



SCIENCE & TECHNOLOGY POLICY INSTITUTE

# **Federal Ethics Rules and Their Impacts on Recruiting and Retaining Federal Science, Technology, Engineering, and Mathematics (STEM) Employees**

Vanessa Peña  
Michael C. Mineiro  
Ryan M. Whelan

November 2014

Approved for public release;  
distribution is unlimited.

IDA Paper P-5208

Log: H 14-001170

IDA SCIENCE & TECHNOLOGY  
POLICY INSTITUTE  
1899 Pennsylvania Ave., Suite 520  
Washington, DC 20006-3602



*The Institute for Defense Analyses is a non-profit corporation that operates three federally funded research and development centers to provide objective analyses of national security issues, particularly those requiring scientific and technical expertise, and conduct related research on other national challenges.*

#### About This Publication

This work was conducted by the IDA Science and Technology Policy Institute under contract NSFOIA0408601, Project TP-20-1000.00.CN, "Conflicts of Interest and the Recruitment and Hiring of Federal STEM Employees," for the Office of Science and Technology Policy. The views, opinions, and findings should not be construed as representing the official position of the National Science Foundation or the Office of Science and Technology Policy in the Executive Office of the President.

#### Copyright Notice

© 2014 Institute for Defense Analyses  
4850 Mark Center Drive, Alexandria, Virginia 22311-1882 • (703) 845-2000.

This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at FAR 52.227-14 [Dec 2007].

SCIENCE & TECHNOLOGY POLICY INSTITUTE

IDA Paper P-5208

**Federal Ethics Rules and Their Impacts on  
Recruiting and Retaining Federal Science,  
Technology, Engineering, and Mathematics  
(STEM) Employees**

Vanessa Peña  
Michael C. Mineiro  
Ryan M. Whelan



# Executive Summary

---

The Office of Science and Technology Policy (OSTP) requested that the IDA Science and Technology Policy Institute (STPI) identify the potential challenges of Federal ethics rules on recruitment and retention of science, technology, engineering, and mathematics (STEM) employees across the executive branch of the Federal Government, including the National Institutes of Health, the Department of Defense (DOD), and the Department of Energy (DOE), and to report on potential suggestions to ameliorate those challenges. This report identifies and analyzes the potential impacts that Federal ethics rules have on recruiting and retaining STEM employees in the executive branch.

## Approach

The findings presented in this report are based on a literature review and semi-structured interviews. The literature review covered Federal legislation, regulations, and agency-specific policies as well as congressional hearings, executive orders and memoranda, books, journal articles, reports, and press releases relevant to the evolution of Federal ethics rules, their application, and their impacts on recruitment and retention of STEM employees in Federal service. The STPI project team interviewed 28 individuals across Federal agencies and offices, academic institutions, and private companies, including general counsel and ethics officials, scientific integrity officers, human capital officers, and current and former Federal employees.

## Background on Federal Ethics Rules

The Office of Government Ethics (OGE) website describes Federal ethics rules in five major areas:<sup>1</sup> (1) financial conflicts and impartiality, (2) post-government employment, (3) outside employment and activities, (4) gifts and payments, and (5) use of government position and resources. The array of Federal ethics rules that govern these areas includes those from criminal and civil statutes, OGE regulations, agency supplemental regulations, and executive orders, among other policies. For the purposes of this report, “Federal ethics rules” refers to Federal ethics laws, regulations, and policies—including those related to conflicts of interest (COIs) that are established in the United

---

<sup>1</sup> OGE website, *Enforcement*, available from <http://www.oge.gov/Topics/Enforcement/Enforcement/http://www.oge.gov/Topics/Enforcement/Enforcement>.

States Code, Code of Federal Regulations—as well as executive orders and memoranda and agency-specific policies.

## **Literature Review Findings and Gaps**

As observed from the literature review, claims that Federal ethics rules negatively impact the recruitment and retention of STEM employees are generally based on anecdotal evidence. Particular attention has been given to Presidential appointments with Senate confirmation, members of Federal advisory committees, and temporary employees, such as special government employees. There has been no rigorous qualitative or quantitative study that examined how Federal ethics rules impact the recruitment and retention of STEM employees within the Federal Government. Two surveys on this topic have been conducted, both of which are narrowly tailored to examine the impact of National Institutes of Health (NIH) ethics rules on NIH intramural researchers. These surveys reported that while NIH policies seem to strengthen the public integrity of research, respondents believe that the rules negatively impact recruitment and retention of NIH researchers.

## **Interview Findings on Impacts**

Interviewees generally agreed that the Federal ethics rules are appropriate and help uphold public integrity and confidence in the Federal Government’s decisions and activities. Many interviewees expressed concerns that Federal ethics rules and processes may be hindering the recruitment and retention of Federal STEM employees. Specific challenges, organized loosely within OGE’s categories of Federal ethics rules, include:

- Financial COI and impartiality requirements can impact recruitment and retention decisions of certain STEM employees.
  - Employees in top STEM positions, particularly those coming from industry, or high-net-worth individuals, may be unable to divest their interests (e.g., stock options controlled by a start-up).
  - Temporary employees, such as Intergovernmental Personnel Act (IPA) detailees, may be unwilling to divest financial interests given the short term nature of their employment.
  - Candidates or employees with patents may encounter conflicts if their official duties appear to influence or be influenced by their invention.
- Post-government employment limitations on communicating with government officials could impact recruitment for STEM candidates.
  - Certain former senior personnel must abide by a one-year “cooling off” restriction on communication that can be particularly challenging for

temporary employees, such as IPA detailees and special government employees.

- The lifetime ban, which is a permanent restriction on communication and representation on a particular matter in which the individual has a “direct and substantial interest,” may not be appropriate for large, long-term projects (e.g., greater than 10 years).
- Post-employment restrictions can deter mobility of STEM talent across the Federal research enterprise, particularly for those in specialized STEM fields with limited employers in their areas of expertise (e.g., nuclear weapon designer employment options may be limited to government employees or contractors in Federal laboratories).
- Restrictions on outside employment and activities, gifts from outside sources, and misuse of position may affect Federal STEM employees more than they do other members of the executive branch who participate in certain activities.
  - Consulting restrictions can impact recruitment and retention by influencing candidates’ salary expectations and professional development opportunities.
  - Federal employees who serve as journal editors cannot receive compensation for their service if it is considered part of their official duties as a government official, and interviewees were concerned about inconsistent interpretation and application of these rules across agencies.
  - Federal STEM employees cannot accept compensation for teaching, speaking, and writing that relates to their official duties.
  - Honorary awards presented to Federal employees may be prohibited under Federal ethics rules. Federal employees may accept honorary awards if they (and their investment interests) do not exceed \$200 (5 CFR Part 2635.204(d)). But the Emoluments Clause of the U.S. Constitution (Article I, Section 9, Clause 8) prohibits Federal employees from accepting compensation from a foreign government unless authorized by Congress. This poses a challenge for those receiving honorary awards when the providing organization is funded predominantly by a foreign government (e.g., a public, government-funded university).

## **Reported Suggestions**

Interviewees provided some suggestions that they perceived as relevant to improving the government’s ability to recruit and retain STEM Federal employees. The project team categorized these into three areas (1) administrative process reforms, (2) regulatory reforms, and (3) legislative reforms.

Experts interviewed provided 16 suggestions among these areas. The project team further developed the suggestions after analysis of the relevant Federal ethics rules. The results are provided in the table below.

### Summary of Interviewee Suggestions

Type of Reform	Suggestions
Administrative Process	<ul style="list-style-type: none"> <li>Implement electronic filing and data management systems to facilitate storage and use of information for reporting financial disclosures</li> <li>Use alternative financial disclosure forms to streamline the process and reduce burdens on STEM candidates and employees</li> <li>Provide information and guidance on Federal ethics rules to candidates for Federal service early in the process to better manage expectations</li> <li>Increase awareness of potential remedies, such as waivers and exceptions, to assist agency ethics officials with the administration of Federal ethics rules</li> <li>Improve outreach and communication within agencies when identifying and assessing ethical conflicts</li> <li>Improve agency recruitment practices to identify candidates without ethical conflicts</li> <li>Encourage interagency exchange of best practices in administering Federal ethics rules and managing ethical conflicts</li> </ul>
Regulatory	<ul style="list-style-type: none"> <li>Clarify the definition and provide examples of “direct and predictable effects” and their application in the context of basic research and Federal STEM employees</li> <li>Update the financial interest <i>de minimis</i> thresholds for exemptions</li> <li>Establish an exemption for financial conflicts that distinguishes between parent companies and their subsidiaries</li> <li>Clarify how unvested stock options and other non-market interests should be considered in determining a financial conflict</li> </ul>
Legislative	<ul style="list-style-type: none"> <li>Establish a standard for financial interest waivers (under 18 U.S.C. § 208) that includes a consideration of national or public interest</li> <li>Delegate the post-employment waiver (18 U.S.C. § 207(k)) to agency heads and increase the personnel cap</li> <li>Develop a waiver for specialized or critical areas of need for STEM fields</li> <li>Revise the post-employment ban for the life of the matter (18 U.S.C § 207(a)(1)) to a defined period</li> <li>Raise the thresholds for financial interest disclosures (5 U.S.C. App. 4 §§ 101–111)</li> </ul>

## Conclusions

The STPI project team found that Federal ethics rules are generally appropriate for upholding public integrity in government decisions and activities. But findings also suggest challenges may exist in administering the Federal ethics rules and mitigating their potential hindrance on the recruitment and retention of Federal STEM employees. The degree of impact on recruitment and retention of Federal STEM employees is unclear. The literature review found largely anecdotal evidence, while interviewees had a range of



opinions on the magnitude of impact in their respective agencies. While a rigorous analysis of the evidence basis for the proposed suggestions was outside the scope of this project, the suggestions on reforming administrative processes, regulation, and legislation provide a path forward for dialogue on perceived challenges and potential solutions.



# Contents

---

1.	Introduction .....	1
	A. Purpose .....	1
	B. Scope .....	1
	C. Approach .....	1
	1. Literature Review .....	1
	2. Interviews .....	2
	D. Structure of the Report .....	2
2.	Federal Ethics Rules .....	5
	A. Overview of the Federal Ethics Rules .....	5
	1. Criminal and Civil Statutes and Regulations .....	7
	2. Agency Supplemental Regulations .....	8
	3. Executive Orders .....	8
	4. Special Applications of Ethics Rules to Certain Federal Employees .....	10
	B. Exceptions and Waivers .....	10
	1. Exceptions .....	11
	2. Waivers .....	11
	C. Administration and Enforcement of Ethics Rules .....	12
3.	Literature Review Findings .....	15
	A. Presidential Appointments with Senate Confirmation .....	15
	B. Members of Federal Advisory Committees and Temporary Employees .....	17
	C. Intramural Researchers at NIH .....	18
4.	Interview Findings .....	21
	A. Financial Conflicts and Impartiality .....	21
	B. Post-Governmental Employment .....	22
	C. Outside Employment and Activities, Gifts from Outside Sources, and Misuse of Position .....	24
5.	Interviewee Suggestions .....	27
	A. Administrative Process Reforms .....	27
	1. Implement Electronic Filing and Data Management Systems to Facilitate Storage and Use of Information for Reporting Financial Disclosures .....	27
	2. Use Alternative Financial Disclosure Forms to Streamline the Disclosure Process and Reduce Burdens on STEM Candidates and Employees .....	28
	3. Provide Information and Guidance on Federal Ethics Rules to Candidates Early to Better Manage Candidate Expectations .....	28

4.	Increase Awareness of Potential Remedies, such as Waivers and Exceptions, to Assist Agency Ethics Officials with the Administration of Federal Ethics Rules .....	29
5.	Improve Outreach and Communication within Agencies when Identifying and Assessing Ethical Conflicts .....	29
6.	Improve Agency Recruitment Practices to Identify Candidates without Ethical Conflicts.....	30
7.	Encourage Interagency Exchange of Best Practices in Administering Federal Ethics Rules and Managing Ethical Conflicts.....	30
B.	Regulatory Reforms .....	30
1.	Clarify the Definition and Provide Examples of “Direct and Predictable Effects” and Their Application in the Context of Basic Research and Federal STEM Employees .....	31
2.	Update the Financial Interest <i>de Minimis</i> Thresholds for Exemptions .....	31
3.	Establish an Exemption for Financial Conflicts that Distinguishes Between Parent Companies and Their Subsidiaries.....	32
4.	Clarify How Unvested Stock Options and Other Non-market Interests Should Be Considered in Determining a Financial Conflict .....	33
C.	Legislative Reform .....	33
1.	Establish a Standard for Financial Interest Waivers (Under 18 U.S.C. § 208) that Includes a Consideration of National or Public Interest.....	33
2.	Delegate the 18 U.S.C. § 207(k) Post-Employment Waiver to Agency Heads and Increase the Personnel Cap .....	34
3.	Develop a Waiver for Specialized or Critical Areas of Need for STEM Fields.....	34
4.	Revise the Post-Employment Ban for the Life of the Matter (18 U.S. Code § 207(a)(1)) to a Defined Period.....	35
5.	Raise the Thresholds for Financial Interest Disclosures (5 U.S.C. App. 4 §§ 101–111).....	36
6.	Conclusions .....	37
	Appendix A. Interviewees .....	A-1
	Appendix B. Discussion Guide.....	B-1
	Appendix C. Agency Supplemental Policies.....	C-1
	Appendix D. Financial Interest Thresholds for Public Financial Disclosures.....	D-1
	Appendix E. Exemptions for Financial Interests .....	E-1
	References.....	F-1
	Abbreviations.....	G-1

# 1. Introduction

---

## A. Purpose

In order to understand the issues related to Federal ethics rules in the context of recruiting and retaining executive branch Federal science, technology, engineering, and mathematics (STEM) employees, the Office of Science and Technology Policy (OSTP) requested that the IDA Science and Technology Policy Institute (STPI) undertake a task to identify the effects of ethics rules on recruitment and retention of STEM employees across various Federal agencies, including the National Institutes of Health (NIH), the Department of Defense (DOD), and the Department of Energy (DOE), and report on any potential suggestions to ameliorate those challenges.

## B. Scope

For the purposes of this report, “Federal ethics rules” include ethics laws, regulations, and policies, including those addressing conflicts of interest (COIs),<sup>2</sup> that govern the conduct of executive branch employees. These rules are established in civil and criminal statutes in the United States Code (U.S.C.), regulations in the Code of Federal Regulations (CFR), executive orders and memoranda, and agency-specific policies. Chapter 2 reviews these rules in detail.

## C. Approach

The findings presented in this report are based on a literature review and semi-structured interviews with individuals across Federal agencies and offices, academic institutions, and private companies.

### 1. Literature Review

The literature review discussed in Chapter 3 covered Federal ethics rules (as defined above), congressional hearings, books, journal articles, reports, and press releases related to the evolution of Federal ethics rules, their application, and their effects on recruitment and retention of STEM employees in Federal service. These materials included:

---

<sup>2</sup> According to Federal Government officials interviewed for this report, “conflict of interest” is a term of art that applies only to the Federal criminal statutes under 18 U.S.C. 201–219.

- Several National Academies reports on the impacts of Federal ethics rules on Presidential appointees and members of Federal advisory committees (FACs) (National Academies 1992, 2001, 2003, 2005, 2008);
- Congressional Research Service (CRS) reports on specific aspects of ethics, including financial interest, gifts, previous employment and affiliations, post-employment restrictions, and application of ethics rules for Federal advisory committees (Maskell 2006; Smith 2006; Maskell 2007a, 2007b; Stine and Brass 2009; Maskell 2010, 2014); and
- Other Federal reports produced by organizations involved in oversight of ethics rules, such as the Office of Government Ethics (OGE), particularly two reports to Congress with suggestions for revising ethics rules (OGE 2005; OGE 2006) and the Government Accountability Office (GAO), which surveyed the enforcement of ethics rules across the Federal Government (GAO 1988), provided a framework for analyzing ethical problems (GAO 1994), and, most recently, reviewed the application of ethics rules for temporary employees on Federal advisory committees (GAO 2004; GAO 2008b).

## **2. Interviews**

The project team interviewed 28 individuals across Federal agencies and offices, academic institutions, and private companies. Refer to Appendix A for a list of individuals interviewed and their affiliations. The interviews yielded a wide-range of Federal perspectives from agency attorneys and ethics officials, scientific integrity officers, human capital officers, and current and former Federal employees. The discussions focused on application, practice, and management of Federal ethics rules; benefits; impacts, if any, on the recruitment and retention of STEM employees; and suggestions to address the challenges. The interviews are discussed in Chapter 4 of this report and Appendix B presents the discussion guide used for the interviews.

## **D. Structure of the Report**

This report presents the following:

- Background on Federal ethics rules (Chapter 2),
- Literature review findings and gaps (Chapter 3),
- Interview findings (Chapter 4),
- Reported suggestions (Chapter 5), and
- Conclusions (Chapter 6).

Supporting appendixes provide:

- A list of interviewees (Appendix A),
- The interview discussion guide (Appendix B),
- Agency supplemental ethics regulations (Appendix C),
- Financial interest thresholds for public financial disclosures (Appendix D), and
- Exemptions for financial interests (Appendix E).





## 2. Federal Ethics Rules

---

According to OGE, Federal ethics rules can be categorized into five major areas (OGE 2014): (1) financial conflicts and impartiality, (2) post-government employment, (3) outside employment and activities, (4) gifts and payments, and (5) use of government position and resources. An array of Federal ethics rules governs these areas, including criminal and civil statutes, OGE regulations, agency supplemental regulations, and executive orders. To add to the complexity, Federal ethics rules include different or additional restrictions for certain types of employees, such as political appointees and senior officials. Because of the broad nature of the restrictions in Federal ethics rules, there are also several exceptions and waivers, some specific only to certain Federal employees. OGE the Department of Justice (DOJ), and the agencies in which the employees work are all involved in overseeing, administering, and enforcing the Federal ethics rules.

### A. Overview of the Federal Ethics Rules

The five categories of Federal ethics rules are:

- *Financial conflicts and impartiality.* This category includes ethics rules that prohibit official work that could benefit the employee personally or affect the financial interests of the employee and the employee’s family. Financial conflicts may involve holding specified property or receiving payment from non-Federal sources, among other interests. Financial conflicts can occur before, during, or after Federal service (OGE 2014d). Two examples follow.
  - A Federal employee may receive a payment from a non-Federal source before entering Federal service and then be involved as a government employee in a matter involving the source of that payment. However, the payment may be regarded as a conflict if “a reasonable person with knowledge of the relevant facts would be likely to question the employee’s impartiality in the matter” (5 CFR Part 2635.502). Additionally, employees may need to disqualify themselves for two years from matters involving a former employer if they have received special severance payments or other benefits in excess of \$10,000 (5 CFR Part 2635.503).

- A Federal employee may not conduct official work that involves a potential future employer if the individual is at the time seeking employment with the employer (5 CFR Part 2635.604).
- *Post-government employment*—Employees may be disqualified from working on particular Federal Government matters while seeking future employment and from engaging in certain activities after leaving Federal service (OGE 2014g).
- *Outside employment and activities*—This category includes restrictions on employees engaging in outside activities, conditions for disqualification from official work while engaged in an outside activity, and accepting compensation for an outside activity (OGE 2014f). These restrictions may apply to teaching, speaking, and writing, among other activities. An employee cannot receive compensation for such activities if they are performed as part of the employee’s official duties.
- *Gifts and payments*—Federal ethics rules in this category prohibit employees from giving, accepting, or soliciting gifts from certain other Federal employees or non-Federal sources if the gift can be construed as providing special treatment. Suspicion may arise in cases where the gift is from an individual or organization that is also involved in dealings with the employee’s agency. In addition, gifts received/given prior to or after an employee’s Federal service can be perceived as a “revolving door” reward, referring to the mobility of personnel between the Federal Government and the private sector.<sup>3</sup> Federal ethics rules provide restrictions on gifts between employees and from outside sources, for compensation involving invitations from outside sources, receiving awards and honors, and bribery (OGE 2014e).
- *Use of government position and resources*—Employees must act impartially, not make improper use of their government position or authority, for instance, for the benefit of the employee’s private interests, or not use the government’s property, non-public information, or time for other than authorized purposes (OGE 2014h).

Many Federal ethics rules apply to more than one of these categories. For example, some activities may be considered a conflicting outside employment activity and, if compensated, may also present a financial conflict.

---

<sup>3</sup> For examples of private sector policies on revolving door rewards, refer to Smallberg (2013).

## 1. Criminal and Civil Statutes and Regulations

The criminal bribery and illegal gratuities statute (18 U.S.C. § 201) and the criminal conflict of interest statutes (18 U.S.C. § 202-209) were first enacted in 1962 by the Ethics in Government Act (P.L. 87-849). The civil statutes in 5 U.S.C. app. 4 were enacted by the Ethics in Government Act of 1978 (P.L. 95-251). OGE has promulgated regulations found in 5 CFR Parts 2634–2641 that establish standards of conduct for executive branch employees, contain guidance for interpreting criminal and civil conflict of interest laws, implement statutory provisions relating to financial disclosure, and describe responsibilities relating to the administration of the executive branch ethics program.<sup>4</sup> Some of these statutes and regulations are described in Table 1.

**Table 1. Select Criminal Statutes and Regulations Relevant to Executive Branch Employees**

<b>Description</b>	
<b>Criminal Statutes</b>	
18 U.S.C. § 201	Bribery of public officials and witnesses
18 U.S.C. § 203	Compensation to Members of Congress, officers, others in matters affecting the government
18 U.S.C. § 205	Activities of officers and employees in claims against and other matters affecting the government
18 U.S.C. § 207	Restrictions on former officers, employees, and elected officials of the executive and legislative branches
18 U.S.C. § 208	Acts affecting a personal financial interest
18 U.S.C. § 209	Salary of government officials and employees payable only by the United States
<b>Regulations</b>	
5 CFR Parts 2635.101–902	Standards of ethical conduct for employees of the executive branch; Subpart A includes general provisions, Subpart B involves gifts from outside sources, Subpart C involves gifts between employees, Subpart D involves conflicting financial interests, Subpart E involves impartiality in performing official duties, Subpart F involves seeking other employment, Subpart G involves misuse of position, Subpart H involves outside activities, and Subpart I involves related statutory authorities
5 CFR Parts 2640.101–304	Interpretation, exemptions and waiver guidance concerning 18 U.S.C. 208 (acts affecting personal financial interest)
5 CFR Parts 2641.101–302	Post-employment conflict of interest restrictions

<sup>4</sup> Refer to OGE (2013) for a reference to Federal ethics rules.

## 2. Agency Supplemental Regulations

Agencies may supplement 5 CFR Parts 2635–2641 with approval from OGE as appropriate to address potential ethical conflicts unique to the agency’s mission (5 CFR Part 2635.106). As of August 2014, 50 agencies had supplemental regulations that are outlined in the agency’s chapter in Title 5 of the CFR. Agency supplemental regulations can be driven by the need to restrict activities beyond those outlined in criminal, civil, and Federal-wide regulations. For instance, DOJ’s supplemental regulation restricts DOJ employees from purchasing property from DOJ that was forfeited to the United States unless approved by the agency (5 CFR Part 3801.104). The provision was established to avoid the appearance of an ethical conflict that raises “a question as to whether the employee has used his official position or nonpublic information to obtain or assist in an advantageous purchase” (5 CFR Part 3801.104).

NIH revised its ethics rules in 2005 to include banning employees from participating in outside activities with industry (see the box on the next page).

## 3. Executive Orders

The following executive orders prescribe standards of ethical conduct to executive branch employees:

- *Executive Order No. 12731, Principals of Ethical Conduct for Government Officers and Employees (Oct. 17, 1990)* sets out basic principles of ethical conduct for executive branch employees and directs OGE to establish a single, comprehensive, and clear set of executive branch standards of ethical conduct (i.e., 5 CFR Part 2635).
- *Executive Order No. 13490, Prescribing Standards of Ethical Conduct for Government Officers and Employees (Jan. 21, 2009)* requires full-time political appointees to sign an ethics pledge. The ethics pledge places restrictions on political appointees additional to the Federal Government-wide ethics rules, including a lobbyist gift ban and revolving door bans, which include a two-year prohibition on (1) participating in a particular matter in which the individual directly and substantially worked on with a former employer or client<sup>5</sup> and (2) lobbying activities, such as seeking employment with a lobbying employer or being registered as a lobbyist within the two years before the date of Federal employment, among others.

---

<sup>5</sup> The phrase “particular matter” is used throughout various Federal ethical rules. OGE has promulgated guidance to agencies regarding the definitions of “particular matter involving specific parties,” such as grants and licenses, broader types of “particular matters,” such as those that have general applicability to an entire class of persons, and “matters,” which is the broadest of the three categories and includes all Government activities. See OGE website, OGE website, *DO-06-029: 'Particular Matter Involving Specific Parties,' 'Particular Matter,' and 'Matter'*, <http://www.oge.gov/displaytemplates/modelsub.aspx?id=2247>.

## Supplemental Ethics Regulations: National Institutes of Health (NIH)

In December 2003, the *Los Angeles Times* released an article reporting that hundreds of NIH scientists, including senior officials overseeing clinical trials, accepted stock options or consulting fees valued in the millions of dollars related to their official work and did not properly disclose these interests (Willman 2003). A congressional representative stated, “this is the largest scandal in all of the NIH’s existence” (Willman 2006). In response, NIH crafted new ethics rules based on three principles:

1. The public must be assured that research decisions made at NIH are based on scientific evidence and not by inappropriate influences.
2. Senior management and people who play an important role in research decisions must meet a higher standard of disclosure and divestiture than people who are not decision-makers.
3. To advance the science and stay on the cutting edge of research, NIH employees must be allowed interaction with professional associations, participation in public health activities, and genuine teaching opportunities.

On August 25, 2005, Elias Zerhouni, then director of NIH, announced the ethics rules amendments in a memorandum to all NIH employees ([http://www.nih.gov/about/ethics/coipolicymemo\\_08252005.htm](http://www.nih.gov/about/ethics/coipolicymemo_08252005.htm)). The main features of the new rules include:

- *Consulting*: The prohibition on outside consulting by NIH staff with substantially affected organizations, such as pharmaceutical, biotechnology, or medical device manufacturing companies; health care providers or insurers; and supported research institutions.
- *Financial disclosures*: Employees who file either a public (SF 278) or a confidential (OGE 450) financial disclosure report and non-filers who serve as clinical investigators identified on an NIH clinical study are required to report their and their family’s interests and amounts held in substantially affected organizations.
- *Divestiture required for senior employees*: Senior NIH employees and family (spouses and minor children) are required to divest financial interests in substantially affected organizations in excess of \$15,000 per company for all. Senior employees include the NIH Director and Deputy Director; all direct reports to the NIH Director; all Institute/Center Directors, Deputy Directors, Scientific Directors, and Clinical Directors; and extramural program officials who report directly to an Institute/Center Director; among others.
- *Monetary awards*: Senior employees are barred from receiving the cash component of pre-screened awards offered by organizations that have matters pending under their official responsibility. The receipt of monetary awards from outside sources for all employees is contingent upon prior approval.

The rules stipulate ongoing need to facilitate academic and scientific interactions and allow some flexibility for pursuing outside activities. For instance, exceptions are made for:

- Compensated academic outside activities, such as teaching courses at universities, writing general textbooks, performing scientific journal reviews or editing, and providing general lectures to physicians and scientists as part of continuing professional education;
- Clinical, medical, or health-related professional practice; and
- Hobbies, sports, civic organizations, or interests unrelated to the NIH mission.
- Accepting compensation for certain activities is allowed under conditions prescribed by regulation and may be subject to prior agency approval and review (5 CFR Part 5501.109(c)(3)(i)).

#### **4. Special Applications of Ethics Rules to Certain Federal Employees**

Federal ethics rules generally apply to all Federal employees, regardless of the position or type of work. Special restrictions apply only to certain types of employees:

- Only political appointees are subject to ethics rules under Executive Order No. 13490, including a lobbying gift ban and a two-year revolving door ban for appointees and lobbyists entering Federal service.
- Certain senior and very senior personnel are subject to one- and two-year post-employment restrictions, respectively, regarding communication or representation before the government on matters in which they worked while in Federal service (referred to as a “cooling-off period”) (18 U.S.C. § 207).<sup>6</sup>
- Only senior officials are required to file public reports of their finances and outside government interests (5 U.S.C. app. §101).
- Special government employees (SGEs)<sup>7</sup> have limited post-employment (18 U.S.C. § 207) and salary restrictions. Specifically, the one-year cooling off period applies only to former SGEs who served 60 days or more during the one-year period before terminating their services as a senior employee. SGEs are also exempted from receiving salary or supplements for their services as a Federal employee given that they are serving in temporary positions and will return to their former employment (18 U.S.C. § 209).

#### **B. Exceptions and Waivers**

Federal ethics rules outline a range of exceptions and waivers, including those for post-employment and financial interests.

---

<sup>6</sup> Senior personnel are defined as employees: (1) with a rate of pay set by the Executive Schedule (5 U.S.C. Chapter 53 Subchapter II), (2) with a rate of pay that is equal to or greater than 86.5 percent of the rate of basic pay for level II of the Executive Schedule, (3) appointed by the President to a position under 3 U.S.C. § 105 (a)(2)(B) for assistance and services for the President or by the Vice President under 3 U.S.C. § 106 (a)(1)(B) for assistance and services for the Vice President, (4) in a position held by an active duty commissioned officer of the uniformed services serving in a grade or rank with a pay grade 0-7 or above, or (5) assigned from a private sector organization to an agency under the Information Technology Exchange Program (5 U.S.C. Chapter 37). Very senior personnel are defined as employees, including the Vice President: (1) with a rate of pay of level I of the Executive Schedule or employed in the Executive Office of the President at a rate of pay of level II of the Executive Schedule or (2) appointed by the President to a position under 3 U.S.C. § 105 (a)(2)(A) for assistance and services for the President or by the Vice President under 3 U.S.C. § 106 (a)(1)(A) for assistance and services for the Vice President.

<sup>7</sup> An SGE, as defined in 18 U.S.C. § 202, is a person recruited by the Federal Government to perform temporary duty, with or without compensation, for not more than 130 days either full or part time, during any period of 365 consecutive days.

## 1. Exceptions

Exceptions exclude the application of an ethics rule in certain circumstances or to certain types of employees. Exceptions are provided by statute or regulation. For example, two exceptions to the post-employment statute (18 U.S.C. § 207) are:

- *Title 18 U.S.C. § 207(j)(2)*: Employees from State and local governments, accredited degree-granting institutions of higher education, hospitals, or medial research organizations are excepted from certain post-employment restrictions related to the one-year cooling-off period for senior personnel and the two-year cooling-off period for very senior personnel, members of Congress, and employees of the legislative branch (18 U.S.C. § 207(c), (d), and (e)).
- *Title 18 U.S.C. § 207(j)(5)*: Post-employment restrictions related to the permanent ban for matters in which the individual participated directly and substantially, the one-year cooling-off period for senior personnel, and the two-year cooling-off period for very senior personnel do not apply to communications solely for the purpose of furnishing scientific or technological information (18 U.S.C. § 207(c), (d), and (e)).

## 2. Waivers

Waivers are authorizations to determine an exception to a Federal ethics rule on a case-by-case basis. Waivers can be granted for an individual, a class of people, or a particular activity. Waivers are subject to a standard of determination established by statute or regulation. Post-employment and financial interest waivers include:

- *Title 18 U.S.C. § 207(k), Post-Employment Restriction Waiver*: This authority allows the President to grant a waiver to the post-employment restrictions under 18 U.S.C. § 207 upon determining and certifying in writing that the waiver is in the public's interest and the services of the employee are critically needed by the government. The waiver is limited to 25 employees currently employed at any one time. The waiver specifies that an employee from Lawrence Livermore National Laboratory, Los Alamos National Laboratory, or Sandia National Laboratories can return to their former employers after Federal service without being subject to post-employment restrictions.<sup>8</sup> The waiver also allows employees to return to work for a government-owned, contractor operated entity after their Federal service if they were employed by the entity immediately prior to their Federal employment.

---

<sup>8</sup> According to interviews, the draft legislation for this statute originated at DOE and language related to these Federal laboratories was carried over to the enacted legislation.

- *Title 18 U.S.C. § 208(b)(1), Financial Conflict of Interest Waiver for a Particular Employee:* Agencies may grant a waiver for an employee to participate in a matter in which the employee has a financial interest upon determination that the interest is not so substantial as to be deemed likely to affect the integrity of the employees services to the government.
- *Title 18 U.S.C. § 208(b)(2), Financial Conflict of Interest Waiver via OGE regulation:* The Director of OGE may promulgate a regulation establishing a waiver to all or a portion of employees for financial interests that are too remote or too inconsequential to affect the integrity of the employees (exemptions are outlined in 5 CFR Part 2640.201–206).
- *Title 18 U.S.C. § 208 (b)(3), Special Government Employee (SGE) Waiver:* Agencies may grant a waiver for an SGE serving on a Federal advisory committee (FAC) upon determination that the need for the individual’s services outweighs the potential for a conflict of interest created by the financial interest involved.

Title 5 CFR Part 2640.303 specifies that OGE may be formally or informally consulted, when practicable, prior to agencies issuing financial interest waivers under Title 18 U.S.C. § 208(b)(1) and (b)(3).

### **C. Administration and Enforcement of Ethics Rules**

The administration of Federal ethics rules is shared among OGE, heads of agencies, designated agency ethics officials (DAEOs), and DOJ. In addition, other Federal agencies, such as the Federal Bureau of Investigation, collaborate with DOJ on investigations, prosecutions, and enforcement.

- *OGE:* OGE promotes ethical standards for executive branch employees and provides overall direction, oversight, and accountability of executive branch policies designed to prevent and resolve violations of Federal ethics rules. Specifically, OGE is responsible for:
  - promulgating and maintaining enforceable standards of ethical conduct for civilian employees and uniformed service members in executive branch agencies;
  - overseeing the financial disclosure system;
  - ensuring that executive branch ethics programs are in compliance with laws and regulations;
  - providing education and training to executive branch employees;



- conducting outreach to the general public, the private sector, and civil society; and
- sharing good practices with, and providing technical assistance to, State, local, and foreign governments and international organizations (OGE 2014).
- *Agency Heads and DAEOs*: Agency heads have primary responsibility for agency ethics programs within their agencies. They are often designated in ethics statutes and regulations as the officials empowered to grant waivers. Each agency head appoints the DAEO to coordinate and manage the agency's ethics program (5 CFR Part 2638.203).
- *DOJ*: DOJ is responsible for the enforcement of criminal and civil ethics rules. Executive branch employees may be imprisoned, fined, demoted, or fired for violating an ethics provision. Whenever ethics officials have information concerning a possible violation of a criminal statute, the agency coordinates with its office of inspector general, or similar investigative unit, to refer the matter to DOJ. A violation of Federal ethics rules may not result in a criminal prosecution, but such violations may be cause for corrective or disciplinary action against an employee by the agency (OGE 2014c).

Ethics officials that find evidence that an employee violated an ethics statute or regulation are required to refer that evidence to the appropriate authority for action. Depending on the circumstances and the statute or regulation at issue, an executive branch employee may be imprisoned, fined, demoted, or fired for violating an ethics provision. Whenever ethics officials have information concerning a possible violation of a criminal statute, the agency should coordinate with its office of inspector general, or similar investigative unit, to refer the matter to DOJ. Violations of other statutes are enforced by DOJ through the use of civil penalties. A violation of the Standards of Conduct may not subject the violator to criminal prosecution, but such violations may be cause for corrective action or for disciplinary action against an employee by the agency (OGE 2014c).



### **3. Literature Review Findings**

---

Claims in the literature that ethics rules negatively impact the recruitment and retention of STEM employees are largely based on anecdotal evidence. Studies are focused on Presidential appointments with Senate confirmation (PAS), members of Federal advisory committees (FACs), and temporary employees, such as special government employees (SGEs). There has been no rigorous qualitative or quantitative study examining how Federal ethics rules impact the recruitment and retention of STEM employees within the Federal Government. Our literature review shows that to date only two surveys on this topic have been conducted. These were narrowly tailored to examine the impact of NIH ethics rules on NIH intramural researchers (further described below).

#### **A. Presidential Appointments with Senate Confirmation**

Several studies, testimonies at congressional hearings, and press releases suggest that Federal ethics rules influence decisions to serve in Federal science and technology (S&T) leadership positions, particularly PAS positions (Marshall 1989; Goldstein 1991; 1991; National Academies 1992, 2001, 2005, 2008; Mackenzie and Hafken 2002). Some of these impacts are represented in the following statements:

Ethics rules have increased in scope and detail, largely in response to a series of defense procurement scandals, and have imposed substantial restrictions on post-government employment choices, types of financial holdings, and outside earnings...Partly as a result of these hurdles and disincentives, fewer scientists and engineers consider serving as presidential appointees (National Academies 1992, 31).

Most of the top S&T positions would ideally be filled by scientists, engineers, or health professionals...[who] are often recruited into public service from academic or industrial research organizations.... It is essential that the pool of potential appointees not be narrowed by avoidable obstacles, such as...unreasonably burdensome restrictions on pre-government and post-government activities (National Academies 2008, 9).

Challenges cited in the literature include the following (National Academies 1992, 2001, 2005, 2008):

- difficulties of remedying financial conflicts through divestiture or recusal, particularly for those recruited from the private sector who may have significant stocks or stock options from their former employers;

- increasing costs and burden of filing and reviewing financial disclosure forms and complying with changing requirements, such as those for disclosure thresholds;
- ban on outside earned income that can impact the continuation of professional development and stymie scientific and engineering careers;
- restrictions on the ability of top S&T personnel to move between the government and the private sector (this mobility is often referred to as the “revolving door”); and
- need for the Federal Government to conduct periodic reviews of the Federal ethics rules to assess the costs and benefits of their application and whether they require updates.

These challenges are based on anecdotal evidence or statements from officials at Federal agencies that experienced difficulties hiring individuals to top S&T positions (see the box below). Due in part to the lack of evidence-based studies, the effects of Federal ethics rules on recruitment and retention decisions of PAS STEM employees and, more importantly, the ability of agencies to obtain qualified PAS employees, remain obscure.

#### **Anecdotes of Impacts of Federal Ethics Rules on Federal S&T Recruitment and Retention**

The selected anecdotes below reflect on the impacts of Federal ethics rules on top S&T positions within the Department of Defense (DOD), the Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA). Although these anecdotes are from sources dating back up to more than 25 years ago, they illustrate ongoing issues described in more recent literature on the topic of Federal ethics rules and the Federal workforce.

R. James Woolsey, who served as undersecretary of the Navy in the Carter administration, noted the significant retention and recruiting effects encountered when people in the Defense Department began to contemplate the impact of the post-employment restrictions...To many in government or being recruited to serve in government, that restriction would severely hamper their ability to make a living after government (Mackenzie and Hafken 2002).

It has been our experience that postemployment restrictions have discouraged senior National Laboratory employees from considering employment with DOE, and have deprived the Department of the technological and managerial know-how of National Laboratory employees whose career paths logically would have them wish to return to a senior Laboratory position after service in a senior DOE position. (1991)

The space station, to cite one prominent example, has had four managers in three years. During that same period, some three dozen of NASA’s most senior executives have left, many to escape new ethics restrictions that limited their career choices (Goldstein 1991; Marshall 1989).

## B. Members of Federal Advisory Committees and Temporary Employees

FACs throughout the Federal Government provide advice on policy and scientific matters. Table 2 shows the numbers of FACs by agency that served as scientific technical program advisory boards in fiscal year (FY) 2013. Rules governing the establishment and operation of FACs by agencies are outlined in the Federal Advisory Committee Act (P.L. 92-463 enacted in 1972) and regulatory guidance by the General Services Administration (GSA) (41 CFR Part 102-3). Included among the legal and regulatory provisions is the agency’s responsibility to ensure that FACs conform to Federal ethics rules.

**Table 2. Top 11 Agencies with Scientific Technical Program Advisory Boards as Federal Advisory Committees (FACs) in Fiscal Year (FY) 2013**

Agency	Number
Department of Health and Human Services (DHHS)	91
Department of Commerce (DOC)	17
Department of Defense (DOD)	15
Department of Energy (DOE)	15
Department of the Interior (DOI)	14
National Science Foundation (NSF)	11
Department of Veterans Affairs (VA)	10
Environmental Protection Agency (EPA)	8
Department of Transportation (DOT)	8
U.S. Department of Agriculture (USDA)	6
NASA	6

Note: FY 2013 is the latest data available from <http://www.facadatabase.gov>. Of the 972 FACs in FY 2013, 216 (22%) were used as scientific technical program advisory boards.

Agencies typically designate most FAC members as either an SGE or a representative. A representative is an individual that provides a particular point of view representing non-governmental entities (e.g., industry sector, labor unions, etc.); as such, ethics conflicts are inherent but accepted. This distinction is important since SGEs are considered government employees, and, therefore, must abide by Federal ethics rules, while representatives are not.

The use of the SGE designation in FACs and the lack of screening and effective management of ethics conflicts of FAC members were cited in several GAO studies (GAO 1983; GAO 1988; GAO 2004; GAO 2008b; GAO 2008a). According to Food and Drug Administration (FDA) officials and FDA Federal advisory committee members, the agency has faced barriers in recruiting qualified FAC members without ethics conflicts (GAO 2008a). This is partly due to the general belief that individuals with the expertise

sought for FDA’s FACs are the same experts sought by industry to conduct research. However, GAO (2008b) argues that improved outreach efforts, for instance in recruitment, could help FDA identify qualified experts without ethics conflicts.

Other studies stress that Federal ethics rules may hamper the ability of the Government to obtain the scientific advice and input it needs due to the burdens of reporting and complying with certain ethics rules, such as Federal and agency-specific financial disclosure requirements, which could deter participation of scientific and technical talent in Federal service (National Academies 2005, 2008; Epstein 2010). Many of the findings in these studies are based on interviews with agency ethics officials and FAC members, and some studies provide only anecdotal evidence of Federal ethics rules’ impacts on the recruitment of FAC members.

### **C. Intramural Researchers at NIH**

As previously described in Chapter 2, NIH amended its ethics rules in response to reports of ethics violations by intramural researchers accepting consulting fees and stock from pharmaceutical and biotechnology companies with financial interests in their research (see the box “Supplemental Ethics Regulations: National Institutes of Health (NIH)” on page 19). Two studies describe the only instances in the literature review in which a survey and statistical methods were used to assess the impact of ethics rules, specifically the 2005 NIH amendments, on recruitment and retention of NIH STEM employees (NIH 2006; Zinner et al. 2010). The findings from these surveys indicate that a majority of respondents believe that the NIH ethics rules have strengthened NIH’s credibility with the public. Findings show that the amendments limited employee relationships with industry as they were intended to do, but they also are perceived to have had negative effects on recruitment and retention. See the box on the next page for relevant findings from these surveys.

## Results from Surveys on Impacts of NIH 2005 Ethics Rules Amendments

Two publications document the results of surveys to assess the impacts of the NIH 2005 ethics amendments on intramural researchers (Zinner et al. 2010). The findings include reported effects of the ethics rules on recruitment or retention of NIH employees, benefits, and performance and mission, among other areas.

- NIH (2006) reported results from an online survey of about 8,000 employees (roughly 50% of all employees). Of relevance are the following findings:
  - 56% and 54% state that policies negatively impact recruitment and retention of staff, respectively
  - Nearly half believe better enforcement of existing policies, rather than strengthening policies, should have occurred
  - 60% and 73% think that the NIH policies are appropriate and strengthened credibility with the public, respectively
  - 10% believe policies negatively impacted performance
  - Restrictions on outside activities are most important factors driving perceptions on the need to address the ethics rules and whether they are appropriate
- Analysis of the cohort of NIH scientists that responded to the survey (about 50%) indicates that scientists were more likely to feel that the new rules negatively impacted recruitment and retention (74.9% and 72%, respectively).
- Zinner et al. (2010) identified 900 NIH intramural scientists and administrators (current employees in 2008), of which 564 responded to the survey. Respondents comprised administrators (11.5%), investigators (61%), and staff scientists or clinicians (27.5%). Nearly all (95%) respondents were employed at NIH before 2005. Of relevance are the following findings:
  - 78% of administrators noted a negative impact on recruitment
  - 80% stated NIH policies were too restrictive
  - Nearly half believed policies strengthen public trust
  - More than 75% thought policies hindered mission
  - Significant drop in employees' consulting activities and board memberships





## 4. Interview Findings

---

Interviewees generally agreed that the Federal ethics rules are appropriate and help uphold public integrity and confidence in the Federal Government's decisions and activities. They indicated that Federal ethics rules are designed to mitigate the appearance of ethical conflicts, assuming that the actual influence from an ethical conflict is not necessary, and they outlined a range of remedies to manage any identified ethical conflicts. Interviewees also generally believed that the Federal ethics rules provide sufficient flexibility to achieve these goals.

Still most interviewees expressed concerns that Federal ethics rules and processes may, in certain circumstances, be negatively affecting the recruitment and retention of Federal STEM employees. While there was no consensus regarding the nature of these effects, interviewees did highlight challenges that Federal ethics rules place on Federal STEM recruitment and retention. The challenges were related to:

- financial COIs and impartiality;
- post-governmental employment; and
- outside employment and activities, gifts from outside sources, and perceived misuse of position.

Interviewees indicated that it is difficult to make a causal link between the Federal ethics rules and a candidate's decision to decline an offer or an employee's decision to leave Federal service. The interviews did not provide supporting data for this attribution beyond anecdotal observations. Interviewees noted there may be a range of factors that contribute to recruitment and retention decisions, including general discontent with the bureaucracy in the Federal Government, uncompetitive salaries compared with other sectors, and the greater limitations not related to ethics issues that Federal STEM employees may have compared with their peers in the private sector and academia.

### A. Financial Conflicts and Impartiality

In situations in which agency officials identify a financial conflict, most candidates and employees are willing to divest or recuse themselves. Interviewees noted that there is no easy way to determine the impact of the recusal on the conduct of the research and development (R&D), on R&D investment decisions, and on the ability for the agency to effectively meet its mission. Interviewees commented that if a recused employee could

have contributed a unique perspective, expertise, or advice, recusal could hinder the productivity and quality of R&D and, therefore, the agency's mission.

Financial interest restrictions seem to have relatively greater impact on a subset of STEM employees and could impact their recruitment and retention decisions:

- Senior STEM positions, particularly those coming from industry, or high-net-worth individuals who may be, for reasons beyond their control (e.g., stock options controlled by a start-up), unable to qualify to obtain a certificate of divestiture.<sup>9</sup>
- Temporary employees, including Intergovernmental Personnel Act (IPA) detailees, may face unique challenges due to the rotational nature of their government positions, which are typically two-year appointments (OPM 2014). These employees maintain their affiliation, benefits, and other financial interests with their employer. As a result, IPA detailees, particularly from non-Federal entities, may find it difficult to justify divesting from significant financial interests.
- Candidates or employees who own patents may also present an ethical conflict if their official duties appear to influence or be influenced by their invention (e.g., through licensing, royalties, and commercialization of the technology).

## **B. Post-Governmental Employment**

Interviewees expressed several concerns that limitations on communicating with government officials could impact recruitment for STEM candidates that find it important not to be limited in their career options after leaving their Federal Government positions.

Federal ethics rules stipulate that certain former senior personnel of the executive branch and independent agencies must abide by a one-year “cooling off” restriction on communication to or appearance before any officer or employee of the department or agency in which such person served on behalf of any other person on a matter (18 U.S.C. § 207(c)). In addition, there is similar limitation on communication lasting two-years for Federal employees with a “direct and substantial interest” in a particular matter that

---

<sup>9</sup> Title 26 U.S.C. § 1043 defines a certificate of divestiture as follows:

...any written determination –

- (A) that states that divestiture of specific property is reasonably necessary to comply with any Federal conflict of interest statute, regulation, rule, judicial canon, or executive order (including section 208 of title 18, United States Code), or requested by a congressional committee as a condition of confirmation,
- (B) that has been issued by the President or the Director of the Office of Government Ethics, in the case of executive branch officers or employees, or by the Judicial Conference of the United States (or its designee), in the case of judicial officers, and
- (C) that identifies the specific property to be divested.

involved specific parties (18 U.S.C. § 207(b)). Interviewees believed that these restrictions place undue hardship on STEM employees, for example, who are transitioning to academia and plan on submitting proposals to Federal funding agencies.<sup>10</sup> These challenges may be particularly notable for temporary employees who maintain their affiliations, such as IPA detailees and SGEs. Interviewees noted that STEM employees may be influenced by this restriction when considering a Federal position. In addition, they indicated that some employees plan ahead for this post-employment restriction by avoiding work relevant to their specific expertise or field for one or two years before leaving Federal service.

Another concern is the lifetime ban, which is a permanent restriction on communication and representation on a particular matter of “direct and substantial interest” to the government in which the individual participated personally and substantially and which involved a specific party or specific parties at the time of such participation (18 U.S.C. § 207(a)). One interviewee mentioned that the lifetime ban is not appropriate for large, long-term projects (e.g., greater than 10 years, such as a space mission) in which a Federal employee may (personally and substantially) work on only one part of the project. There may be no clear distinction on segmenting the project and the interest may be imputed to all aspects of the project over its lifetime. In such cases, individuals might be restricted from communicating with the agencies on behalf of another employer on any part of their project many years after their involvement. This interviewee thought the permanent restriction for these types of projects was unnecessary and overly burdensome, particularly when individuals are likely to be at different stages in their careers 5 to 10 years later and largely dealing with issues that would not be specific to their former duties. This restriction could impact recruitment if STEM candidates feel this limitation can hinder their career advancement and prospects with other employers.

Post-employment restrictions can also deter mobility of STEM talent across the Federal research enterprise and sectors, particularly for those in specialized STEM fields. These employees may have a limited number of options for employers in their areas of expertise (e.g. weapons designer). Some interviewees mentioned experiencing difficulty hiring these employees, particularly if they are coming from contractor-operated Federal laboratories, due to the restrictions that would be placed on them after leaving Federal service.

---

<sup>10</sup> Title 18 U.S.C. 207(j)(2) provides an exception of the one-year “cooling off” period (18 U.S.C. 207(c)) for former Federal employees that are employed by a State and local government entity, accredited, degree-granting institutions of higher education or hospital, and medical research organizations.

### C. Outside Employment and Activities, Gifts from Outside Sources, and Misuse of Position

Several interviewees indicated that some Federal ethics rules that may impact Federal STEM recruitment and retention are related to activities in which STEM employees may engage more than the broader workforce, including:

- *Consulting*: Restrictions on consulting vary by agency. For example, at NIH, employees are prohibited from consulting for pharmaceutical, biotechnology, and medical device companies and for any research institute that receives funding from NIH. At other agencies, consulting arrangements may be approved on a case-by-case basis. Interviewees mentioned that candidates may not be aware of Federal or agency-specific restrictions on consulting when hired. This could be because, according to interviewees, many agency ethics officials meet only rarely or ad hoc with the rank-and-file STEM candidates during the recruitment process. These restrictions can impact recruitment and retention by influencing the candidate's salary expectations and their professional development in order to stay current with the state-of-the-art in their respective fields. Often, Federal STEM employees compare their inability to consult with the freedoms provided to their peers in other sectors. Some interviewees felt that the concerns from STEM employees regarding this limitation could be reduced by better managing expectations regarding Federal service.
- *Serving as a journal editor*: Although Federal STEM employees often serve as journal editors, they cannot receive compensation for their service if it is considered part of their official duties as a government official (5 CFR Part 2635.807(a)). Interviewees noted a situation in which a STEM employee was offered compensation for traveling to meetings related to service as a journal's editor, but the agency did not allow the employee to receive this compensation. An agency's interpretation on accepting this compensation can vary depending on whether the service is considered part of the employee's official duties. Interviewees expressed concern over perceived inconsistency among agencies' interpretation and application of these rules. Inconsistent application could hinder the ability of STEM employees to engage in professional development and could influence recruitment and retention decisions.
- *Disseminating research findings through teaching, speaking, and writing*: Federal STEM employees cannot accept compensation for teaching, speaking, and writing that relates to their official duties (5 CFR Part 2635.807(a)).<sup>11</sup> The

---

<sup>11</sup> According to 5 CFR Part 2635.807(a)(2)(i), teaching, speaking, and writing are considered related to a government employee's official duties if:

effect of this limitation may be heightened by the increased scrutiny on travel spending and budget cuts, which, some interviewees noted, have increased the need for STEM employees to find supplemental funding from other sources to attend conferences.<sup>12</sup> These restrictions can change STEM employees' expectations for professional development and influence their recruitment and retention.

- *Receiving honorary awards:* Honorary awards and other compensation presented to Federal employees may be prohibited under Federal ethics rules. Federal employees may accept an award if the value of the award and any investment interests do not exceed \$200 (5 CFR Part 2635.204(d)). Gifts that aggregate to over \$200 may be accepted if there is a written determination by an agency ethics official that (1) the award is made on a regular basis, and (2) the selection of the award is determined by written standards. Interviewees mentioned experiencing some challenges with the latter condition when organizations do not have written criteria for assessing the selection of an awardee (e.g., Nobel prizes). This condition has limited STEM employees from receiving awards. One interviewee thought that having a selection committee composed of prominent and highly regarded scientists should be a sufficient condition for selection. However, these arguments have not gained traction with OGE. In addition, the Emoluments Clause of the U.S. Constitution (Article I, Section 9, Clause 8), which prohibits Federal employees from accepting compensation from a foreign state unless authorized by Congress, presents a challenge for receiving honorary awards if the providing organization is funded predominantly by a foreign government (e.g., a public, government-funded university). As one interviewee remarked, these issues seem to be particularly challenging for Federal STEM employees as compared with the broader workforce due to the many scientific and technical organizations that recognize meritorious research achievements. This could influence recruitment and retention of STEM employees that place importance on the ability to receive honorary awards.

- 
- the subject of the activity deals in significant part with any matter to which the employee presently is assigned or to which the employee had been assigned during the previous one-year period;
  - the invitation to speak was extended to the employee primarily because of his official position, rather than his or her expertise in the subject;
  - the invitation or the offer of compensation was extended by a person or entity substantially affected by the performance of the employee's duties; or
  - the activity is based substantially on nonpublic information.

<sup>12</sup> For an overview of recent conference and travel scandals from General Services Administration employees, refer to McElhatton (2012).



## 5. Interviewee Suggestions

---

Generally, interviewees agreed that Federal ethics rules are appropriate to ensure public confidence in government activities and decisions. However, they provided some suggestions that they believed are relevant to improving the government's ability to recruit and retain STEM Federal employees. The project team categorized these areas as:

- *Administrative process reforms*: Changes to a range of agency administrative processes that are relevant to Federal ethics rules, including but not limited to recruitment and hiring practices, ethics training, communication, and guidance.
- *Regulatory reforms*: Changes to relevant Federal ethics regulations, particularly 5 CFR Part 2640.
- *Legislative reforms*: Changes that require legislative action by Congress, such as revisions to existing or creation of new authorities.

The following section describes 16 suggestions provided by agency representatives and further developed from STPI researchers' own analysis of Federal ethics rules. These suggestions address only some of the many factors that may be linked to recruitment or retention decisions. The authors suggest that the reader consider these reported suggestions with caution, as supporting data for the potential impacts on recruitment or retention of Federal STEM employees is not available and the implementation of the suggestions may require further refinement.

### A. Administrative Process Reforms

Interviewees provided seven suggestions to improve processes in the administration of Federal ethics rules that could facilitate the recruitment or retention of Federal STEM employees.

#### 1. Implement Electronic Filing and Data Management Systems to Facilitate Storage and Use of Information for Reporting Financial Disclosures

Various interviewees recommended that annual reporting of financial disclosures could be made simpler by developing an electronic filing system. One interviewee mentioned an ideal system could store information so users do not have to refill forms with the same information each year. The visibility of such a system in the recruitment process could potentially ameliorate a STEM candidate's negative perceptions related to the bureaucracy of filing financial disclosures. A few agencies already offer this option:

- The Army offers an electronic filing system, Financial Disclosure Management (FDM), which won OGE's Program Excellence and Innovation Award in 2011. FDM can be procured on a reimbursable service basis by other agencies and has been used by the Department of Veterans Affairs (VA), Department of Health and Human Services' Centers for Disease Control (CDC), and the Department of Homeland Security (DHS) (OGE 2011a).
- The National Science Foundation (NSF) also has an electronic filing option, the Ethics Program Management Tool. Among other features, the system sends financial disclosure filers notifications, reminders, delinquency notices, and submission confirmations. (OEG 2011b).

## **2. Use Alternative Financial Disclosure Forms to Streamline the Disclosure Process and Reduce Burdens on STEM Candidates and Employees**

Some interviewees thought that agencies could be more flexible in determining the types of financial interests to be disclosed and that are relevant to the agency based on the context of the agency's mission. For example, an agency funding basic research may be concerned with potential financial conflicts stemming from a candidate's portfolio of research awards, which is not mandated by law or regulation to be disclosed. At some agencies, this information is collected as a supplement to mandated financial disclosure elements (refer to 6.Appendix D for a list of mandated financial disclosure elements).

Some interviewees suggested that OGE could promulgate guidance to help agencies create and seek approval of alternative financial disclosure forms. This could simplify the process of reporting different financial interests in a variety of formats and forms. For example, the Environmental Protection Agency (EPA) developed a form for SGEs to submit *in lieu* of OGE Form 450, which is required for public disclosures (EPA 2014). In contrast, as a *supplement* to Form 450, the Food and Drug Administration (FDA) uses a form that requires disclosure of additional interests such as speaking, writing, and acting as an expert witness (DHHS 2014). Interviewees generally thought that OGE could better work with agencies to streamline the financial disclosure process and requirements. This could ease the burden on, and potentially influence recruitment and retention decisions of, Federal STEM candidates and current employees.

## **3. Provide Information and Guidance on Federal Ethics Rules to Candidates Early to Better Manage Candidate Expectations**

Some interviewees stressed that starting the ethics dialogue early in the hiring process helped provide clarity and transparency for both the agency and employees. One interviewee said hard copies of the financial disclosure form are provided by the agency as part of a candidate's offer package to develop awareness of the financial disclosure requirements. Interviewees noted that in some cases, employees realized after being hired



that Federal ethics rules could restrict their participation in certain activities that their academic or industry peers can easily pursue, such as consulting and accepting compensation for attending conferences, speaking, and writing. Raising awareness of ethics rules early in the recruitment process may provide candidates with greater clarity into their responsibilities as a Federal Government employee. It could also help address negative sentiments that may arise if uninformed candidates become dissatisfied due to ethics rules restrictions, which can impact retention.

**4. Increase Awareness of Potential Remedies, such as Waivers and Exceptions, to Assist Agency Ethics Officials with the Administration of Federal Ethics Rules**

Interviewees generally suggested that OGE increase awareness of the ethics rules among agency ethics officials, particularly the array of exceptions authorized across the Federal Government and the appropriate use of waivers. One individual recommended that OGE develop a legal advisory that explains all the available waiver authorities and provides examples of their use in managing ethics conflicts. This advisory could provide clear guidelines to agency ethics officials to identify the most appropriate remedy for given situations and explain the circumstances in which a waiver is warranted. Currently, OGE legal advisories for waivers are developed separately and a comprehensive guidance for all waivers does not exist.<sup>13</sup> Interviewees expressed that improved OGE guidance could enhance the recruitment process and help recruit and retain STEM talent.

**5. Improve Outreach and Communication within Agencies when Identifying and Assessing Ethical Conflicts**

Several interviewees noted that agency ethics officials may not be reaching out to program directors, managers, and other technical experts within their agencies for context when assessing potential ethical conflicts. They emphasized that the insights of STEM subject-matter experts could help with assessments of whether an identified conflict, particularly within science and engineering fields, warrants divestiture, recusal, or a waiver. On the other hand, some agency representatives mentioned that agency ethics officials often seek advice from current STEM employees to support their review and the justification for waivers submitted to OGE. This practice could help ethics officials validate the causal link between the decision or action and the expected effect on an employee's financial interest. It may also provide greater transparency on decisions for remedies, such as requesting and issuing waivers. A more effective process for reviewing ethical conflicts may help STEM candidates and employees understand agency justifications, which may influence their recruitment or retention decisions.

---

<sup>13</sup> An example of a reference developed by the Office of Personnel Management (OPM) provides hiring officials guidance on the available human resource hiring and pay flexibilities (OPM 2008).

## **6. Improve Agency Recruitment Practices to Identify Candidates without Ethical Conflicts**

Some interviewees reported that agency hiring managers look only for candidates who arguably have unique skills or are the world's expert in their respective fields and then need to request waivers to resolve a candidate's ethical conflicts. But some interviewees thought that hiring managers could place greater effort on finding a qualified candidate who does not have an ethical conflict, particularly for temporary advisers, such as members in advisory committees. More effective recruitment efforts could diminish the apparent need to use waivers while obtaining a sufficiently qualified candidate and increase the likelihood of a successfully hire.

## **7. Encourage Interagency Exchange of Best Practices in Administering Federal Ethics Rules and Managing Ethical Conflicts**

Several interviewees suggested that discussions with agency ethics officials and others relevant to the administration of Federal ethics rules, such as OGE and DOJ, could facilitate the exchange of best practices related to the administration of Federal ethics rules and the resolution of any effects they have on STEM recruitment and retention. This could be accomplished through workshops or by expanding existing interagency communities of practice, such as the Scientific Integrity Officer meetings, which, one interviewee noted, meets irregularly, but at least monthly.<sup>14</sup> The exchange of agency practices could help the Federal ethics community learn effective ways to manage ethics conflicts and improve recruitment and retention of Federal STEM employees. It could also provide opportunities to learn from ethics training and guidance materials developed by agencies to more effectively administer Federal ethics rules and manage employee expectations.

## **B. Regulatory Reforms**

Interviewees provided four suggestions to facilitate the recruitment or retention of STEM Federal employees through OGE regulatory reforms.

---

<sup>14</sup> Federal agencies designated Scientific Integrity Officers to implement scientific integrity policies and principles described in the March 2009 Presidential Memorandum on Scientific Integrity ([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 the guidance provided by the December 2010 Office of Science and Technology Policy Memorandum on Scientific Integrity (<http://www.whitehouse.gov/sites/default/files/microsites/ostp/scientific-integrity-memo-12172010.pdf>).

## **1. Clarify the Definition and Provide Examples of “Direct and Predictable Effects” and Their Application in the Context of Basic Research and Federal STEM Employees**

The general provisions in 5 CFR Part 2640.103(a)(3) and 5 CFR Part 2640.402(b)(1) identify definitions and examples of “direct and predictable effects” for determining a financial conflict under 18 U.S.C. § 208, stating:

- (i) A particular matter will have a direct effect on a financial interest if there is a close causal link between any decision or action to be taken in the matter and any expected effect of the matter on the financial interest. An effect may be direct even though it does not occur immediately. A particular matter will not have a direct effect on a financial interest, however, if the chain of causation is attenuated or is contingent upon the occurrence of events that are speculative or that are independent of, and unrelated to, the matter. A particular matter that has an effect on a financial interest only as a consequence of its effects on the general economy does not have a direct effect within the meaning of this subpart.
- (ii) A particular matter will have a predictable effect if there is a real, as opposed to a speculative possibility that the matter will affect the financial interest. It is not necessary, however, that the magnitude of the gain or loss be known, and the dollar amount of the gain or loss is immaterial.

Several interviewees felt there was insufficient guidance from OGE to properly determine “direct and predictable effects” relevant to Federal STEM employees and their responsibilities. They remarked that agency ethics officials find difficulty justifying how research, primarily basic research, has a direct impact on an individual’s financial interests, when research outcomes (and a direct causal link to companies, revenue, and stocks) may not be easily determined. Interviewees recommended that OGE further clarify the definition and examples presented in 5 CFR Part 2640.103(a)(3) and 5 CFR Part 2640.402(b)(1) to simplify this complexity and address the application of the regulations in the context of basic research. One scenario could include a greater emphasis for agency officials to justify the direct causal links of research impacts to meet the regulatory standard. This could positively impact recruitment and retention of Federal STEM talent, particularly basic science researchers, since it could result in a more realistic standard for determining a financial conflict.

## **2. Update the Financial Interest *de Minimis* Thresholds for Exemptions**

Title 18 U.S.C. § 208 does not specify monetary thresholds to determine if a financial interest constitutes an ethical conflict, but 18 U.S.C. § 208(b)(2) authorizes OGE to establish blanket exemptions for financial interests considered “too remote or too inconsequential to affect the integrity of the services of the Government officers or employees.” OGE established several exemptions, known as the *de minimis* standards, for various situations (5 CFR Part 2640.202) (Appendix E). One interviewee suggested

updating and raising certain *de minimis* thresholds, particularly those set more than a decade or two ago. For example:

- The \$15,000 threshold for aggregated securities in matters involving specific parties was established in 2002 (61 Federal Register 66841).
- The \$50,000 threshold for aggregated securities in all entities impacted by matters of general applicability was established in 1996 (67 Federal Register 12445).

Another interviewee suggested that the *de minimis* thresholds be based on a percentage of the employee's income or net worth to properly consider ethical conflicts for those that have relatively more assets. Interestingly, one interviewee commented that before OGE developed these regulations, agency ethics officials used this method to determine if a financial interest was a conflict.

Raising the *de minimis* thresholds may ease burdens to administer and adhere to the regulations. A higher threshold may result in fewer Federal STEM employees having to divest or recuse themselves from their official responsibilities, which could influence their recruitment and retention decisions.

### **3. Establish an Exemption for Financial Conflicts that Distinguishes Between Parent Companies and Their Subsidiaries**

Some interviewees believed that current interpretation of Federal ethics rules leads agency ethics officials to consider a Federal STEM employee's financial interests in a subsidiary of a company as interests in the parent company and all its other subsidiaries. A subsidiary of a company may perform work that is wholly unrelated to the work of its parent or other subsidiaries. One interviewee emphasized that, in these cases, a financial interest in a subsidiary should not be imputed to the parent company and its subsidiaries. They suggested that OGE clarify this concept through regulation.

A similar exemption is specified for higher education institutions. Title 5 CFR Part 2640.203(c) indicates that a financial interest in one higher education institution in a multi-campus system (e.g., University of California) does not constitute a financial interest in other institutions in the multi-campus system and, therefore, does not disqualify the individual from participating in matters with these other institutions. One interviewee noted that a parallel stipulation for subsidiaries does not, but could, exist in this regulation. This exemption could particularly facilitate the recruitment of STEM personnel who hold interests in and work for large corporations with subsidiaries.

#### **4. Clarify How Unvested Stock Options and Other Non-market Interests Should Be Considered in Determining a Financial Conflict**

Non-market interests, such as unvested stock options, are required to be disclosed as a financial interest (5 U.S.C. App. 4 §§ 101-111). One interviewee observed that treatment of potential financial conflicts under 18 U.S.C. § 208 and associated regulations under 5 CFR Part 2640 varies within the agency. The interviewee suggested that OGE could clarify how agency ethics officials should treat non-market financial interests. The interviewee expressed the belief that agencies could facilitate recruitment and retention of Federal STEM employees if non-market interests are exempted from inclusion in determining a financial conflict and are not aggregated under *de minimis* values like other financial interests.

### **C. Legislative Reform**

Interviewees identified five reforms to ethics legislation as useful avenues to reduce barriers to the recruitment or retention of STEM talent into the government.

#### **1. Establish a Standard for Financial Interest Waivers (Under 18 U.S.C. § 208) that Includes a Consideration of National or Public Interest**

Under 18 U.S.C. § 208, the standard in the OGE regulations for issuing financial interest waivers includes that the interest be “not so substantial” or “too remote or too inconsequential” to affect the employee’s performance and that “the need for the individual’s services outweighs the potential for a conflict of interest created by the financial interest involved.” Including a national interest or public interest standard for financial waivers could allow agencies to hire employees with skills that would benefit the national or public interest to work on a particular subject matter in which they have a financial conflict. Such a standard already appears in 18 U.S.C. § 207(k).

OGE (2006) recommended a similar legislative reform that would amend 18 U.S.C § 208 to include a new paragraph that describes this type of waiver. OGE stipulated that the waiver could be certified by an agency head in writing, stating “that for the purposes of national security, national defense preparedness, or the health or safety of the people of the United States, the Government has need for his services on a particular matter or matters” (OGE 2006, 31). OGE proposed a similar waiver to Congress in 1991 in response to needs of the Persian Gulf War (OGE 2006). There has been no congressional action on these proposals.

A similar suggestion was to amend the 18 U.S.C. § 208(b)(1) waiver standard to include language that allows agencies to balance the benefits to the agency and consider the agency’s need for the individual and their expertise (similar to the SGE waiver, 18 U.S.C § 208 (b)(3)).

## **2. Delegate the 18 U.S.C. § 207(k) Post-Employment Waiver to Agency Heads and Increase the Personnel Cap**

The 18 U.S.C. § 207(k) post-employment restriction provides a waiver to employees coming into Federal service or returning to employment at a federally funded research and development center (FFRDC), such as the national laboratories under the National Nuclear Security Administration (NNSA): Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Sandia National Laboratories. A waiver under this authority has yet to be issued given the requirement for the President’s approval, and it is limited to 25 Federal employees at any one time.

Title 18 U.S.C. § 207(k) specifies that this waiver be issued for circumstances determined to be in the “public interest to grant the waiver and that the services of the officer or employee are critically needed for the benefit of the Federal Government.” Delegating the waiver to agency heads could facilitate its use in recruiting from government-owned, contractor-operated (GOCO) facilities, and could particularly alleviate the challenges detailees or other temporary employees from GOCO facilities may face when being recruited into Federal service. Additionally, one interviewee mentioned that the personnel cap could also be increased, as appropriate. Other waivers do not have a limit on the number of employees. The interviewee imagined that a revised waiver could offer highly useful flexibility to agency heads who hire STEM talent and would be frequently used across the Federal Government.

## **3. Develop a Waiver for Specialized or Critical Areas of Need for STEM Fields**

Several interviewees believed that agencies could benefit from having greater flexibility to waive ethics conflicts for employees in specialized or critical STEM fields. Although these interviewees did not specify the legislative revision to implement this suggestion, they believed that there was a need to waive ethics conflicts for STEM professionals in certain fields, such as computer sciences and cybersecurity.

One interviewee suggested developing a STEM exchange program that could be modeled after the Information Technology Exchange Program (ITEP), which was authorized by the E-Government Act of 2002 and reauthorized in 2007.<sup>15</sup> This program allows for the temporary exchange of information technology employees between DOD and the private sector. ITEP participants are regarded as Federal employees and subject to Federal ethics rules (32 CFR Part 241.8). One interviewee mentioned this has caused particular challenges in implementing the program since recusal, divestiture, or other

---

<sup>15</sup> The ITEP program was extended through September 2018 by the National Defense Authorization Act for FY 2014, Section 1110, Pilot Program for the Temporary Exchange of Information Technology Personnel.

remedies may be required for private sector employees.<sup>16</sup> The development of a new program could include waivers of certain Federal ethics rules, as appropriate, to facilitate the recruitment of qualified information technology or other professionals from critical or specialized STEM fields.

#### **4. Revise the Post-Employment Ban for the Life of the Matter (18 U.S. Code § 207(a)(1)) to a Defined Period**

Post-employment ethics rules restrict former Federal employees from representing their employers before the government on particular matters in which the employer was a “specific party” and in which they “personally and substantially” participated (18 U.S. Code § 207(a)(1)). This restriction is applied for the life of the matter. Some interviewees remarked that this restriction is less relevant for long-term, complex projects (on the order of 10 years or more) that involve relatively few organizations (e.g., space missions). For these projects, a Federal employee may have had a number of responsibilities throughout the project that could be considered personal and substantial. Interviewees remarked that after 5 to 10 years, former employees are likely to be in a different career stage with different responsibilities in their current positions (e.g., senior managers or executives). But these employees would likely be barred from communicating with the government until relevant projects are completed.

A relevant post-employment exception allows former Federal employees to represent and communicate with the government solely for the purpose of furnishing scientific or technological information (18 U.S. Code § 207(j)). Interviewees noted that this exception was not helpful for long-term projects since communication with a former employee, who would likely after 5 to 10 years be a senior manager or executive, would include areas beyond scientific or technical information.

A revision of the statute so that it applies for a defined period, as appropriate, rather than the life of a matter could potentially influence candidates’ decisions to enter Federal service if they perceive that the 18 U.S. Code § 207(a)(1) ban may limit their future careers. Some interviewees perceived this as being a particularly important factor in recruiting positions that involve long-term projects and in which relatively few specialized organizations are potential employers.

---

<sup>16</sup> This problem was confirmed by GAO, which found that Federal ethics rules have led to challenges in implementing the ITEP program by discouraging participation from private sector employees. The report states, “the regulations specified by the act, such as those governing claims against the government, political contributions, post-employment activities, disclosure of confidential information, and, especially, financial disclosure could make a detail to a federal agency unattractive” (GAO 2006, 9).

**5. Raise the Thresholds for Financial Interest Disclosures (5 U.S.C. App. 4 §§ 101–111)**

Unlike the *de minimis* standards, which OGE can establish through regulation (5 CFR Part 2640.202), financial disclosure requirements are specified by law (5 U.S.C. app. 4 §§ 101–111). Thresholds for financial interest disclosure requirements can range in items valued from \$200 for investment and non-investment income from a single source to over \$10,000 for liabilities (5 U.S.C. app. 4 §§ 101–111; see Appendix D for details). Interviewees thought the thresholds, in some cases, were low, and created an undue burden on employees as well as agency administrators while not aiding in the identification of financial interests that warrant remedies (as required by 5 U.S.C. app. 4 §§ 101–111.). Along these lines, OGE (2014a) states that “while some disclosure elements may seem more relevant to avoiding conflicts of interest than others, OGE has no authority to alter the statutory requirements.”

Interviewees thought that alleviating the burdens of financial disclosure requirements by raising the thresholds through appropriate revisions in the relevant statutes, could facilitate recruitment and retention of Federal STEM employees. This could particularly impact the retention of junior employees as they are promoted to senior positions, such as the Senior Executive Service, that may require reporting financial disclosures. In these cases, raising the threshold could impact retention decisions from those who may be deterred from, or unwilling to, take a higher level position due to the burden of having to disclose, and possibly modify, their financial interests.



## **6. Conclusions**

---

The STPI project team found that Federal ethics rules are generally appropriate for upholding public integrity in government decisions and activities. Findings also suggest challenges may exist in administering the Federal ethics rules and mitigating their potential hindrance on the recruitment and retention of Federal STEM employees. The degree to which these challenges impact recruitment and retention of Federal STEM employees remains unclear. The literature review provided only anecdotal evidence, while interviewees had a range of opinions on the magnitude of this impact in their respective agencies. While a rigorous analysis of supporting data for the interviewees' proposed suggestions was outside the scope of this project, the suggestions on reforming administrative processes, regulation, and legislation provide a path forward for dialogue regarding the issues and potential solutions to the perceived challenges.

One option for OSTP may be to encourage the community of Federal ethics administrators to share information on challenges faced in STEM recruitment and retention, exchange effective management practices, and discuss potential solutions. Some agencies may benefit from learning about other agencies' practices and understanding how they may be effectively applied in their own agencies. Interviewees confirmed that the Federal ethics community meets only informally and that officials typically communicate with one another only on an ad hoc basis. While there is some exchange of knowledge at these levels, interagency dialogue could be improved.



## **Appendix A. Interviewees**

---

The project team interviewed 28 individuals across Federal agencies and offices, academic institutions, private companies, and nonprofit organizations:

- 21 individuals from 11 Federal agencies and offices, (including the Office of Government Ethics and the Office of Science and Technology Policy)
- 3 individuals from 3 academic institutions
- 4 individuals from 4 private companies

Table A-1 lists the interviewees' names, affiliations, interview specifics.

**Table A-1. Interviewees by Sector, Affiliation, Interview Date, and Type.**

<b>Sector</b>	<b>Agency/Organization</b>	<b>Sub-Agency/Office</b>	<b>Name</b>	<b>Interview Date</b>	<b>Interview Type</b>
Federal Government	Defense Advanced Research Projects Agency (DARPA)	Office of the General Counsel	Geraldine Chanel	7/23/2014	Phone
	Department of Health and Human Services (DHHS)	Office of the General Counsel	Andrew Caplan	7/7/2014	In-person
			Elizabeth Fischmann	7/7/2014	In-person
		National Institutes of Health	Holli Beckerman Jaffe	7/2/2014	Phone
			Gretchen Weaver	7/7/2014	In-person
	Department of Homeland Security (DHS)	Human Resources	Lisa Douglas-Naughton	7/21/2014	Phone
		Office of the General Counsel	Ferne Mosley	7/21/2014	Phone
	Department of Commerce (DOC)	Office of the General Counsel	David Maggi	7/22/2014	In-person
			Arthur Warren	7/10/2014	In-person
	Department of Energy (DOE)	Office of Science	Susan Beard	7/17/2014	In-person
	Department of Justice (DOJ)	Departmental Ethics Office	Janice Rodgers	7/23/2014	Phone
	Environmental Protection Agency (EPA)	Office of the General Counsel	Daniel Fort	7/7/2014	In-person
			Justina Fugh	7/7/2014	In-person
		Office of the Science Advisor	Francesca Grifo	7/7/2014	In-person
	National Aeronautics and Space Administration (NASA)	Office of the General Counsel	Rebecca Gilchrist	7/8/2014	In-person
			Adam Greenstone	7/8/2014	In-person
	National Science Foundation (NSF)	Office of the General Counsel	Karen Santoro	6/26/2014	In-person
	Office of Government Ethics (OGE)	—	David Apol	6/16/2014	In-person
	Office of Science and Technology Policy (OSTP)	Science Division	Sean Jones	4/9/2014	In-person
		Director's Office	Rachael Leonard	5/22/2014	In-person
Environment and Energy Division		Brad Moran	4/9/2014	In-person	

<b>Sector</b>	<b>Agency/Organization</b>	<b>Sub-Agency/Office</b>	<b>Name</b>	<b>Interview Date</b>	<b>Interview Type</b>
Academic	Brandeis University	—	Darren Zinner	7/16/2014	Phone
	Harvard Medical School	—	Eric Campbell	7/16/2014	Phone
	University of Washington in St. Louis	—	Kathleen Clark	7/15/2014	Phone
Private	Attorney/private practice	—	Charlie Brown	3/25/2014	Phone
	Boeing	—	Steve Epstein	6/27/2014	Phone
	Science Works	—	Kathie Olsen	7/23/2014	Phone
	Wilmer Cutler Pickering Hale and Dorr LLP	—	Jamie Gorelick	7/24/2014	Phone



## **Appendix B. Discussion Guide**

---

This appendix provides the discussion guide with an introduction and 18 questions related to the:

- Background of the interviewee and their role in administering Federal ethics rules,
- Application, practice, and management of Federal ethics rules,
- Policy rationale and benefits of Federal ethics rules,
- Challenges, if any, of Federal ethics rules on the recruitment and retention of STEM employees,
- Suggestions to address the challenges, and
- Recommendations for others to contact regarding the project.

### **DISCUSSION GUIDE**

Interviewer:

Interviewee/Agency:

Date:

Type of Interview:

### **Introduction**

The Office of Science and Technology Policy (OSTP), in the White House Executive Office of the President, asked us, the Institute for Defense Analyses (IDA) Science and Technology Policy Institute (STPI), to conduct a study on the challenges of Federal ethics rules in Federal recruitment and retention for scientific and technical professionals. According to the Office of Government Ethics, areas of ethical conflicts include

- Financial conflicts of interest (COI) and impartiality – This includes the employee’s personal or “imputed” financial interests that prohibits an employee from, for example holding specified property or receiving payment from non-Federal sources.
- Gifts and payments – This includes giving, accepting, or soliciting contributions from certain other Federal employees or non-Federal sources.

- Use of Government position and resources – This includes the requisite for employees to act impartially, improper use of a Government position or authority, and use of the Government’s property, non-public information, or time for other than authorized purposes.
- Outside employment and activities – This includes employees engaging in outside activities, working on particular Government matters, and accepting compensation for an outside activity.
- Post-Government employment – This includes employee disqualifications for working on particular Government matters while seeking post-Government employment and engaging in certain activities after leaving Government service.
- Selected employee categories – This includes the application of Federal ethics rules provisions to certain categories of employees, such as political appointees, advisory committee members, detailees, and special Government employees.

These are specified in criminal and civil statutes, executive orders, and the administrative code of conduct for the executive branch. If there are other areas of Federal ethics rules that fall outside this typology, please feel free to bring those up as well.

We would like to gauge your perspective on the challenges you have experienced or observed when implementing Federal ethics rules as it relates to the recruitment and retention of scientific and technical professionals. Your responses will be non-attributational.

### **Background**

1. What is your office’s and your specific role in the agency with regards to identifying or assessing Federal ethics rules?

### **Management and Practice**

#### Current Practice

2. Has your agency established policies or guidance related to Federal ethics rules? If so, can you describe them? Are any stricter than Federal mandates?
3. Who is involved in the process to identify and administer Federal ethics rules within your agency during recruitment and hiring?
4. What is their role?
5. How are Federal ethics rules communicated
  - a. Within your office?
  - b. Across the agency and other actors?

#### Evolution

6. Based on your observations, how have Federal ethics rules changed over time?



7. How has your agency's implementation of Federal ethics rules changed over time?

### **Benefits**

8. In your opinion, what are the benefits of Federal ethics rules?

### **Challenges**

#### Types of Ethical Conflicts

9. In your opinion, what are the drawbacks of Federal ethics rules on recruiting and hiring highly-qualified scientific and technical professionals?
10. What issues do you encounter with Federal ethics rules when recruiting and retaining scientific and technical professionals?
11. Are there specific Federal ethics rules that are particularly challenging for your agency? If so, which ones?

#### *Regulatory vs. Research Agency*

- a. Are there any specific or unique challenges due to the regulatory role of your agency?
- b. Are there any specific or unique challenges due to the research role of your agency?

#### *Consulting and Intellectual Property*

- c. To what extent do you experience challenges with employees that ...
  - i. Engage in consulting activities?
  - ii. Generate intellectual property in outside activities, such as consulting?

#### *Examples*

- d. Can you provide specific examples/anecdotes from your agency's experience to illustrate these challenges?

#### Temporal

12. What do you see as the major challenges or concerns of Federal ethics rules...
  - a. While recruiting and hiring scientific and technical professionals?
  - b. Throughout a scientific and technical professional's Federal career?
  - c. For post-employment or transitioning from a Federal scientific and technical position?

#### Type of Employee

13. What are the challenges or concerns with Federal ethics rules that you encounter when recruiting or hiring scientific and technical professionals for
  - a. Presidential-appointed Senate-confirmed positions?
  - b. Presidential-appointments (not Senate-confirmed) positions?

- c. Senior Executive Service (SES) positions?
- d. Senior program managers (GS-15 or above)?
- e. SL/ST or non-management senior specialist equivalents?
- f. Civilian and any other position at any agency (below GS-15)?
- g. Advisory boards?

### **Suggestions**

- 14. What suggestions, if any, do you have to address the issues identified in this interview? For example:
  - a. Would you suggest revisions to existing Federal ethics rules? If so, which ones?
  - b. Would you suggest new Federal ethics rules? If so, describe?
- 15. Given it is becoming more challenging for the Federal Government to fund programs and activities and assuming an increasing trend towards partnerships with the private sector, including partnerships involving the private sector funding of Federal activities, ...
  - a. What implications do these trends have for Federal ethics rules?
  - b. Would you suggest revisions to or new Federal ethics rules to address these trends and impacts?
- 16. What role does the \_\_\_\_\_ have in any of the suggested reforms?
  - a. Executive Office of the President
  - b. Departments/agencies?
  - c. Human capital managers?
  - d. Others?
- 17. Do you have any final thoughts?

### **Contacts**

- 18. Do you have recommendations on others that we should speak with that (a) administer Federal ethics rules, or (b) may have experienced difficulties with Federal ethics rules with regards to recruitment and retention of scientific or technical professionals?

## **Appendix C.**

### **Agency Supplemental Policies**

---

The Office of Government Ethics (OGE) published a list of 50 government organizations with supplemental policies related to ethics as of August 2014 (OGE 2014b). The agencies are listed below alongside the relevant statute:

Board of Governors of the Federal Reserve System, Chapter LVIII, 5 CFR Part 6801  
Bureau of Consumer Financial Protection, Chapter LXXXIV, 5 CFR Part 9401  
Commission on Civil Rights, Chapter LXVIII, 5 CFR Part 7801  
Commodity Futures Trading Commission, Chapter XLI, 5 CFR Part 5101  
Consumer Product Safety Commission, Chapter LXXI, 5 CFR Part 8101  
Department of Agriculture, Chapter LXXIII, 5 CFR Part 8301  
Department of Defense, Chapter XXVI, 5 CFR Part 3601  
Department of Education, Chapter LIII, 5 CFR Part 6301  
Department of Energy, Chapter XXIII, 5 CFR Part 3301  
Department of Health and Human Services (Financial Disclosure), Chapter XLV, 5 CFR Part 5502  
Department of Health and Human Services, Chapter XLV, 5 CFR Part 5501  
Department of Housing and Urban Development, Chapter LXV, 5 CFR Part 7501  
Department of Interior, Chapter XXV, 5 CFR Part 3501  
Department of Justice, Chapter XXVIII, 5 CFR Part 3801  
Department of Labor, Chapter XLII, 5 CFR Part 5201  
Department of the Treasury, Chapter XXI, 5 CFR Part 3101  
Department of Transportation, Chapter L, 5 CFR Part 6001  
Environmental Protection Agency, Chapter LIV, 5 CFR Part 6401  
Equal Employment Opportunity Commission, Chapter LXII, 5 CFR Part 7201  
Export-Import Bank of the United States, Chapter LII, 5 CFR Part 6201  
Farm Credit Administration, Chapter XXXI, 5 CFR Part 4101  
Farm Credit System Insurance Corporation, Chapter XXX, 5 CFR Part 4001  
Federal Communications Commission (Financial Disclosure), Chapter XXIX, 5 CFR Part 3902  
Federal Communications Commission, Chapter XXIX, 5 CFR Part 3901  
Federal Deposit Insurance Corporation, Chapter XXII, 5 CFR Part 3201

Federal Energy Regulatory Commission, Chapter XXIV, 5 CFR Part 3401  
Federal Housing Finance Agency, Chapter LXXX, 5 CFR Part 9001  
Federal Mine Safety and Health Review Commission, Chapter LXXIV, 5 CFR Part 8401  
Federal Retirement Thrift Investment Board, Chapter LXXVI, 5 CFR Part 8601  
Federal Trade Commission, Chapter XLVII, 5 CFR Part 5701  
General Services Administration, Chapter LVII, 5 CFR Part 6701  
Institute of Museum and Library Sciences, Chapter LXVII, 5 CFR Part 7701  
Inter-American Foundation, Chapter LXIII, 5 CFR Part 7301  
Merit Systems Protection Board, Chapter LXIV, 5 CFR Part 7401  
National Aeronautics and Space Administration, Chapter LIX, 5 CFR Part 6901  
National Archives and Records Administration, Chapter LXVI, 5 CFR Part 7601  
National Credit Union Administration, Chapter LXXXVI, 5 CFR Part 9601  
National Endowment for the Arts, Chapter LV, 5 CFR Part 6501  
National Endowment for the Humanities, Chapter LVI, 5 CFR Part 6601  
National Labor Relations Board, Chapter LXI, 5 CFR Part 7101  
National Science Foundation, Chapter XLIII, 5 CFR Part 5301  
Nuclear Regulatory Commission, Chapter XLVIII, 5 CFR Part 5801  
Office of Management and Budget, Chapter LXXVII, 5 CFR Part 8701  
Office of Personnel Management, Chapter XXXV, 5 CFR Part 4501  
Office of the Special Inspector General for Afghanistan Reconstruction, Chapter  
LXXXIII, 5 CFR Part 9303  
Overseas Private Investment Corporation, Chapter XXXIII, 5 CFR Part 4301  
Postal Rate Commission, Chapter XLVI, 5 CFR Part 5601  
Securities and Exchange Commission, Chapter XXXIV, 5 CFR Part 4401  
Tennessee Valley Authority, Chapter LXIX, 5 CFR Part 7901  
United States Postal Service, Chapter LX, 5 CFR Part 7001

## Appendix D.

# Financial Interest Thresholds for Public Financial Disclosures

---

Table D-1 describes the financial interests and disclosure thresholds required to be reported for public financial disclosure reports (5 CFR Parts 2634.301–305).

**Table D-1. Financial Interest Disclosure Thresholds**

Financial Interest	Disclosure Threshold
Property (real and personal) Examples include real estate; stocks, bonds, securities, and future contracts; livestock owned for commercial purposes; commercial crops, either standing or held in storage; antiques or art held for resale or investment; beneficial interests in trusts and estates; deposits in banks or other financial institutions; pensions and annuities; mutual funds; accounts or other funds receivable; and capital accounts or other asset ownership in a business	Market value exceeds \$1,000
Noninvestment income Examples include salaries and wages; retirement benefits other than from United States Government employment; any honoraria; and any other noninvestment income, such as prizes or awards	Exceeds \$200 from any one source
Investment income Examples include dividends; rents; interest; capital gains; or income from qualified or excepted trusts or excepted investment funds	Exceeds \$200 from any one source
Purchases, sales, and exchanges Examples include real property, other than a personal residence of the filer or spouse; stocks; bonds; commodity futures; mutual fund shares; and other forms of securities	Transaction exceeds \$1,000
Gifts An example includes in-kind travel-related gifts	Aggregated gifts exceeds \$350 from any one source
Reimbursements An example includes travel-related reimbursements	Aggregated reimbursements exceeds \$350 from any one source
Liabilities An example includes but is not limited to debts owed to a creditor	Exceeds \$10,000 owed to any creditor

Source: 5 CFR Part 2634.301–305.



## Appendix E.

### Exemptions for Financial Interests

---

Table E-1 provides exemptions for financial interests pursuant to 18 U.S.C. 208(b)(2) promulgated by OGE (5 CFR Part 2640.201–202).

**Table E-1. Financial Interest Exemptions and De Minimis Standards**

Exemption	De Minimis Standard
Interests in diversified mutual funds	None
Interests in sector mutual funds	Aggregate market value of interests in any sector fund or funds does not exceed \$50,000
Employee benefit plans	None (exempted under other conditions)
Interests in securities for matters involving parties Applies for any particular matter involving specific parties in which the disqualifying financial interest arises from securities issued by one or more entities affected by the matter	Aggregate market value of the holdings does not exceed \$15,000
Interests in securities for matters affecting nonparties Applies for any particular matter involving specific parties in which the disqualifying financial interest arises from securities issued by one or more entities that are not parties to the matter but that are affected by the matter	Aggregate market value of the holdings does not exceed \$25,000
Interests in securities for matters of general applicability Applies for any particular matter of general applicability, such as rulemaking, in which the disqualifying financial interest arises from securities issued by one or more entities affected by the matter	For publicly traded or municipal securities, the market value does not exceed: (A) \$25,000 in any one such entity; and (B) \$50,000 in all affected entities For long-term Federal Government securities, the market value does not exceed \$50,000
Interests in Federal Government securities	None
Interests in tax-exempt organizations	None (exempted under other conditions)
Interests in securities of general partners	Does not exceed \$200,000 (exempted under other conditions)

Source: 5 CFR Part 2640.201–202.





## References

---

- Department of Health and Human Services (DHHS). 2014. *Confidential Financial Disclosure Report for Special Government Employees*. Washington, D.C.: DHHS, <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM048297.pdf>.
- Environmental Protection Agency (EPA). 2014. *Confidential Financial Disclosure Form for Environmental Protection Agency Special Government Employees*. Washington, D.C.: EPA. [http://epa.gov/osp/bosc/pdf/EPA\\_3110-48.pdf](http://epa.gov/osp/bosc/pdf/EPA_3110-48.pdf).
- Epstein, R. 2010. *How Conflict-of-Interest Rules Endanger Medical Progress and Cures*. New York, NY: Manhattan Institute.
- Goldstein, M. 1991. Flight from NASA. *Government Executive*, April 1991, 14–18.
- Government Accountability Office (GAO). 1983. *Objectivity of DOD’s Senior Scientific Advisory Committees Can Be Better Assured*. Washington, D.C.: GAO.
- . 1988. *Ethics Enforcement: Results of Conflict of Interest Investigations*. Washington, D.C.: GAO.
- . 1994. *Framework for Assessing Job Vulnerability to Ethical Problems*. Washington, D.C.: GAO.
- . 2004. *Federal Advisory Committees: Additional Guidance Could Help Agencies Better Ensure Independence and Balance*. Washington, D.C.: GAO.
- . 2006. *Information Technology: Status and Challenges of Employee Exchange Program*. Washington, D.C.: GAO.
- . 2008a. *FDA Advisory Committees: Process for Recruiting Members and Evaluating Potential Conflicts of Interest*. Washington, D.C.: GAO.
- . 2008b. *Federal Advisory Committee Act: Issues Related to the Independence and Balance of Advisory Committees*. Washington, D.C.: GAO.
- Mackenzie, C., and M. Hafken. 2002. *Scandal Proof: Do Ethics Laws make Government Ethical?* Washington, D.C.: Brookings Institution.
- Marshall, E. 1989. “Top Talent Leaving NASA...” *Science* 245 (4915):251.
- Maskell, J. 2006. *The Use of Blind Trusts By Federal Officials*. Washington, D.C.: Congressional Research Service.
- . 2007a. *Entering the Executive Branch of Government: Potential Conflicts of Interest with Previous Employments and Affiliations*. Washington, D.C.: Congressional Research Service.

- . 2007b. *Gifts and Ethics Rules: Side-by-Side Comparison of Provisions of S. 1 and H. Res. 6, 110th Congress*. Washington, D.C.: Congressional Research Service.
- . 2010. *Post-Employment, “Revolving Door,” Laws for Federal Personnel*. Washington, D.C.: Congressional Research Service.
- . 2014. *Financial Assets and Conflict of Interest Regulation in the Executive Branch*. Washington, D.C.: Congressional Research Service.
- McElhatton, J. 2012. “GSA Scandal Widens; Dozens of Conferences Now Under Investigation.” *The Washington Times*.
- National Academies. 1992. *Science and Technology Leadership in American Government: Ensuring the Best Presidential Appointments*. Washington, D.C.: National Academies Press.
- . 2001. *Science and Technology in the National Interest: The Presidential Appointment Process*. Washington, D.C.: National Academies Press.
- . 2003. *Policy on Committee Composition and Balance and Conflicts of Interest*. Washington, D.C.: National Academies Press.
- . 2005. *Science and Technology in the National Interest: Ensuring the Best Presidential and Federal Advisory Committee Science and Technology Appointments*. Washington, D.C.: National Academies Press.
- . 2008. *Science and Technology for America's Progress: Ensuring the Best Presidential Appointments in the New Administration*. Washington, D.C.: National Academies Press.
- National Institutes of Health (NIH). 2006. *Evaluation of the Impact of the New NIH Ethics Rules on Recruitment and Retention*. Washington, D.C.: NIH.
- Office of Government Ethics (OGE). 2005. *Report to Congress Evaluating the Financial Disclosure Process for Employees of the Executive Branch, and Recommending Improvements to It*. Washington, D.C.: OGE.
- . 2006. *Report to the President and to Congressional Committees on the Conflict of Interest Laws Relating to Executive Branch Employment*. Washington, D.C.: OGE.
- . 2011a. *Fact Sheet: Financial Disclosure Management (FDM)*. Washington, D.C.: OGE.  
[http://www.oge.gov/uploadedFiles/Education/Education\\_and\\_Communication\\_Award\\_Winners/FS\\_ArmyFDM.pdf](http://www.oge.gov/uploadedFiles/Education/Education_and_Communication_Award_Winners/FS_ArmyFDM.pdf).
- . 2011b. *Fact Sheet: NSF eFile*. Washington, D.C.: OGE.  
[http://www.oge.gov/uploadedFiles/Education/Education\\_and\\_Communication\\_Award\\_Winners/FS\\_NSF.pdf](http://www.oge.gov/uploadedFiles/Education/Education_and_Communication_Award_Winners/FS_NSF.pdf).
- . 2013. *Compilation of Federal Ethics Laws*. Washington, D.C.: OGE.
- . *5 U.S.C. app. 4 §§ 101-111: Public Financial Disclosure Requirements*. OGE 2014a [cited Aug 29, 2014. Available from <http://www.oge.gov/Laws-and->

Regulations/Statutes/5-U-S-C--app--4-%C2%A7%C2%A7-101-111---Public-financial-disclosure-requirements/.

- . *Agency Supplemental Regulations*. OGE 2014b [cited Aug 29, 2014. Available from <http://www.oge.gov/Laws-and-Regulations/Agency-Supplemental-Regulations/Agency-Supplemental-Regulations/>].
- . *Enforcement*. OGE 2014c [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Enforcement/Enforcement/>].
- . *Financial Conflicts of Interest and Impartiality*. OGE 2014d [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Financial-Conflicts-of-Interest-and-Impartiality/Financial-Conflicts-of-Interest---Impartiality/>].
- . *Gifts and Payments*. OGE 2014e [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Gifts-and-Payments/Gifts---Payments/>].
- . *Outside Employment and Activities*. OGE 2014f [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Outside-Employment-and-Activities/Outside-Employment---Activities/>].
- . *Post-Government Employment*. OGE 2014g [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Post-Government-Employment/Post-Government-Employment/>].
- . *Use of Government Position and Resources*. OGE 2014h [cited Aug 28, 2014. Available from <http://www.oge.gov/Topics/Use-of-Government-Position-and-Resources/Use-of-Government-Position---Resources/>].
- Office of Personnel Management (OPM). 2008. *Human Resources Flexibilities and Authorities in the Federal Government*. Washington, D.C.: OPM. <http://www.opm.gov/policy-data-oversight/pay-leave/reference-materials/handbooks/humanresourcesflexibilitiesauthorities.pdf>.
- . *Hiring Authorities: Intergovernment Personnel Act*. OPM 2014 [cited Aug 29, 2014. Available from <http://www.opm.gov/policy-data-oversight/hiring-authorities/intergovernment-personnel-act/>].
- Smallberg, M. *Big Businesses Offer Revolving Door Rewards*. Project on Government Oversight 2013 [cited Aug 25, 2014. Available from <http://www.pogo.org/our-work/reports/2013/big-businesses-offer-revolving-door-rewards.html>].
- Smith, P. 2006. *The National Institutes of Health (NIH): Organization, Funding, and Congressional Issues*. Washington, D.C.: Congressional Research Service.
- Stine, D., and C. Brass. 2009. *Hiring and Pay Authorities for Federal Scientific and Technical (S&T) Personnel*. Washington, D.C.: Congressional Research Service.
- U.S. Congress. 1991. *Oversight on the Procurement Integrity Act*. 1st ed: Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs.
- Willman, D. 2003. “Stealth Merger: Drug Companies and Government Medical Research.” *Los Angeles Times*, Dec 7, 2003.

———. 2006. “Panel Challenges NIH Handling of Rules Violations.” *Los Angeles Times*, Sept 14, 2006.

Zinner, D., C. DesRoches, S. Bristol, B. Clarridge, and E. Campbell. 2010. *Tightening Conflict-of-Interest Policies: The Impact of 2005 Ethics Rules at the NIH*. Washington, D.C.: NIH.

## Abbreviations

---

CDC	Center for Disease Control
CFR	Code of Federal Regulations
COI	Conflict of Interest
CRS	Congressional Research Service
DAEO	designated agency ethics official
DARPA	Defense Advanced Research Projects Agency
DHHS	Department of Health and Human Services
DHS	Department of Homeland Security
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOT	Department of Transportation
EPA	Environmental Protection Agency
FAC	Federal advisory committee
FDA	Food and Drug Administration
FDM	Financial Disclosure Management
FFRDC	federally funded research and development center
FY	fiscal year
GAO	Government Accountability Office
GOCO	government-owned, contractor-operated
GSA	General Services Administration
IDA	Institute for Defense Analyses
IPA	Intergovernmental Personnel Act
ITEP	Informational Technology Exchange Program
NAS	National Academy of Sciences
NASA	National Aeronautics and Space Administration
NIH	National Institutes of Health
NNSA	National Nuclear Security Administration
NSF	National Science Foundation
OGE	Office of Government Ethics
OPM	Office of Personnel Management
OSTP	Office of Science and Technology Policy
PAS	Presidential appointments with Senate confirmation
R&D	research and development
S&T	science and technology
SES	Senior Executive Service
SGE	special government employee
STEM	Science, Technology, Engineering, and Mathematics

STPI  
U.S.C.  
USDA  
VA

Science and Technology Policy Institute  
United States Code  
United States Department of Agriculture  
Department of Veterans Affairs

**REPORT DOCUMENTATION PAGE**

*Form Approved  
OMB No. 0704-0188*

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

**PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

<b>1. REPORT DATE (DD-MM-YYYY)</b> XX-11-2014		<b>2. REPORT TYPE</b> Final		<b>3. DATES COVERED (From - To)</b> Aug 2014 Nov 2014	
<b>4. TITLE AND SUBTITLE</b> Federal Ethics Rules and Their Impacts on Recruiting and Retaining Federal Science, Technology, Engineering, and Mathematics (STEM) Employees				<b>5a. CONTRACT NUMBER</b> NSFOIA0408601	
				<b>5b. GRANT NUMBER</b>	
				<b>5c. PROGRAM ELEMENT NUMBER</b>	
<b>6. AUTHOR(S)</b> Peña, Vanessa Mineiro, Michael C. Whelan, Ryan M.				<b>5d. PROJECT NUMBER</b>	
				<b>5e. TASK NUMBER</b> TP-20-1000.CN	
				<b>5f. WORK UNIT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> IDA Science and Technology Policy Institute 1899 Pennsylvania Avenue, NW, Suite 520 Washington, DC 20006-3602				<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b> IDA Paper P-5208	
<b>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> Office of Science and Technology Policy Executive Office of the President Eisenhower Executive Office Building 1650 Pennsylvania Avenue, NW Washington, DC 20504				<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b> OSTP	
				<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>	
<b>12. DISTRIBUTION/AVAILABILITY STATEMENT</b> Approved for public release; distribution is unlimited (8 December 2014).					
<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b> The Office of Science and Technology Policy (OSTP) requested that the IDA Science and Technology Policy Institute (STPI) identify the potential challenges of Federal ethics rules on recruitment and retention of science, technology, engineering, and mathematics (STEM) employees across the Executive branch of the Federal Government, including the National Institutes of Health, the Department of Defense (DOD), and the Department of Energy (DOE), and report on potential suggestions to ameliorate those challenges. This report identifies and analyzes the potential impacts that Federal ethics rules have on recruiting and retaining STEM employees in the Executive branch.					
<b>15. SUBJECT TERMS</b> ethics, Federal workforce, STEM, conflicts of interest, COI, Executive branch					
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b> Same as Report	<b>18. NUMBER OF PAGES</b> 61	<b>19a. NAME OF RESPONSIBLE PERSON</b> Morrow, Jane
<b>a. REPORT</b> Unclassified	<b>b. ABSTRACT</b> Unclassified	<b>c. THIS PAGE</b> Unclassified			<b>19b. TELEPHONE NUMBER (Include area code)</b> 202-395-6206