidential Memoranda, the policy of the Department is to:

- a. Promote a culture of scientific integrity. Science, and public trust in science, thrives in an environment that shields scientific data and analyses and their use in policy making from political interference or inappropriate influence. Scientific and technological findings should not be suppressed or altered;
- b. Select and retain candidates for scientific and technical positions at USDA based on the candidate's scientific and technical knowledge, credentials, experience, and integrity, and hold them and their supervisors to the highest standard of professional and scientific ethics, as described in the Code of Scientific Ethics (Appendix A);
- c. When considering scientific or technical information in deriving policy decisions, ensure the quality, accuracy and transparency of that information:
 - (1) Use information based on well-established scientific processes, including appropriate peer review and public input consistent with the OMB Final Information Quality Bulletin for Peer Review;
 - (2) Reflect scientific information appropriately and accurately when complying with and applying relevant statutory and regulatory standards and procedures;
 - (3) Make scientific findings or conclusions considered or relied on in policy decisions publicly available online and in open formats, to the extent practicable, consistent with the Administration's Open Government Initiative, the Freedom of Information Act, the Administrative Procedure Act, and other applicable statutes,

regulations or document-handling procedures and policies. Include information on the specific approach, data and models used to develop such scientific conclusions, including a clear explanation of underlying assumptions and uncertainties, and, where appropriate, probabilities associated with a range of projections or scenarios;

- d. Continue to develop policies, in coordination with the General Services Administration and consistent with the Administration's guidance on lobbyists serving on Federal Advisory Committees (FACs), for convening FACs tasked with giving scientific advice, consistent with the following:
 - (1) The recruitment process for new FAC members should be as transparent as practicable. When practicable and appropriate, FAC member vacancies will be announced widely, including notification in the Federal Register with an invitation for the public to recommend individuals for consideration and for self-nominations;
 - (2) Professional biographical information of FAC appointees (including current and past affiliations) will be made widely available to the public (e.g., via a Web site) subject to Privacy Act and other statutory/regulatory considerations;
 - (3) The selection of members to serve on a scientific or technical FAC will be based on expertise, knowledge, and contribution to the relevant subject area. Additional factors for consideration will include the availability of the member to serve, diversity among members of the FAC, and the ability to work effectively on advisory committees. Committee membership should be fairly balanced in terms of points of view represented with respect to the functions to be performed by the FAC;
 - (4) Except when prohibited by law, USDA will make all Conflict of Interest waivers granted to the committee members publicly available; and
 - (5) Except when explicitly stated in a prior agreement between USDA and an FAC, all reports, recommendations, and products produced by FACs will be treated as solely the findings of such committees rather than of the U.S. Government and, thus, will not be subjected to intra- or inter-agency revision.
- e. Support scientific integrity in the communication of scientific findings and products, including to:
 - (1) Encourage, but not require, USDA scientists to participate in communications with the media regarding their scientific findings. Scientists are expected to coordinate with their immediate supervisors and public affairs office in accordance with the policies of their specific agencies. Agencies are expected to coordinate with the Office of Communications, which provides a centralized

operational direction for communications about the work of the Department. Its role in communications regarding research and analysis done by USDA scientists and researchers is to assist with presentation, style, and logistics of the communications and advice on potential media requests or media outreach strategies.

- (2) Ensure that scientists may communicate their findings without political interference or inappropriate influence, while at the same time complying with USDA policies and procedures for planning and conducting scientific activities, reporting scientific findings, and reviewing and releasing scientific products. Such communications include research on policy-related issues when appropriate to the role of the agency and scientist; however, the scientists should refrain from making statements that could be construed as being judgments of or recommendations on USDA or any other federal government policy, either intentionally or inadvertently. Communications on such matters should remain within the bounds of their scientific findings. Such scientific and technical communications for non-USDA media (e.g., manuscripts and presentations for scientific journals, workshops, conferences, and symposia) should follow agency technical review procedures and do not generally require review above the agency level.
 - (3) The scientific integrity policy is not meant to limit the obligations of political appointees and agency leadership in setting research priorities that may change due to budget constraints or other challenges that may arise, such as the need to address urgent public health crises. It also is not intended to limit the ability of public affairs staff to make decisions about whether or not the Department issues press releases or other external communications vehicles about research findings.
- f. Encourage USDA scientists, engineers, and analysts to interact with the broader scientific community, in a manner that is consistent with Federal rules of ethics, job responsibilities, and existing agency policies, including:
- (1) Encouraging publication of research findings in peer-reviewed, professional, or scholarly journals;
 - (2) Encouraging presentation of research findings at professional meetings;
 - (3) Allowing USDA scientists and engineers to become editors or editorial board members of professional or scholarly journals;
 - (4) Allowing participation in professional societies, committees, task forces and other specialized bodies of professional societies, including removing barriers to serving as officers or on governing boards of such societies, to the extent allowed by law; and

- (5) Allowing Government scientists and engineers to receive honors and awards for their research and discoveries with the goal of minimizing, to the extent practicable, disparities in the potential for private-sector and public-sector scientists and engineers to accrue the professional recognition of such honors or awards.
- g. Ensure that mechanisms are in place to resolve disputes that arise from instances in which the scientific process or the integrity of scientific and technological information may be compromised;
- h. Protect those who uncover and report allegations of research misconduct or other violations of scientific integrity, as well as those accused of research misconduct or other violations of scientific integrity in the absence of a finding of misconduct, from prohibited personnel practices (as defined in 5 U.S.C. 2302(b));
- i. Continue to comply with the requirements of the Whistleblower Protection Act of 1989 (WPA), Public Law 101-12, and its expanded protections enacted by Public Law 103-424. The USDA shall also continue to comply with all Department- and Agency-specific WPA regulations, rules, and policies.

6. RESPONSIBILITIES

This Memorandum establishes the USDA's scientific integrity policy to direct the conduct of scientific investigation, management of scientific activities, and use of scientific information to the extent practicable, consistent with the Administration's Open Government Initiative, the Freedom of Information Act, the Administrative Procedure Act, Final Information Quality Bulletin on Peer Review, and other applicable statutes, regulations, OMB guidance and other Departmental regulatory decision making requirements embodied in DR-1512.

- a. This policy applies to:
 - (1) All USDA Mission Areas, Agencies, and Offices;
 - (2) All USDA employees, political and career, who engage in, supervise, or manage scientific activities, analyze and/or publicly communicate information resulting from scientific activities, or who utilize the information in decision making; and
 - (3) All contractors, cooperators, partners, permittees, lessees, and grantees that assist with developing or applying the results of scientific and technical activities on behalf of USDA.
- b. The USDA Chief Scientist oversees all aspects of this directive. Specific responsibilities, which may be delegated as appropriate, include:
 - (1) Providing leadership for the Department on scientific integrity;

- (2) Ensuring Departmental compliance with this policy;
 - (3) Seeking consultation with the USDA Science Council in regard to implementation of this policy;
 - (4) Reviewing Mission Area, Agency, and Communications and Office compliance with this policy;
 - (5) Developing training to ensure that employees understand the policy and are adequately prepared to comply;
 - (6) Updating this Departmental Regulation and accompanying guidance, as appropriate; and
 - (7) Designating the duties of Departmental Scientific Integrity Officer (DSIO) to a senior career staff person with scientific or scholarly credentials or both.
- c. The DSIO will:
- (1) Serve as a neutral point of contact (ombudsman) for receiving allegations of violations of scientific integrity against USDA employees from the Office of Inspector General (OIG) hotline, directly from the public, or from other sources.
 - (2) Serve as the Scientific Integrity Officer for the Office of the Secretary.
 - (3) Coordinate with OIG, the Office of Ethics, the Office of Human Resources Management, the Office of Communications, and the Office of the Chief Information Officer, and others as necessary to ensure that policies are aligned and guidance is appropriate and consistent.
 - (4) Refer allegations to the appropriate Agency Scientific Integrity Officer (ASIO).
 - (5) Review Agency reports of allegations and their disposition.
 - (6) Maintain a status Report for USDA as a means of monitoring the progress toward resolution.
 - (7) Immediately report any potentially criminal behavior to OIG and coordinate with the appropriate USDA agency to ensure that all records, documents, or other materials related to the allegation are provided to OIG. If OIG accepts the case for criminal investigation, it will assume responsibility for conducting the criminal investigation into the allegation.
 - (8) Keep the Chief Scientist and the Science Council informed on the status of the implementation of this policy.
 - (9) Provide contact information for the DSIO on the USDA website and any other appropriate medium.
 - (10) Maintain a public Web site containing USDA scientific integrity policy, procedures, points of contact, and an annual summary of the aggregate number of allegations of misconduct and their disposition (e.g., how many proceeded to investigation, and the number of findings of misconduct).
- d. Assistant Secretaries and Under Secretaries will:
- (1) Ensure that their agencies and offices comply with this policy.

- (2) Appoint representatives to the USDA Science Council as requested.
 - (3) Review agency/office-specific guidance, as appropriate.
- e. USDA Chief Procurement Officer (Director, Office of Procurement and Property Management) will:
- (1) Promulgate appropriate changes to contract provisions to implement this policy through the Agriculture Acquisition Regulations.
 - (2) Provide USDA contracting officers and contracting officer's technical representatives information regarding the requirements of this policy.
- f. The USDA Agencies and Offices will:
- (1) Provide agency employees and volunteers with policy and guidance and ensure that they receive the training needed to understand their responsibilities under, and comply with, the Departmental policy and any agency-specific guidance on scientific integrity;
 - (2) Develop any agency-specific policies and guidance, as appropriate, including appropriate language in contracts, grants, permits, leases, and cooperative agreements;
 - (3) Ensure that contractors, cooperators, partners, permittees, lessees, and grantees covered under the scope of this policy are aware of their responsibilities for complying with the principles of this policy and any agency-specific guidance.
 - (4) Appoint an ASIO; and
 - (5) Monitor and report compliance with the USDA Scientific Integrity Policy to the DSIO, including activities undertaken to implement this policy and a summary of complaints received and their disposition.
- g. ASIOs are responsible for:
- (1) Implementing this policy as it pertains to the agency.
 - (2) Keeping the agency Administrator or appropriate senior executive informed on the status of implementation of this policy.
 - (3) Coordinating with the appropriate human resources officer, ethics officer, Agency Research Integrity Officer (ARIO)³, information integrity officer, peer review officer, public affairs officer, the DSIO, advisory committee Designated Federal Officers and others as needed to ensure that agency policies are aligned and agency guidance is appropriate and consistent.

³The responsibilities of ARIO and the Department Research Integrity Officer (USDA RIO) are explained in the USDA policy on research misconduct in DR 2401-001. An agency may or may not assign ARIO and ASIO responsibilities to the same individual, and REE may or may not assign USDA RIO and DSIO responsibilities to the same individual.

- (4) Reporting all allegations received by the Agency to the DSIO; providing records when requested, and status reports to DSIO of the disposition of allegations (including those referred to the ASIO by DSIO).
 - (5) Conducting a review of allegations and submitted materials received from the DSIO, OIG, or other source, following established procedures, to determine their merit.
 - (6) Coordinating with the DSIO on all submitted allegations and subsequent actions to ensure integrity and consistency of the process across the Department.
- h. Managers and Supervisors are responsible for:
- (1) Being aware of and upholding the principles contained in this policy, including the Code of Scientific Ethics (Appendix A).
 - (2) Implementing this policy as it pertains to their area of management or supervision.
 - (3) Ensuring that their employees are informed about and receive training on this policy.
 - (4) Taking appropriate administrative and disciplinary action.
 - (5) Consulting, as appropriate depending upon the nature of the allegation, with the ASIO, human resources officer, ethics officer, DSIO, OIG, Office of the General Counsel, and the Office of Civil Rights.
 - (6) Ensuring that all contracts, written agreements, cooperative agreements, grants, permits, and lessees, covered under the scope of this policy and under their purview, include the requirements of this policy in their performance work statement.
- i. Employees and Volunteers are responsible for:
- (1) Being aware of and upholding the principles contained in this policy, including the Code of Scientific Ethics (Appendix A).
 - (2) Complying with the policy and any additional agency/office-specific guidance.
 - (3) Reporting to the appropriate officials any knowledge of scientific misconduct that is planned, is imminent, or has occurred.
 - (4) Ensuring that any contractors, cooperators, partners, permittees, lessees, and grantees covered under this policy with whom they are executing contracts, written agreements, cooperative agreements, grants, leases, or permits are aware of their responsibilities for complying with this policy and any agency/office-specific guidance.
- j. Contractors, cooperators, partners, permittees, lessees, and grantees are responsible for abiding by the principles contained in this policy regarding the integrity of the Department's scientific and scholarly activities, as specified in written agreements or statements of work.

7. DEFINITIONS

- a. Advisory Committee. Any committee, board, commission, council, conference, panel, task force, or other similar group that is established by statute, or established or utilized by the President or by an agency official, for the purpose of obtaining advice or recommendations for the President or on issues or policies within the scope of an agency official's responsibilities.
- b. Agency Research Integrity Officer (ARIO). The individual appointed by a USDA agency that conducts research and who is responsible for overseeing agency responsibilities and activities related to research misconduct.
- c. Agency Scientific Integrity Officer (ASIO). The individual appointed by a USDA agency who is responsible for overseeing agency responsibilities and activities related to scientific integrity.
- d. Allegation. A disclosure of possible research misconduct or other violation of scientific integrity through any means of communication. The disclosure may be by written or oral statement, or by other means of communication to an institutional or USDA official.
- e. Conflict of Interest. Any financial or non-financial interest that conflicts with the actions or judgments of an individual when conducting scientific activities because it:
 - (1) could impair the individual's objectivity;
 - (2) could create an unfair competitive advantage for any person or organization; or
 - (3) could create the appearance of either (1) or (2).
- f. Decision-Makers. Employees who may:
 - Develop policies or make determinations about policy or management;
 - Make determinations about expenditures of USDA funds;
 - Implement or manage activities that involve, or rely on, scientific activities; or
 - Supervise employees who engage in scientific activities.
- g. Designated Federal Officer (DFO). An individual designated by the agency head, for each advisory committee for which the agency head is responsible, to implement the provisions of sections 10(e) and (f) of the Federal Advisory Committee Act and any advisory committee procedures of the agency.
- h. Fabrication. Making up data or results and recording or reporting them.
- i. 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.

- j. Financial Interest. Any matter affecting a personal financial interest or a financial interest imputed to the individual (including, but not limited to, the individual's spouse and any entity for which the individual serves in a personal capacity as an officer or board member, such as due to fiduciary duties to the organization under state law).⁴
- k. Inappropriate influence. The attempt to shape the production of a scientific or statistical product against the judgment of a nonpartisan and apolitical scientific or statistical agency. More specifically, it includes:
 - (1) the suppression of an agency's responsibility to offer its best judgment on how to most accurately and reliably study or measure a given phenomenon;
 - (2) the decision to prevent an agency from using state-of-the-art science;
 - (3) the insistence on preclearance of a major statistical product or a scientific or technical manuscript or presentation that is based on state-of-the-art science; and
 - (4) the suppression, alteration, or delay of the release of a statistical or scientific product for any reason other than technical merit as determined through standard agency procedures.
- l. Non-Financial Conflict of Interest. Individual participation in a matter where one of the parties has, or is represented by someone with whom the individual has, a covered relationship (including, but not limited to, a spouse's employer and any entity for which the individual is actively involved in a personal capacity).⁵
- m. Plagiarism. The appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
- n. Political interference. The attempt to gain partisan or regional advantage by shaping the production of a statistical or scientific product against the judgment of a nonpartisan and apolitical statistical or scientific agency. More specifically, it includes: (1) the politically motivated suppression of an agency's responsibility to offer its best judgment on how to most accurately and reliably measure a given phenomenon; (2) the politically motivated decision to prevent an agency from using state-of-the-art science; and (3) the politically motivated insistence on preclearance of a major statistical or scientific product that is based on state-of-the-art science.

⁴ See 18 U.S.C. 208. This definition will be applied consistently with any rule issued by U.S. Office of Government Ethics permitting the appointment of Federal employees to serve in their official capacities on the boards of directors and as officers of nonprofit organizations, including scientific organizations, professional societies, and similar bodies that are actively involved in matters under the jurisdiction of the Department. See 76 FR 24816 (May 3, 2011).

⁵ See 5 C.F.R. 2635.502(b).

- o. Research. All basic, applied, and demonstration research in all fields of science, technology, engineering, and mathematics. This includes, but is not limited to, research in economics, education, linguistics, medicine, psychology, natural sciences, social sciences, statistics, and research involving human subjects or animals regardless of the funding mechanism used to support it.
- p. Research Misconduct. 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.
- q. Scientific Activities. Activities that involve inventorying, monitoring, observations, experimentation, study, research, analysis, integration, modeling, scientific assessment, and technology development.
- r. Scientific Assessment. Evaluation of a body of scientific or technical knowledge that typically synthesizes multiple factual inputs, data, models, and assumptions, and implies the use of best professional judgment to bridge uncertainties in the available information.
- s. Scientific Integrity. The condition resulting from adherence to professional values and practices when conducting and applying the results of science that ensures objectivity, clarity, and reproducibility, and that provides insulation from bias, fabrication, falsification, plagiarism, interference, censorship, and inadequate procedural and information security.
- t. Scientific Product. Presentation of the results of scientific activities including the analysis, synthesis, compilation, or translation of scientific information and data into formats for the use of the Department of Agriculture or the Nation. Official policy, budget, or management documents are not considered scientific products.
- u. Statistical Agency. A Federal statistical agency is a unit of the federal government whose principal function is the compilation and analysis of data and the dissemination of information for statistical purposes.
- v. Transparent (Transparency). Characterized by visibility or accessibility of information (the quality or state of being transparent).
- w. USDA Departmental Scientific Integrity Officer (DSIO). The individual designated by the USDA Chief Scientist who is responsible for implementing the USDA scientific integrity policy under the direction of the Chief Scientist and the USDA Science Council.
- x. USDA Research Integrity Officer (USDA RIO). The individual designated by the

Office of the Under Secretary for Research, Education, and Economics (REE) who is responsible for overseeing USDA and its research agencies' development and implementation of research misconduct policies and procedures.

- y. USDA Science Council. A group representing USDA Mission Areas and Offices, chaired by the USDA Chief Scientist, to facilitate cross-Department coordination and collaboration among all USDA agencies.

8. ABBREVIATIONS

- a. ARIO: Agency Research Integrity Officer.
- b. ASIO: Agency Scientific Integrity Officer.
- c. CFR: Code of Federal Regulations.
- d. DFO: Designated Federal Officer.
- e. DR: Departmental Regulation.
- f. DSIO: Department Scientific Integrity Officer.
- g. FAC: Federal Advisory Committee.
- h. FR: Federal Register.
- i. OC: The Office of Communications of the United States Department of Agriculture.
- j. OIG: The Office of Inspector General of the United States Department of Agriculture.
- k. OMB: The Office of Management and Budget of the Executive Office of the President.
- l. OSTP: The Office of Science and Technology Policy of the Executive Office of the
- m. President.
- n. PL: Public Law.
- o. REE: The Research, Education and Economics Mission Area of the United States
- p. Department of Agriculture.
- q. SM: Secretary's Memorandum.
- r. USC: United States Code.
- s. USDA: The U.S. Department of Agriculture.
- t. USDA RIO: The Research Integrity Officer of the U.S. Department of Agriculture.
- u. WPA: The Whistleblower Protection Act of 1989.

9. PROCEDURES

The Scientific Integrity Policy Handbook maintained by the DSIO establishes processes for implementing this Departmental Regulation.

-END-

APPENDIX A CODE OF SCIENTIFIC ETHICS

- I dedicate myself to the pursuit, promotion, and advancement of scientific knowledge.
- I will design, conduct, manage, judge, and report scientific research honestly, thoroughly, and without conflict of interest.
- I will prevent abuse of all resources entrusted to me and endeavor to treat human and animal subjects humanely, following established guidelines where they are available.
- I will not willfully hinder the research of others nor engage in dishonesty, fraud, deceit, misrepresentation, or other professional misconduct.
- I will welcome constructive criticism of my personal scientific research and offer the same to my colleagues in a manner that fosters mutual respect amid objective scientific debate.
- I will recognize past and present contributors to my research and will neither accept nor assume unauthorized and/or unwarranted credit for another's accomplishments.
- I will claim authorship for a research product only if I am willing to be held responsible for both the interpretation of the data and the conclusions as presented.
- I will claim authorship for a research product only if I have made a major intellectual contribution (as part of conception, design, data collection, data analysis, or interpretation) and made significant contributions to its preparation (written, reviewed, or edited).
- I will not publish or use original ideas, research data, or unpublished findings of others without written approval.
- I will refrain from duplicative publication of the same research findings as original.
- I will show appropriate diligence toward preserving and maintaining resources, such as data records, that are entrusted to me.