

## **DEPARTMENT OF LABOR**

### **Scientific Integrity: Statement of Policy**

**AGENCY:** Office of the Secretary, Labor

**ACTION:** Statement of policy on Scientific Integrity.

**SUMMARY:** The United States Department of Labor (DOL) hereby publishes its draft policies on Scientific Integrity in response to the March 9, 2009, Presidential Memorandum on Scientific Integrity, and the December 17, 2010, Memorandum from the Director of the Office of Science and Technology Policy.

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**SUPPLEMENTARY INFORMATION:** In March of 2009, the President articulated six principles federal agencies should follow to preserve and promote scientific integrity. The President also assigned the Director of the Office of Science and Technology Policy (OSTP) with responsibility for ensuring scientific integrity across the executive branch. This draft Scientific Integrity policy would establish standards for DOL for ensuring accuracy and integrity in all scientific activities informing rulemaking and public policy decisions in accordance with the memoranda from the President and OSTP.

This policy statement is intended to protect the public's confidence in the integrity of DOL scientific activities and ensure that DOL agencies support scientific integrity and operate in an open and fully transparent manner with the public and the media.

As a public agency, DOL has an obligation to preserve public trust in the integrity of science and scientific processes used to inform DOL rulemaking and public policy decisions. To protect that trust, DOL implements this policy to ensure that its scientific activities are credible and devoid of inappropriate political influence. This policy is also intended to improve the internal management of DOL scientific activities and the professional development and selection of scientists and technology professionals for positions in DOL.

Scientific Integrity of DOL scientific personnel is vital to the public interest and critical to conducting DOL's mission. Scientific activities provide data to

inform many of DOL's decision makers regarding the production of economic indicators, the evaluation of programs funded by DOL, protection of the health and safety of our Nation's workers, and labor laws that address conditions of employment, benefits and compensation.

The scope of the activities covered by this policy are those activities that generate scientific information involved in public policy development, rulemaking, economic analysis and research, evaluation, econometric modeling, and sample and survey methodology. Scientific activities are conducted in a manner specified by appropriate protocols and procedures and include any of the physical, social, biological and/or mathematical sciences, whereby economists, statisticians, mathematicians, researchers, industrial hygienists, occupational physicians, and engineers and other scientists conduct research and studies as part of cost-benefit analyses, risk-assessments, technical feasibility studies, and other analyses to support rulemaking, policy development, benefit eligibility determinations and production of leading economic indicators. Inspections for regulatory compliance and resulting records are not included because they are covered by separate requirements.

Due to the evolving nature of DOL scientific activities, this policy provides broad standards and is not changing any employee's already existing rights. It does not replace the Standards of Ethical Conduct at 5 C.F.R. § 2635, other relevant ethical obligations or policies concerning DOL employees engaged in scientific activity, or governing collective bargaining agreements or other federal employment rights. This Policy is intended to improve the internal management of the Department of Labor, and is not intended to and does not create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, the Department of Labor, or other entities, its officers or employees, or any other person. However, it does represent DOL's current thinking on scientific integrity.

**AUTHORITY:** 5 U.S.C. § 301, March 9, 2009, Presidential Memorandum on Scientific Integrity, and the December 17, 2010, memorandum from the Director of the Office of Science and Technology Policy.

## **Definitions**

- (1) "Allegation" means a written statement, having a self-identified author, describing possible scientific dishonesty and submitted to the potential Respondent's supervisor or an employee designated by the Agency head. A good faith allegation is an allegation made with the honest belief that scientific misconduct may have occurred. A bad faith allegation is an allegation by a complainant(s) who knows, or

through reasonable inquiry could have known, that the allegation is untrue or frivolous.

- (2) "Complainant(s)" means a person who makes an allegation of scientific dishonesty.
- (3) "DOL agency" means a DOL agency involved in scientific activities.
- (4) "Agency head" means an employee of a DOL agency with the highest managerial authority.
- (5) "Competing interests" means any financial or other interest (e.g., including personal, business, and organizational relationships) that could affect an employee's actions, judgment, or objectivity when conducting scientific activities, or that could create or give the perception of an unfair competitive advantage for any person or organization, or result in personal or financial gain for persons (or family members or affiliated organizations) working for or on behalf of DOL.
- (6) "Decision makers" means a DOL employee who manages, supervises, or decides policy. Decision makers may rely in part on scientific products or on documents compiled and translated from scientific activities to ensure that agency actions are supported by evidence, have a rational basis, and are not arbitrary or capricious.
- (7) "Influential scientific information" means scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions. See Final Information Quality Bulletin on Peer Review (70 FR 2664).
- (8) "Fabrication" means inventing data or results and recording or reporting them.
- (9) "Falsification" means manipulating research materials, equipment, or processes; or changing or omitting data or results so that the scientific record is inaccurate.
- (10) "Plagiarism" means the appropriation of another person's ideas, processes, results, or words without giving appropriate credit, including ideas, processes, results, or words obtained through confidential review of scientific proposals or manuscripts.
- (11) "Respondent(s)" means the person(s) against whom an allegation of scientific dishonesty is directed or whose actions are the subject of an inquiry or investigation. Use of this term does not imply that the person(s) are, or will be, the subject of a disciplinary proceeding.
- (12) "Reporting" means dissemination or disclosure of the results of scientific activities. Dissemination and disclosure may be oral or in any media, including print and digital media.

- (13) "Research misconduct" means 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. See Federal Policy on Research Misconduct (65 FR 76260-76264).
- (14) "Scientific activities" means activities involving the physical, social, biological and/or mathematical sciences, whereby economists, statisticians, mathematicians, researchers, industrial hygienists, occupational physicians, and engineers and other scientists conduct research and studies as part of cost-benefit analyses, risk-assessments, technical feasibility studies, and other analyses to support rulemaking, policy development, benefit eligibility determinations, and production of leading economic indicators. Inspections for regulatory compliance and resulting records are not included because they are covered by separate requirements.
- (15) "Scientific assessment" means an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, assumptions, and/or applies best professional judgment to bridge uncertainties in the available information. These assessments include, but are not limited to: state-of-science reports; technology assessments; weight-of-evidence analyses; meta-analyses; health, safety, or ecological risk assessments; toxicological characterizations of substances; integrated assessment models; hazard determinations; and exposure assessments. See Final Information Quality Bulletin on Peer Review (70 FR 2664).
- (16) "Scientific dishonesty" means: hindering scientific integrity; engaging in dishonesty, deceit, misrepresentation; or engaging in or knowingly permitting other scientific, research, or professional misconduct; or knowingly omitting data from reports and testimony for purposes of misrepresentation or manipulation. Scientific dishonesty also involves suppressing data collection, scientific studies, or publication of results by scientists or their supervisors for the purpose of manipulating outcomes. Scientific dishonesty does not include honest error or differences of opinion.
- (17) "Scientific information" means factual inputs, data, models, analyses, technical information, or scientific assessments based on the behavioral and social sciences, public health and medical sciences, life and earth sciences, engineering, mathematics, statistics, or physical sciences. This includes any communication or representation of knowledge such as facts or data, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms. This definition includes information that an

agency disseminates from a web page, but does not include the provision of hyperlinks to information that others disseminate. This definition does not include opinions, where the agency's presentation makes clear that what is being offered is someone's opinion rather than fact or the agency's views. See Final Information Quality Bulletin on Peer Review (70 FR 2664).

- (18) "Scientific integrity" means the principles of scientific integrity outlined in the President's and Director's Memoranda. See [http://www.whitehouse.gov/the\\_press\\_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/](http://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/) and <http://www.whitehouse.gov/blog/2010/12/17/scientific-integrity-fueling-innovation-building-public-trust-ostp>.
- (19) "Scientific knowledge" means knowledge obtained and tested through use of the scientific method. Scientific knowledge may also include the observation and classification of facts with the goal of establishing verifiable knowledge derived through induction and hypothesis.
- (20) "Scientific method" means a method of research in which a problem is identified or hypothesis formulated, relevant data and a means to gather and analyze them are established, data are gathered, the hypothesis is empirically tested through data analysis, and conclusions are reached.
- (21) "Scientific misconduct" means fabrication, falsification, or plagiarism in proposing, performing, reviewing, or reporting scientific activities and their products.
- (22) "Scientific personnel" means an employee or detailee who engages in scientific activities or who conducts or directly supervises scientific activities, including but not limited to proposing, performing, or reviewing research, or in reporting research results; and individuals who directly supervise or personally perform work involving the compilation and translation of scientific information into formats used by the DOL decision makers.
- (23) "Scientific product" presents the results of scientific activities, including the synthesis, compilation, or translation of scientific information into formats used in the DOL's decision-making process.
- (24) "The DOL Scientific Integrity Policy" (SIP) means the policy and procedures issued by DOL to ensure integrity in DOL's scientific activities.

## General Policies

- (1) It is the responsibility of all DOL agencies to make scientific integrity an important component in every relevant phase of rulemaking and public policy development.
- (2) The objective of SIP is to establish consistent and uniform procedures to be implemented by DOL agencies and agency heads.
- (3) Agency heads should ensure that clear and consistent instructions are provided to scientific personnel on the elements of the SIP and stress the importance of consistent application of the procedures set out in this policy.
- (4) SIP criteria should not be arbitrary or vary dramatically from agency to agency within DOL.
- (5) This policy provides guidelines to assure integrity and transparency of DOL scientific activities. It clarifies the roles and responsibilities of DOL agencies, agency heads, and scientific personnel. It acknowledges existing Federal and DOL policies and procedures that could be used to accomplish the scientific integrity principles. It also initiates new procedures and requirements.
- (6) Given the complexity and evolving nature of scientific activities within DOL, this policy should be reviewed periodically in coordination with the DOL Regulatory Council.
- (7) DOL agencies should **not** engage in activities to suppress, distort, or alter scientific findings and reporting.
- (8) DOL agencies should provide objective and timely information and strive to maintain the integrity of scientific activities conducted on its behalf and should verify the completeness and accuracy of scientific activities. Agencies should communicate scientific and technological findings by including a clear explanation of underlying assumptions and uncertainty.
- (9) DOL agencies should take steps to ensure that all employees whose work affects or is affected by science, including its scientific personnel, are aware of the SIP, and act consistent with the policy:
  - a. The DOL new employees' orientation program should include training on SIP.
  - b. Agency heads should be committed to identifying methods to educate scientific personnel about the SIP. Agency heads should ensure that their agencies have procedures for distributing information about the SIP.
  - c. DOL agencies should adopt appropriate procedures to evaluate and correct inaccurate scientific information produced through the Department's scientific activities.

## **Scientific Integrity Principles**

1. **Creation of a Scientific Integrity Culture**
  - The ultimate aim for DOL is to embed a culture of scientific integrity as part of the scientific activities across DOL. Effective leadership and awareness are essential to the development of a scientific integrity culture.
2. **Selection and retention of candidates for science and technology positions**
  - DOL agencies engaged in scientific activities should ensure that senior-level scientists within the appropriate disciplines and interests are involved in recruitment and selection of scientists and technology professionals for positions in DOL. The selection of candidates for scientific positions should be based on their scientific and technological knowledge, credentials, experience, and integrity, mindful at all times that DOL is committed to a diverse work force with the full expectation that the same diversity reflected in the DOL work force will be reflected among those holding scientific positions. Candidates should be committed to the highest standards of quality of work and professional ethics.
3. **Rules and procedures for scientific integrity**
  - DOL agencies should:
    - Investigate all allegations of scientific dishonesty;
    - Use appropriate legally permitted means for conducting inquiries and impose appropriate corrective actions in order to protect the public trust;
    - Embrace open government principles of transparency and accessibility by conveying scientific information to the public and the media and strive for the widest possible dissemination of scientific data and results in a timely manner. To the extent feasible, expand and promote access to scientific and technological information by making it available online in open formats, consistent with the Administration's Open Government Initiative. Where appropriate, this should include data and models underlying regulatory proposals and policy decisions.
    - Ensure that all established record retention schedules for scientific studies are followed and, if necessary, establish new schedules; and
    - Under no circumstance may political officials ask or direct scientific personnel to alter or suppress scientific information or products.

4. **Instill credibility and trust by operating in an open and fully transparent manner with the public and the media.**

- Office of Public Affairs (OPA) has implemented the President's Open Government Initiative and will pursue that Initiative in a manner consistent with the public communication principles identified as preserving and promoting scientific integrity.
- OPA should:
  - Consult with DOL agencies in order to effectively assist in the communication of scientific information to the public;
  - Review current public communications policies to ensure that they promote and maximize, to the extent practicable, openness, transparency and accuracy with the media and the general public while assuring full compliance with limits on disclosure of information. Establish a mechanism to resolve disputes that may arise from decisions to proceed or not to proceed with proposed interviews or other public communication activities. Under no circumstance may public affairs officers ask or direct scientific personnel to alter or suppress scientific information or products.
  - Take appropriate actions to communicate accurate information when it has been determined that inaccurate scientific information has been produced through the DOL's scientific activities; and
  - Provide guidance to expand and promote access to scientific information and support or train managers and scientific personnel who need to improve their skills in public communication.
- In accordance with the standard set out by the Administrative Procedure Act (APA), all DOL agencies will address applicable issues submitted in response to a rulemaking requesting comments and be attentive to potential concerns about scientific integrity and competing interests.
- In response to media interview requests about the scientific and technological dimensions of their work: Agencies will offer spokespersons who Agency leadership have determined are articulate and knowledgeable and who can, in an objective and nonpartisan fashion, describe and explain these dimensions to the media and the American people.
  - Scientific personnel may speak to the media and the public about scientific and technological matters based on their official work, if assigned by their immediate



supervisor and in coordination with their public affairs office.

5. **Peer review**

- On January 14, 2005, the Office of Management and Budget (OMB) issued the Final Information Quality Bulletin on Peer Review (70 FR 2664) (OMB bulletin). The OMB bulletin contains guidelines for conducting peer review. The guidelines require that an agency post to its public website an agenda of peer review plans, describing all planned and ongoing peer reviews of information products qualifying as influential scientific information and highly influential scientific assessments. The agenda is to be updated at least semiannually. For each peer review, the agency is required to prepare a peer review plan and post the plan to its public website. Also, each agency must provide an annual report to OMB by December 15 of each year. This SIP does not supersede the OMB bulletin, but is designed to provide supplementary policies for peer review.
- Agency heads should ensure that their agency:
  - Is in compliance with the OMB bulletin;
  - Promotes an independent peer review process to facilitate a free flow of scientific and technology information and encourage scientific personnel to engage with the larger scientific community;
  - Encourages an open and honest debate for the advancement of science activities and ensures that a peer review is part of that debate; and
  - Ensures the peer review process is conducted in an open and transparent manner consistent with the OMB Bulletin and in accordance with administrative rulemaking procedures, when applicable.

6. **Process for considering scientific integrity in policy decisions**

- Consistent with this policy, DOL agencies should establish procedures to ensure the transparency and scientific integrity of scientific activities, data and technical information relied upon by the agency in rulemaking and other activities, including ensuring that:
  - Data and research used to support policy decisions undergo independent peer review by qualified experts, where feasible and appropriate, and consistent with law.
  - DOL agencies should establish principles for conveying scientific and technological information to the public

accurately. Scientific communications should include relevant information about underlying assumptions, the strengths and limitations of the analyses, and the uncertainties associated with results. When appropriate, information should include the results using varying assumptions.

7. **Procedures for addressing scientific misconduct and dishonesty**

- On September 12, 2003, DOL published its policies implementing the Federal Policy on Research Misconduct issued by the Executive Office of the President's Office of Science and Technology on December 6, 2000. See 68 FR 177. This policy addresses behavior that affects the integrity of research records and establishes procedural safeguards for handling allegations of misconduct.
- In order to ensure that the DOL's decision making is based on the best available science, this policy requires a scientific product to be subject to the required level of review. Public release of a scientific product without the required level of review or without the inclusion of appropriate disclaimers could be considered misconduct in violation of DOL policy. This SIP does not supersede DOL current policy on Research Misconduct, but is designed to provide supplementary policies to identify and address compromised information.
  - DOL agencies should:
    - Investigate comprehensively each allegation of misconduct while ensuring the rights and privacy of any party against whom the allegation is made;
    - Take corrective and disciplinary actions as appropriate, in accordance with DOL personnel policies; and
    - Educate scientific personnel to recognize and report coercive efforts. If an employee believes that he or she has been subjected to coercion, it should be reported immediately to the respective supervisor, agency, or DOL ethics official.
  - DOL agencies should not, to the extent permitted by law:
    - Tolerate hindering scientific activities by scientific personnel. This includes actions such as biased review of scientific proposals or manuscripts and physical disruption of any scientist's database; or
    - Impede the free flow of scientific and technological information, consistent with privacy and classification standards.

## 8. **Whistleblower and other related procedures to ensure scientific integrity**

- The Department of Labor Manual Series (DLMS) 8, Audits and Investigations, Chapter 700—Incident Reporting and Whistleblower Protection, establishes DOL procedures and assigns responsibility for reporting and investigating allegations of wrongdoing that would include allegations of scientific dishonesty. This SIP does not supersede DLMS 8, Chapter 700.
  - DOL agencies should assess current whistleblower protection procedures and, if necessary, provide additional training that proactively educates employees regarding their rights and protections. This training could include briefing new hires, refresher training for incumbent scientists, and posting educational material throughout the workplace;
  - Ensure that scientific personnel who report political interference in their work may do so without fear of retaliation; and
  - Review whistleblower training programs, and if necessary make available refresher training to ensure that scientific personnel are familiar with the laws, regulations, and policies governing privacy and freedom of information.

## 9. **Use of Federal Advisory Committees**

- DOL will ensure that any Federal Advisory Committee Act (FACA) committee tasked with giving scientific advice will ensure:
  - The recruitment process for new committee members will be as transparent as practicable. DOL agencies should, when practicable and appropriate, announce committee member vacancies widely, including notification in the *Federal Register* with an invitation for the public to recommend individuals for consideration and for self nominations to be submitted.
  - Professional biographical information (including current and past professional affiliations) for appointed committee members will be made widely available to the public (e.g., via a website) subject to Privacy Act and other statutory/regulatory considerations. Such information should clearly illustrate the individuals' qualifications for serving on the committee.
  - The selection of members to serve on scientific or technical FACA committees will be based on expertise, knowledge, and contribution to the relevant subject area. Additional factors include, but are not limited to, the availability of the

member to serve, diversity among members of the committee, 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 committee. Except when prohibited by law, agencies should make all Conflict of Interest waivers granted to committee members publicly available.

- Except when explicitly stated in a prior agreement between an agency and a FACA committee, all reports, recommendations, and products produced by FACA committees should be treated as solely the findings of such committees rather than of the U.S. government, and thus are not subject to intra- or inter-agency revision.

10. **Professional Development of Government Scientists and Engineers**

- The Office of the Chief Human Capital Officer should foster an environment to encourage and support professional development of scientific personnel within established and ongoing DOL initiatives in collaboration with human resources components in agencies engaged in scientific activities.
- Consistent with applicable law, DOL agencies should:
  - Within available resources and established priorities, encourage scientific personnel to attend and participate in professional meetings and training and arrange for assignment rotations as appropriate;
  - Identify shortcomings in the approaches of management and scientific personnel to scientific projects and provide opportunities for support and training to correct any shortcomings;
  - Encourage publication of research findings in peer-reviewed, professional, or scholarly journals;
  - Permit government scientists and engineers to become editors, editorial board members, or peer reviewers of professional or scholarly journals;
  - Permit participation in professional or scholarly societies, committees, task forces and other specialized bodies of professional societies, as appropriate. Such participation should be reviewed to determine whether it is appropriate to be conducted in a personal or official capacity in accordance with ethical standards; and

- Permit government scientists and engineers to receive honors and awards for their research and discoveries; any such honor or award should be reviewed by the Ethics Office to insure that a prize would fall within general DOL ethics guidelines.

## 11. **Responsibilities of Agency Personnel and Organization**

- All scientific personnel should:
  - work together to ensure that the SIP is consistently applied. Agency heads may delegate authority for carrying out the responsibilities related to the SIP;
  - be familiar with the agency's procedures for carrying out the SIP;
  - be aware of the ways in which a person might subvert the integrity of scientific activities; and
  - Report all incidences of scientific dishonesty, whether by a formal submission to the agency, an informal document, or a verbal communication. If scientific personnel suspect scientific dishonesty or are asked to participate in or contribute to scientific dishonesty, promptly discuss those observations or concerns with his/her supervisor. If scientific personnel are concerned that the supervisor is involved in scientific dishonesty, then he/she should go to the next higher supervisor with their concerns.

## 12. **Monitoring and Facilitation**

- The Office of the Assistant Secretary for Policy (OASP), in consultation with the Department's ethics officers as well as agency scientific personnel, shall monitor and facilitate the scientific integrity efforts of the Department as appropriate. A senior career manager in OASP shall serve as the Department's Scientific Integrity Officer and have primary responsibility for managing OASP's functions related to scientific integrity. OASP's oversight functions shall include:
  - Helping to ensure consistent understanding, application and implementation of the Department's SIP;
  - Providing advice and guidance to agencies and scientific personnel regarding the Department's SIP and best scientific integrity practices;

- Advising scientific personnel about the Department's SIP and avenues for resolving complaints and allegations of misconduct; and
  - Advising and assisting agencies and senior leadership in evaluating and resolving complaint and allegations of scientific misconduct.
- DOL agencies are responsible for implementing the SIP. Agencies shall report any supplemental procedures that they develop concerning scientific integrity to the Scientific Integrity Officer.

### 13. **Training and policy review**

- It is important that people are appropriately trained to meet scientific integrity standards. Such training should take place in group sessions or individually, as and when required.
- The SIP policy and procedures should be reviewed and updated when required.

### 14. **Compliance**

- This SIP applies to all employees and detailees. Agencies should take steps to ensure the scientific integrity of data and analyses generated by its contractors. Scientific integrity is the responsibility of all personnel who affect or are affected by science, including scientific personnel, and these personnel should be made aware of their responsibilities with regard to scientific integrity. Agency heads should communicate this clearly throughout their agencies to reinforce this policy.
- Agency heads should take reasonable and appropriate steps to ensure all affected personnel, including scientific personnel, comply with the terms of this policy.