

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**HOW GRANTEES MANAGE
FINANCIAL CONFLICTS OF
INTEREST IN RESEARCH FUNDED
BY THE NATIONAL INSTITUTES
OF HEALTH**



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OBJECTIVES

1. To determine the nature of financial conflicts of interest reported by grantee institutions to the National Institutes of Health (NIH) in fiscal year (FY) 2006.
2. To determine how grantee institutions managed, reduced, or eliminated these financial conflicts of interest.
3. To determine whether vulnerabilities exist in grantee institutions' oversight of the identification and management of financial conflicts of interest.

BACKGROUND

NIH receives billions of dollars annually to support its mission of conducting and supporting medical research. In FY 2008, the total NIH appropriation was \$29.5 billion, 80 percent of which was distributed through almost 50,000 competitive grants to more than 325,000 investigators (hereinafter referred to as researchers) at over 3,000 universities, medical schools, and other research institutions across the country and around the world.

Pursuant to Federal regulation, each grantee institution receiving NIH funds must have a written policy for identifying financial conflicts of interest (hereinafter referred to as conflicts) and ensuring that conflicts are managed, reduced, or eliminated. Grantee institutions must certify that they have written and enforced administrative processes to identify and manage, reduce, or eliminate conflicting interests. They must also certify:

- that existing conflicts (but not the nature of the interest or other details) will be reported to NIH prior to the expenditure of any funds under that award;
- that these conflicts have been managed, reduced, or eliminated; and
- that any subsequently identified conflicts will be reported and will be managed, reduced, or eliminated, at least on an interim basis, within 60 days of identification.

We collected information from each of the 41 grantee institutions that reported conflicts to NIH in FY 2006. We also requested supporting documentation, including researchers' financial disclosure forms,

conflict management plans, and conflict-of-interest committee meeting notes related to 184 conflicts reported to NIH in FY 2006.

FINDINGS

The most common type of financial conflict of interest among NIH-funded researchers is equity ownership. Financial conflicts of interest may provide researchers with incentives to improperly influence the results of grant research. The most common type of conflict among researchers (111 out of 165 researchers with reported conflicts) was equity ownership (including stock and stock options) in companies in which the researchers' financial interests could significantly affect the grant research. Grantee institutions provided specific equity amounts for 56 researchers. Six of these researchers had equity valued at greater than \$100,000, and 13 researchers had equity ownership of 50 percent or more.

Other conflicts involved researchers inventing technology, consulting, or holding positions with outside companies. For these conflicts, grantee institutions that could provide specific compensation amounts indicated that seven researchers received at least \$50,000 in royalty payments or compensation for their services.

To manage financial conflicts of interest, grantee institutions often require researchers to disclose their conflicts in research publications; however, grantee institutions rarely reduce or eliminate financial conflicts of interest. Grantee institutions reported that they managed 136 researchers' conflicts, reduced 6 researchers' conflicts, and eliminated 6 researchers' conflicts. Another 17 researchers' conflicts were handled using a combination of management, reduction, and elimination.

Grantee institutions frequently used disclosure to manage researchers' conflicts. This includes disclosing the conflict in publications and/or presentations in which research results are presented. Some of the other methods used by grantee institutions to manage conflicts did not seem to directly address the specific conflicts. Examples of these methods include researchers' certifying that their primary commitment is to the grantee institution and agreeing to abide by institutional financial conflict-of-interest policies and procedures.

Vulnerabilities exist in grantee institutions’ identification, management, and oversight of financial conflicts of interest.

- Ninety percent of the grantee institutions rely solely on researchers’ discretion to determine which of their significant financial interests are related to their research and are therefore required to be reported.
- Because nearly half of the grantee institutions do not require researchers to provide specific amounts of equity or compensation on their financial disclosure forms, the specific financial interests of NIH-funded researchers are often unknown.
- Grantee institutions do not routinely verify information submitted by researchers.
- Conflicts were not uniformly reported by grantee institutions.
- The majority of grantee institutions do not have policies and procedures to address subgrantee compliance with Federal regulations regarding conflicts.
- Grantee institutions lack documentation to support their oversight of conflicts.
- Grantee institutions are not required to report to NIH any financial interests that they have with outside companies.

RECOMMENDATIONS

Eighty percent of NIH’s budget is used to fund research grants at grantee institutions. Given the complex nature of researchers’ conflicts and the vulnerabilities that exist regarding their identification and management, there is a need for more transparency about and oversight of grantee institutions. Increased oversight is needed to ensure that (1) these conflicts are managed appropriately, (2) the research conducted using Federal funds is not biased by any conflicting financial interests of researchers, and (3) human subjects are not subjected to unnecessary risks.

We continue to recommend, as we did in a previous report, that NIH:

Request grantee institutions to provide details to NIH regarding the nature of all reported financial conflicts of interest and how they are managed, reduced, or eliminated.

We also recommend that NIH:

Require grantee institutions to collect information on all significant financial interests held by researchers and not just those deemed by researchers to be reasonably affected by the research.

Require grantee institutions to collect information on specific amounts of equity and compensation from researchers.

Develop and disseminate guidance on methods to verify researchers' financial interests.

Ensure that grantee institutions are providing adequate oversight of subgrantee compliance with Federal financial conflict-of-interest regulations.

Ensure that grantee institutions are maintaining proper documentation as outlined in the Federal financial conflict-of-interest regulations.

Ensure that grantee institutions take appropriate actions against researchers who do not follow grantee institutions' financial conflict-of-interest policies and procedures.

Increase oversight of grantee institutions to ensure that financial conflicts of interest are reported and managed appropriately.

Develop regulations that address institutional financial conflicts of interest.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

Overall, NIH did not state whether it concurs or does not concur with our recommendations. We ask that in its final management decision, NIH more clearly indicate whether it concurs or does not concur with our recommendations and what steps, if any, it will take to implement them.

NIH stated that it takes its compliance oversight responsibilities very seriously and is committed to preserving the public trust in objective scientific research.

NIH also stated that many of the report findings were not made within the context of the current financial conflict-of-interest regulation and therefore, many of the recommendations are difficult to assess and/or cannot be implemented because NIH is bound by the requirements of

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the current regulation. OIG believes that the current regulation allows NIH to take a more proactive role in overseeing grantee institutions. Moreover, OIG has recommended that, where necessary, NIH amend its regulations to enhance its oversight of financial conflicts of interest.

Regarding OIG's first recommendation, that NIH collect the details about conflicts and how they were managed, reduced, or eliminated, NIH stated that it could be argued that requesting this information from grantees with frequency would constitute a rule, which would need to be issued consistent with notice and comment procedures. OIG believes that the current regulation does not prohibit NIH from requesting follow-up information from grantee institutions with respect to reported conflicts. The regulation specifies that the grantee institutions agree to produce such information on "all" conflicting interests. To address NIH's concern, we have modified our recommendation slightly to parallel the language of the regulation at 42 CFR § 50.604(g)(3). OIG continues to recommend that NIH work with the Secretary of Department of Health and Human Services (HHS) to amend the current regulation to request details regarding the nature and management of conflicts at grantee institutions.

Regarding OIG's recommendation that NIH increase its oversight of grantee institutions, NIH highlighted a number of initiatives designed to enhance its oversight of and promote grantee compliance with Federal regulation. However, despite these efforts, vulnerabilities continue to exist at grantee institutions in their identification, management, and oversight of conflicts. Therefore, OIG maintains its position that increased oversight of grantee institutions is needed to ensure that conflicts are reported and managed appropriately.

NIH will consider OIG's recommendation on developing and disseminating guidance on methods to verify researchers' conflicts. With respect to OIG's recommendation that grantee institutions maintain proper documentation, NIH will continue to emphasize grantee institution compliance with documentation requirements established by Federal regulation.

In response to the remaining five OIG recommendations, NIH referred to the recently developed Advanced Notice of Proposed Rulemaking (ANPRM). NIH stated that many of the observations made by OIG are addressed in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process. OIG understands that NIH is engaged in rulemaking regarding some of the very vulnerabilities we

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identified in our report. OIG will review the proposed rule and provide comments or clearance during the Department's internal review process.

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OBJECTIVES

1. To determine the nature of financial conflicts of interest reported by grantee institutions to the National Institutes of Health (NIH) in fiscal year (FY) 2006.
2. To determine how grantee institutions managed, reduced, or eliminated financial conflicts of interest.
3. To determine whether vulnerabilities exist in grantee institutions' oversight of the identification and management of financial conflicts of interest.

BACKGROUND

Pursuant to Federal regulation, each grantee institution receiving NIH funds must have a written policy for identifying financial conflicts of interest (hereinafter referred to as conflicts) and ensuring that conflicts are managed, reduced, or eliminated. Conflicts occur when designated official(s) of grantee institutions reasonably determine that a significant financial interest could directly and significantly affect the design, conduct, or reporting of the research funded by NIH. With 80 percent of NIH funding allocated for extramural research grants, it is critical that any existing or potential conflicts be reported and managed, reduced, or eliminated by grantee institutions.

This study was conducted in response to a congressional request.

National Institutes of Health Grants

NIH is the primary Federal agency responsible for conducting and supporting medical research. Organized into 27 Institutes and Centers (Institutes), NIH receives billions of dollars annually to support its mission. In FY 2008, the total NIH appropriation was \$29.5 billion, 80 percent of which was distributed through almost 50,000 competitive grants to more than 325,000 investigators (hereinafter referred to as researchers) at over 3,000 universities, medical schools, and other research institutions across the country and around the world.¹

Twenty-four of the 27 Institutes have grant-making authority. Each of these 24 Institutes is responsible for managing and overseeing its

¹ NIH, "NIH budget information." Available online at <http://www.nih.gov/about/budget.htm>. Accessed on November 10, 2008.

grants, and each has its own grants management staff that handles these functions.

Responsibility of Grantee Institutions

Federal regulation at 42 CFR pt. 50, subpart F, establishes standards to ensure that the design, conduct, or reporting of research funded under NIH grants will not be biased by researchers'² conflicts. Pursuant to 42 CFR § 50.604, each grantee institution receiving NIH funds must have a written policy for identifying conflicts and must ensure that conflicts are managed, reduced, or eliminated. Additional text from 42 CFR § 50.604 is presented in Appendix A.

Grantee institutions must also certify that they have written and enforced administrative processes to identify and manage, reduce, or eliminate conflicts. As part of this process, grantee institutions must collect from each researcher a listing of his/her known significant financial interests (and those of his/her spouse and dependent children) that would reasonably appear to be affected by the research and in entities whose financial interests would reasonably appear to be affected by the research. Pursuant to 42 CFR § 50.603, a significant financial interest includes: salaries, royalties, or other payments from sources other than the grantee institution exceeding \$10,000 in a 12-month period; as well as equity interests exceeding \$10,000 in fair market value and/or representing more than 5 percent ownership in any single entity (hereinafter referred to as a company). Additional text from 42 CFR § 50.603 is presented in Appendix A.

The regulations at 42 CFR § 50.605(a) provide that a conflict exists when the designated official at the grantee institution reasonably determines that a significant financial interest could directly and significantly affect the design, conduct, or reporting of NIH-funded research. Regulations also require that the grantee institution certify that existing conflicts (but not the nature of the interests or other details) be reported to NIH prior to the expenditure of any grant funds and that these conflicts have been managed, reduced, or eliminated. The grantee institution must also certify that any subsequently identified conflicts will be reported and the conflicts will be managed, reduced, or eliminated, at least on an interim basis, within 60 days of identification.

² The term "researcher" includes the principal researcher or any other person who is responsible for the design, conduct, or reporting of research funded by NIH.

The NIH Grants Policy Statement and the NIH grant application explain the financial disclosure responsibilities of grantee institutions. By signing a grant application, the designated representative of the grantee institution is certifying that the applicant organization will comply with all applicable assurances and certifications referenced in the application, including those related to conflicts.

On May 8, 2009, NIH issued an Advance Notice of Proposed Rulemaking to gain public input on whether modifications are needed to 42 CFR pt. 50, subpart F. NIH invited public comments on all aspects of potential regulation in this area, and particularly on the following issues: (1) expanding the scope of the regulation and disclosure of interests, (2) changing the definition of “significant financial interest,” (3) identifying and managing of conflicts by grantee institutions, (4) assuring grantee institution compliance, (5) requiring grantee institutions to provide additional information to NIH, and (6) broadening the regulations to address institutional conflicts of interest.³

NIH Oversight of Grantee Institutions

NIH’s oversight responsibilities include ensuring that (1) grantee institutions are fully and correctly implementing the financial conflict-of-interest regulation at 42 CFR pt. 50, subpart F, and (2) reporting requirements are being met. In FY 2006, NIH conducted targeted site reviews of 18 grantee institutions as part of its oversight responsibilities. The 18 grantee institutions reviewed represented approximately \$4 billion in research grant awards for FY 2005.⁴ NIH reported that the \$4 billion represented approximately 25 percent of total research grant awards for FY 2005.

NIH found no instances of intentional noncompliance by grantee institutions but found that more emphasis is needed on the appropriate definition of “investigator” as listed at 42 CFR § 50.603. NIH observed that grantee institutions have the most difficulty identifying and reporting conflicts that arise after the start of the research project and obtaining disclosures from researchers who join the project after its

³ NIH Guide Notice NOT-OD-09-099. Available online at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-099.html>. Accessed on May 12, 2009.

⁴ “Observations from NIH’s FY 2006 Targeted Site Reviews on Financial Conflict of Interest.” Available online at <http://grants1.nih.gov/grants/policy/coi/index.htm>. Accessed on November 21, 2008.

inception.⁵ Other compliance issues included (1) not having provisions in place to ensure that identified conflicts are reported to NIH by subgrantees through the prime grantee, (2) not having a consistent reporting process in place, (3) submitting grant applications prior to collecting significant financial interest information from researchers, and (4) expending grant funds prior to reporting identified conflicts to NIH.⁶

Inquiries of Researchers' Conflicts

Recent inquiries by the Senate Finance Committee (Committee) into payments from drug and device companies to researchers and physicians has led to a number of high-profile investigations into the financial conflicts of interest among NIH-funded researchers. To date, nine cases that involve NIH-funded researchers have been made public by Committee staff. Among these cases, five include researchers who allegedly failed to report that they received payments (or own stock) of \$1 million or more from drug and device companies. One of these researchers, from Emory University, failed to disclose that he received a total of \$2.4 million over a 7-year period. Subsequently, NIH suspended a \$9 million grant to Emory and the researcher stepped down from research and as department chair.

Related Study by the Office of Inspector General

In a January 2008 report, the Office of Inspector General (OIG) reviewed 438 financial conflict-of-interest reports that were received by NIH from grantee institutions during FY 2004 through FY 2006.⁷ Of these 438 reports, 93 percent did not state the nature of the conflicts and 89 percent did not state how conflicts would be managed, reduced, or eliminated because regulations do not require grantee institutions to report the nature or other details of the conflicts. Regulations only require grantee institutions to report the existence of a conflict and assure that the conflict has been managed, reduced, or eliminated. The report concluded that it would be difficult for NIH to determine whether followup with grantee institutions is warranted if the details regarding the nature and management of conflicts are not collected.

⁵ Ibid.

⁶ Ibid.

⁷ HHS, OIG, "National Institutes of Health: Conflicts of Interest in Extramural Research," OEI-03-06-00460, January 2008.

One of OIG's recommendations to NIH was to require grantee institutions to provide details regarding the nature of conflicts and how they are managed, reduced, or eliminated. In response to OIG's final report, NIH did not concur with this recommendation. NIH stated that the responsibility for identifying and managing conflicts must remain with grantee institutions and that collecting such information would effectively transfer the responsibility to the Federal Government. NIH also stated that it had taken a series of actions to improve its administration of financial conflict-of-interest policies and procedures.

METHODOLOGY

Scope

We focused our review on the 41 grantee institutions that submitted 225 financial conflict-of-interest reports to NIH in FY 2006. These reports, provided by NIH, were originally identified in OIG's January 2008 study. An additional grantee institution sent a report to NIH that was a notification of potential research misconduct and not of a conflict. This grantee institution and its researcher are not included in our data analysis.

In OIG's prior study, we found that NIH could not provide an accurate count of the financial conflict-of-interest reports received from grantees during FY 2004 through FY 2006, and therefore the 225 reports reviewed for this study are not a complete count of all conflicts reported to NIH in FY 2006. During data collection for this study, 24 of the 41 grantee institutions reported sending to NIH an additional 235 financial conflict-of-interest reports for FY 2006 that NIH had not originally provided to us. These additional reports are not included in our data analysis.

Data Collection

We collected data from each of the 41 grantee institutions that reported conflicts to NIH in FY 2006. Officials from all 41 grantee institutions responded to our request for information regarding the following: their policies and procedures describing the reporting and management of conflicts; the nature of each conflict reported to NIH in FY 2006; how each conflict was managed, reduced, or eliminated; the decision process for determining how each conflict was managed, reduced, or eliminated; and how grantee institutions ensure researchers' compliance with Federal regulations and conflict management plans. All 41 grantee institutions had policies and procedures related to conflicts.

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We requested documentation that outlined how grantee institutions identify and manage, reduce, or eliminate conflicts. This documentation included:

- written policies and procedures that meet the requirements in Federal regulations at 42 CFR pt. 50, subpart F, and any additional written policies and procedures;
- written information or guidance that the grantee institution provides to researchers regarding conflicts;
- institutional forms or checklists that researchers use to disclose their significant financial interests and those used to certify compliance with conflict management plans; and
- other institutional forms or checklists used by designated officials, committee members, or other staff to review and/or verify financial disclosure information and determine whether conflicts exist.

We also requested supporting documentation for each of the financial conflict-of-interest reports submitted to NIH in FY 2006. Supporting documentation included:

- the researcher's financial disclosure forms; conflict management plans; proof that the conflicts were managed, reduced, or eliminated; meeting notes; and records of contact;
- correspondence to/from the researcher, conflict-of-interest committee, designated officials, and other grantee institution staff regarding the conflicts; and
- any additional documentation that provides information regarding how the conflicts were identified and managed, reduced, or eliminated.

Data Analysis

Of the 225 financial conflict-of-interest reports submitted to NIH in FY 2006 by the 41 grantee institutions, we included only 184 in our analysis. We excluded 41 financial conflict-of-interest reports from five different grantee institutions for various reasons. Thirty-three of these 41 reports were from one grantee institution. Upon receipt of our survey, that grantee institution determined that the 33 reports had been mistakenly sent to NIH. According to the grantee institution, the financial interests were not significant financial interests as defined by Federal regulation. The grantee institution stated that these conflicts

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were, therefore, not required to be reported to NIH. The remaining eight reports were excluded because they were either duplicates or erroneous reports (e.g., the report was for an incorrect grant number).

We used a standard protocol to extract information from the documentation. We analyzed the grantee institutions' policies and procedures regarding conflicts. We determined whether these documents demonstrated that each grantee institution was meeting requirements in the Federal regulation at 42 CFR § 50.604. We also determined whether grantee institutions followed their own policies and procedures to identify and manage, reduce, or eliminate conflicts. This includes identifying the methods that were implemented to manage, reduce, or eliminate conflicts. We also determined whether grantee institutions verified information submitted by researchers. Verification was defined as any attempt made by the grantee institution to validate, certify, or clarify the conflict information provided by the researcher.

Standards

This study was conducted in accordance with the "Quality Standards for Inspections" approved by the Council of the Inspectors General on Integrity and Efficiency.

► FINDINGS

The most common type of financial conflict of interest among NIH-funded researchers is equity ownership

Federal regulation requires that grantee institutions report significant financial interests to

NIH if they determine that the financial interests could directly and significantly affect the design, conduct, or reporting of the research. These financial interests may provide researchers with incentives to improperly influence the results of grant research. This review includes the 184 financial conflict-of-interest reports sent to NIH in FY 2006; these reports involved 165 researchers.

The majority of researchers' conflicts were related to equity ownership in outside companies

Financial conflicts of interest may provide researchers with incentives to improperly influence the results of grant research. The most common type of conflict among researchers was equity ownership (including stocks and stock options) in companies in which the researchers' financial interests could significantly affect the grant research. One-hundred eleven researchers owned equity in companies ranging from publicly traded companies to small, privately held companies. Of these 111 researchers, 44 (39 percent) were founding members of the companies.

Table 1 shows the nature of conflicts that were reported by grantee institutions in FY 2006, the number of researchers who had each type of conflict, and the number of reports that were related to each type.

Table 1: Nature and Number of Conflicts Reported by Grantee Institutions Between October 1, 2005, and September 30, 2006

Nature of Conflicts	Number of Researchers ¹	Number of Reports ²
Owning equity	111	127
Inventing or developing technology/intellectual property	95	101
Consulting for an outside company	66	74
Holding a position at an outside company	65	78
Receiving royalties	27	32
Speaking or writing for an outside company	7	7
Serving as an expert witness	1	1
Other ³	3	3

Source: OIG analysis of grantee institution survey responses.

¹ The total number of researchers equals 165. The number of researchers in this column does not equal 165 because some researchers had more than one type of conflict.

² The number of reports in this column does not equal 184 because some reports were about more than one type of conflict.

³ These three researchers are one researcher who was the daughter of the NIH program officer on the grant, one researcher whose spouse was an employee of a related outside company, and one researcher whose paid staff on the grant included his son and an employee of his private company.

Grantee institutions provided specific equity amounts for 56 researchers; 6 researchers had equity valued at more than \$100,000, and 13 researchers had equity ownership amounts of 50 percent or more.

For 56 of the 111 researchers with equity ownership, grantee institutions provided specific amounts of equity that were reported as dollar values and/or ownership percentages. Grantee institutions submitted equity values for 28 of these researchers, which ranged from \$0 to \$4 million. Six of these 28 researchers (21 percent) had equity values greater than \$100,000. The average equity value for researchers was \$232,464 and the median was \$22,500. For equity interests that were valued at \$0, the researchers owned a percentage of a company that was above the Federal threshold (5 percent). For example, a researcher could hold a percentage of equity ownership in a company for which the equity had no current dollar value yet. Although the equity may have no value at present, it may have great future value if the research leads to the eventual commercialization of a product.

The researcher with equity valued at \$4 million disclosed that he was president and director of a company related to the research. This researcher owned 400,000 shares and 300,000 stock options of the company, valued at a total of \$4 million. The researcher also received an annual salary of \$325,000.

For 41 of the 56 researchers with specific amounts of equity, grantee institutions also submitted equity ownership percentages that ranged from 2 percent to 100 percent. For these 41 researchers, the average equity percentage was 38 percent and the median equity percentage was 33 percent. Thirteen of these 41 researchers (32 percent) had equity ownership amounts that were 50 percent or more.

Other common conflicts of researchers included inventing technology, consulting, holding positions with outside companies, or receiving royalties

The second most common type of conflict among researchers was inventing or developing technology/intellectual property related to or used as part of the grant research. Grantee institutions reported that 95 researchers had this type of conflict. Nearly 70 percent of these 95 researchers had their technology/intellectual property licensed by the grantee institution to a private company with which they had a

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relationship.⁸ Examples of relationships that researchers had with these companies include holding equity in the companies and consulting with the companies.

Another common type of conflict among researchers was consulting with companies whose financial interests would reasonably appear to be affected by the grant research. Sixty-six researchers had consulting agreements with outside companies, creating conflicts. The majority of researchers consulted with just one company. However, one researcher consulted with five companies.

Sixty-five researchers held some type of position at outside companies, such as serving in an executive role, serving on a company's board of directors, and/or serving on a company's advisory board or medical review board.

Twenty-seven researchers received royalties (either from the grantee institutions or other entities) from the licensing of technology/intellectual property.⁹ This technology/intellectual property was often licensed to the companies by the grantee institutions.

Grantee institutions provided specific compensation amounts for 31 researchers; 7 of these received at least \$50,000 in payments.

One-hundred thirty-nine researchers invented technology/intellectual property, consulted with outside companies, served on advisory boards, and/or provided other types of services. Of these 139 researchers, 113 were compensated for their services, received royalty payments, or had the potential to receive royalty payments.¹⁰

Grantee institutions provided specific dollar amounts for 31 of the 113 researchers; seven of these 31 researchers (23 percent) received at least \$50,000 from royalty payments or for their services. Instead of receiving a dollar payment for consulting, one additional researcher received a specific percentage of equity for his services.

⁸ The Bayh-Dole Act, passed in 1980, facilitated the transfer of inventions developed by federally funded research institutions to private industry. Private industry could then develop the inventions into commercial products that would benefit the public. This transfer of technology is often done through licensing agreements between grantee institutions and private entities.

⁹ Federal regulations exclude from the definition of a significant financial interest royalties received from the grantee institution; however, grantee institutions sometimes identified these royalties as conflicts.

¹⁰ Twenty-six researchers provided services to outside companies but were not compensated (i.e., they served on advisory boards without compensation).

Specific dollar amounts for compensation ranged from \$1,500 to \$1.075 million. The researcher who reported \$1.075 million received \$1 million in royalties and \$75,000 in consulting fees. The average dollar amount of the compensation for all researchers was \$79,248 and the median was \$23,000.

To manage financial conflicts of interest, grantee institutions often require researchers to disclose their conflicts in research publications; however, grantee institutions rarely reduce or eliminate financial conflicts of interest

Grantee institutions reported that 136 researchers' conflicts were managed, 6 researchers' conflicts were reduced, and 6 researchers' conflicts were eliminated.

Another 17 researchers' conflicts were handled using a combination

of management, reduction, and elimination. However, grantee institutions were not consistent in how they used these terms. For example, grantee institutions would describe a similar management method; yet one grantee institution would report the method as management, whereas another would report it as reduction. Appendix B provides the methods grantee institutions used to manage, reduce, or eliminate researchers' conflicts reported to NIH in FY 2006.

The most common method for managing conflicts was disclosure. One-hundred forty-two researchers were required to disclose their conflicts in the following ways:

- in publications and/or presentations in which the research results are circulated,
- to other staff working on the grants,
- to human research subjects participating in the grant research (this information is usually provided in patient consent forms), and/or
- to the grantee institutions' Institutional Review Boards (these boards ensure the rights and safety of people participating in clinical trials).

The second most common method for managing conflicts was to ensure that protections were in place to prevent the exertion of inappropriate pressure on other staff working on the grant. Sixty-two researchers had their conflicts managed using this method. This method included:

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- ensuring that staff who work on the grant knew where to bring any concerns about the impact of the conflict on them or the research,
- ensuring that students and trainees were not involved with the company with which the researcher had a relationship, and/or
- gaining prior approval before allowing students and trainees to conduct research related to the company.

Other common methods to manage conflicts included:

- requiring researchers to notify the grantee institution when and how relationships with the outside companies changed (this included changes in equity amounts, changes in the nature of the researchers' relationship with the outside companies, changes in any funding of the research provided by the outside companies, and accrual of royalties),
- requiring researchers to ensure that an open exchange of research results would take place,
- monitoring or oversight of the grant research by grantee institution staff not related to the grant research, and
- limiting or prohibiting researchers from research involving human subjects.

Some of the other methods used by grantee institutions to manage conflicts did not seem to directly address the specific conflicts.

Examples of these methods include researchers' certifying that their primary commitment is to the grantee institution and agreeing to abide by institutional financial conflict-of-interest policies and procedures.

Vulnerabilities exist in grantee institutions' identification, management, and oversight of financial conflicts of interest

Vulnerabilities exist at grantee institutions regarding conflicts. For example, grantee institutions do not require researchers to provide specific amounts of equity or compensation on financial disclosure forms. Grantee institutions also do not routinely verify all researchers' identified financial interests. Moreover, some grantee institutions lacked documentation related to the reporting and/or management of these conflicts. These vulnerabilities may affect the identification, management, and oversight of conflicts by grantee institutions.

Vulnerabilities exist at grantee institutions regarding conflicts. For example, grantee institutions do not require researchers to

Ninety percent of the grantee institutions rely solely on the researchers' discretion to determine which of their significant financial interests are related to their research and are therefore required to be reported

Federal regulation requires grantee institutions to obtain a listing of researchers' significant financial interests that would reasonably appear to be affected by their research. All 41 grantee institutions require researchers to disclose only significant financial interests that relate to, or could possibly relate to, the research. It is left up to each researcher's discretion to determine which significant financial interests would reasonably appear to be affected by research. None of the grantee institutions maintains a policy of full disclosure of all significant financial interests. Full and complete disclosure ensures that the determination of whether a significant financial interest relates to the research rests with the grantee institution and not with the researcher.

However, three grantee institutions also require researchers to disclose all of their consulting agreements and positions held at outside companies. One grantee institution has additional disclosure requirements for its faculty physicians.

Because nearly half of the grantee institutions do not require researchers to provide specific amounts of equity or compensation on their financial disclosure forms, the specific financial interests of NIH-funded researchers are often unknown

Disclosure requirements for equity and compensation related to conflicts are not consistent across grantee institutions. Of the 41 grantee institutions, 23 specifically instruct researchers to disclose actual dollar amounts of compensation and/or equity on financial disclosure forms or in supplemental forms. The remaining 18 grantee institutions do not specifically instruct researchers to disclose actual amounts. These grantee institutions require researchers to disclose only that they received monetary compensation or equity above a certain threshold (e.g., over \$10,000) or as a range (e.g., \$20,001 to \$100,000). However, 7 of these 18 grantee institutions instruct researchers to provide details of their financial interests, which could include actual dollar amounts. If specific amounts of equity and compensation are not reported, grantee institutions may not be able to assess the true nature of the conflict or determine the most appropriate management strategy.

Grantee institutions did not provide specific equity amounts for 50 percent of researchers who received equity. Grantee institutions did not provide

specific amounts for 55 of 111 researchers who received equity. For 48 of these 55 researchers, grantee institutions provided only a minimum value or a range for researchers' equity. For the majority of these equity amounts, grantee institutions provided a minimum value, such as greater than 5 percent or greater than \$10,000. For the remaining 7 researchers, grantee institutions provided no information on the amount of equity held by researchers.

Grantee institutions did not provide specific amounts of compensation for 72 percent of researchers who received compensation from an outside company. Grantee institutions did not provide specific amounts of compensation for 81 of the 113 researchers (72 percent) who were compensated for their services, received royalty payments, or had the potential to receive royalty payments. For 63 of these researchers, grantee institutions provided only a minimum value or ranges. For 15 of the 81 researchers, grantee institutions did not provide potential royalty amounts. For another 3 of the 81 researchers, the compensation amount could not be found within any information that was submitted by the grantee institution.

Grantee institutions do not routinely verify information submitted by researchers

Thirty of the 41 grantee institutions reported that they verify the information disclosed by researchers. However, only 19 of these grantee institutions submitted documentation to show how they verified information reported by researchers in FY 2006. Only seven of these grantee institutions verified information for all of their financial conflict-of-interest reports. Because grantee institutions do not routinely verify information submitted by researchers, they rely on the researchers to submit accurate and complete information.

According to the documentation, 19 grantee institutions verified information for conflicts related to 59 of their 135 reports (44 percent). For conflicts related to 48 reports, grantee institutions used only one method to verify information. For conflicts related to 11 reports, grantee institutions used multiple methods of verification.

For 31 of the 59 verified reports, the submitted documentation showed that information was verified by reviewing licensing agreements and/or patents involving the researchers. For 21 of the 59 reports, the documentation showed that researchers' involvement with outside companies was confirmed through Internet searches. For 15 of the 59 reports, evidence showed that consulting agreements or contracts

between the researchers and the outside companies were reviewed for verification. Documentation for 3 of the 59 reports showed that the grantee institution contacted the outside company to confirm the nature of the relationship with the researcher.

Conflicts were not uniformly reported by grantee institutions

Because there was no standard format for reporting researchers' conflicts to NIH during the time of our review, these conflicts were not reported in a consistent format across grantee institutions. Some grantee institutions sent one financial conflict-of-interest report that related to one grant, but pertained to multiple researchers. Conversely, other grantee institutions sent a separate report for each researcher with a conflict who worked on the same grant. One grantee institution sent separate reports for a researcher's conflicts that were related to several different projects associated with one grant. Because of the lack of a consistent format, a one-to-one relationship did not exist between the number of reports sent to NIH by grantee institutions and the number of researchers who have conflicts. Without an accurate count of the number of conflicts among researchers, NIH may encounter difficulties with the tracking and oversight of conflicts.

Beginning in July 2009, NIH requires grantee institutions to utilize their Electronic Research Administration (eRA) Commons Web-based system to report researchers' conflicts.¹¹ The financial conflict-of-interest module in eRA Commons will allow grantee institutions to prepare an initial financial conflict-of-interest report, as well as edit or rescind the report for each identified conflict. For each report submitted, the following data will be collected:

- grant number;
- principal researcher;
- name of the researcher with the conflict;
- whether the conflict has been (1) managed, (2) reduced, or (3) eliminated;
- whether the report is for a subgrantee; and

¹¹ NIH, "Financial Conflict of Interest (FCOI): User Guide, Commons System Version 2.19.1.4." Available online at http://era.nih.gov/files/fcoi_user_guide.pdf. Accessed on June 19, 2009.

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- the name of subgrantee if the report is for a subgrantee recipient.

The majority of grantee institutions do not have policies and procedures in place to address subgrantee compliance with Federal regulations regarding conflicts

Federal regulations require grantee institutions to take reasonable steps to ensure that their subgrantees comply with the regulations. However, only 17 out of 41 grantee institutions sent documentation showing that they address subgrantee compliance with institutional policies and procedures. Furthermore, documentation for only 2 of these 17 grantee institutions provided specific information regarding the process subgrantees should follow in disclosing conflicts to the grantee institutions.

In addition, 2 of the 184 financial conflict-of-interest reports reviewed for this study were subgrantee notifications to the grantee institutions. When one of these grantee institutions was asked to provide details regarding the nature and management of the researcher's conflict for the purpose of this study, the grantee institution could not do so and had to contact the subgrantee for such details.

Grantee institutions lack documentation to support their oversight of conflicts

Some conflicts lacked documentation regarding researchers' financial interests. Conflicts related to 18 reports at six grantee institutions did not have documentation to show that grantee institutions' reporting policies and procedures were followed. For conflicts related to 15 of the 18 reports, grantee institutions did not submit specific forms that researchers are required by policies and procedures to complete.

For conflicts related to 2 of the 18 reports, documentation indicated that conflicts were reported inaccurately. Discrepancies were found between the initial financial disclosure forms submitted by the researcher and subsequent information discovered by the grantee institution. For example, one researcher failed to disclose that he held 386,250 stock options in the company in which he had a conflict. Another researcher failed to disclose the fact that an employee of the researcher's company and the researcher's son were paid as staff on the grant. In these two instances, although the grantee institutions discovered the conflicts, the researchers did not initially report them.

For the remaining financial conflict of interest report, no supporting documentation was submitted.

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For conflicts related to another nine financial conflict-of-interest reports at four grantee institutions, the grantee institutions submitted only financial disclosure forms dated several years before or 1 year after the date of the report to NIH. For example, one grantee institution submitted financial disclosure forms from FY 2001 even though the grantee institution's policy requires researchers to submit annual disclosures. Another grantee institution submitted financial disclosure forms from FY 2007.

Some conflicts lacked documentation to show that they were managed, reduced, or eliminated. For conflicts related to nine reports at five grantee institutions, no supporting documentation was submitted to show that the conflicts were managed, reduced, or eliminated.

For 60 out of 184 reports, no evidence could be found in the submitted documentation to show that management methods were followed.

Submitted documentation showed that researchers followed management methods in 124 of the 184 reports. For the remaining 60 reports, no evidence could be found in the documentation to show that management methods were followed.

Grantee institutions submitted various types of documentation to show that researchers' conflicts were managed. For 67 reports, grantee institutions submitted evidence that a periodic review of the conflicts was conducted.¹² Documentation submitted for 53 reports provided evidence to show that the conflicts were disclosed in publications, during presentations, on consent forms, and to researchers' staff members or students. For 14 reports, submitted documentation showed that a data-monitoring committee or an independent reviewer was assigned to monitor the research projects.

Finally, documentation submitted for 15 reports contained evidence that the institution obtained only a certification signature from the researcher stating that management methods had been followed.

¹² Periodic review includes written progress reports or annual updates from researchers regarding their conflicts and/or reports supporting that the conflicts were managed, reduced, or eliminated. Periodic review also includes reviews by a conflict-of-interest committee.

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Grantee institutions are not required to report to NIH any financial interests that they have with outside companies

Although this study focuses on researchers' conflicts, license agreements can also pose conflicts for the grantee institutions themselves. Grantee institutions provided documentation that showed they held the same types of financial interests as their researchers. The financial interests held by these researchers were determined to be conflicts by the grantee institutions. NIH does not have any policies or procedures in place for grantee institutions to report institutional conflicts. The potential for financial gain can pose an institutional conflict when a grantee institution licenses technology/intellectual property for the purposes of commercialization.

NIH is the primary Federal agency responsible for conducting and supporting medical research. Eighty percent of NIH's \$29 billion budget is used to fund research grants at research institutions across the country and around the world. With so much funding at stake, the question of research integrity becomes crucial because of the appearance or existence of conflicts by recipients of these grants. It is vital to public health and safety that this research not be biased by researchers' conflicts.

Federal regulations establish standards to ensure that the design, conduct, and reporting of federally funded research will not be biased by any conflicting financial interest of a researcher. The regulations require that grantee institutions only report to NIH the existence of a conflict and assure that the conflict has been managed, reduced, or eliminated. As found in OIG's previous study, "National Institutes of Health: Conflicts of Interest in Extramural Research," OEI-03-06-00460, NIH's primary method of oversight is reliance on the assurances that the grantee institutions have followed Federal regulations and managed, reduced, or eliminated the conflicts.

Given the complex nature of researchers' conflicts and the vulnerabilities that exist regarding their identification and management, there is a need for more transparency about and oversight of grantee institutions. Increased oversight is needed to ensure that (1) these conflicts are managed appropriately, (2) the research conducted using Federal funds is not biased by any conflicting financial interests of researchers, and (3) human subjects are not subjected to unnecessary risks.

Therefore, we continue to recommend, as we did in the previous report, that NIH:

Request Grantee Institutions To Provide Details to NIH Regarding the Nature of All Reported Financial Conflicts of Interest and How They Are Managed, Reduced, or Eliminated

In view of the findings of this report, OIG continues to believe that NIH has cause and current authority to collect basic details regarding the nature of conflicts and how they are managed as a followup to financial conflict-of-interest reports filed by grantee institutions. This would

enable NIH to question whether certain conflicts could affect the research being conducted.

We recommend that after a grantee submits a report identifying the existence of a conflict, NIH use the current authority at 42 CFR § 50.604(g)(3) to request details about the conflict and how it was managed, reduced, or eliminated. We further recommend that NIH request that 45 CFR § 50.604(g)(2) be amended to provide it with the authority to require grantee institutions to report certain details to NIH about the nature and management of conflicts at the time grant funds are issued to the grantee institutions or for any conflicts that the grantee institutions identify after the initial report.

We also recommend that NIH:

Require Grantee Institutions To Collect Information on All Significant Financial Interests Held by Researchers and Not Just Those Deemed by Researchers To Be Reasonably Affected by the Research

Federal regulation requires grantee institutions to collect a listing of researchers' known significant financial interests that would reasonably appear to be affected by the research and in companies whose financial interests would reasonably appear to be affected by the research. We believe the term "reasonably affected by the research" is left open to interpretation. In addition, in the absence of any guidelines, researchers within the same grantee institution may interpret "reasonably affected by the research" in different ways. Full and complete disclosure ensures that the determination of whether a significant financial interest relates to the research rests with the grantee institution and not with the researcher.

To maintain consistency across grantee institutions and researchers, we recommend that NIH amend 45 CFR § 50.604(c)(1) to require researchers to report all significant financial interests to the grantee institutions.

Require Grantee Institutions To Collect Information on Specific Amounts of Equity and Compensation From Researchers

Without knowing the exact amounts of researchers' equity and compensation, grantee institutions may not know the true nature of researchers' conflicts. Collecting this information might enable grantee institutions to more appropriately manage conflicts.

Develop and Disseminate Guidance on Methods To Verify Researchers' Financial Interests

Although the majority of grantee institutions reported that they verify the information provided by researchers regarding their conflicts, few grantee institutions submitted documentation to show that verification was actually performed. To assist grantee institutions in fulfilling their responsibilities under 42 § CFR 50.604(d), NIH should provide grantee institutions with guidance on when and how to verify information provided by researchers.

Ensure That Grantee Institutions Are Providing Adequate Oversight of Subgrantee Compliance With Federal Financial Conflict-of-Interest Regulations

NIH should make certain that grantee institutions are ensuring that subgrantees are in compliance with Federal regulations. NIH should also suggest to grantee institutions that they outline subgrantee procedures for reporting conflicts to both the grantee institutions and NIH.

Ensure That Grantee Institutions Are Maintaining Proper Documentation as Outlined in the Federal Financial Conflict-of-Interest Regulations

Because we found cases in which grantee institutions lacked documentation to show that conflicts were reported, managed, reduced, or eliminated according to grantee institutions' policies and procedures, NIH should ensure that grantee institutions are maintaining proper documentation as outlined in 42 CFR § 50.604(e).

Ensure That Grantee Institutions Take Appropriate Actions Against Researchers Who Do Not Follow Grantee Institutions' Financial Conflict-of-Interest Policies and Procedures

NIH should ensure that grantee institutions are taking appropriate actions against researchers who do not follow institutional financial conflict-of-interest policies and procedures. This is consistent with NIH's important oversight responsibilities under 42 CFR § 50.606. NIH may want to consider collecting information regarding noncompliant researchers and any sanctions taken against them to determine whether grantee institutions are appropriately handling researcher noncompliance.

Increase Oversight of Grantee Institutions To Ensure That Financial Conflicts of Interest Are Reported and Managed Appropriately

NIH should take a more proactive approach in overseeing grantee institutions because of the varying ways grantee institutions report,

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manage, and oversee conflicts. Although grantee institutions can provide guidelines to researchers indicating what constitutes a reportable significant financial interest, not all grantee institutions may define a significant financial interest that would reasonably be affected by the research in the same manner. Therefore, NIH would need to provide oversight to ensure that grantee institutions are applying consistent standards. NIH should also provide guidance regarding how financial conflicts should be managed so that management methods are used consistently across grantee institutions.

Develop Regulations That Address Institutional Financial Conflicts of Interest

Institutional financial conflicts of interest are not addressed by Federal regulations. Because there is the potential for grantee institutions to have financial conflicts of interest related to grant research, NIH should develop regulations that address these interests. In developing regulations NIH should address: the definition of an institutional financial conflict of interest; the elements required in a grantee institution's policy regarding institutional financial conflicts of interest; how institutional financial conflicts of interest are reported to NIH; and how institutional financial conflicts of interest are managed, reduced, or eliminated.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

Overall, NIH did not state whether it concurs or does not concur with our recommendations. We ask that in its final management decision, NIH more clearly indicate whether it concurs or nonconcur with our recommendations and what steps, if any, it will take to implement them.

NIH stated that it takes its compliance oversight responsibilities very seriously and is committed to preserving the public trust in objective scientific research. NIH strongly believes that all research should be conducted with the highest scientific and ethical standards.

Furthermore, NIH stated that it has demonstrated its commitment to oversight activities and continues to make them an agency priority.

NIH also stated that many of the report findings were not made within the context of the current financial conflict-of-interest regulation and, therefore, many of the recommendations are difficult to assess and/or cannot be implemented because NIH is bound by the requirements of

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the current regulation. The current regulation permits NIH to rely on grantee institutions to monitor and enforce researcher compliance with the regulation. However, without knowing the nature of conflicts, NIH cannot properly oversee conflicts among its funded researchers. OIG believes that the current regulation allows NIH to take a more proactive role in overseeing grantee institutions. Moreover, OIG has recommended that, where necessary, NIH amend its regulations to enhance its oversight of financial conflicts of interest.

NIH requested that OIG consider incorporating more direct references to the regulatory framework within the report's analysis, particularly within the findings. Specifically, NIH requested that statements exceeding the requirements of the regulation be characterized as observations or suggested modifications to the current regulation. A discussion of both NIH's and grantee institutions' responsibilities is presented in the background of the report.

Regarding OIG's first recommendation that NIH collect the details about conflicts and how they were managed, reduced, or eliminated, NIH continues to maintain that the responsibility for identifying and managing conflicts belongs with grantee institutions, as assigned by the current regulations. In comments on OIG's previous study, NIH did not concur with this recommendation and stated that the collection of specific details of the nature and management of conflicts would effectively transfer the responsibility for managing conflicts from the grantee institutions to the Federal Government.

NIH now states that "it could be argued that" requesting this information from grantees with frequency could constitute a rule, which would need to be issued consistent with notice and comment procedures. OIG believes that the current regulation does not prohibit NIH from requesting follow-up information from grantee institutions with respect to reported conflicts. The regulation specifies that the grantee institutions agree to produce such information on "all" conflicting interests. Further, we believe that the findings of this and related reports warrant NIH's requesting follow-up information on all reported conflicts. To address NIH's concern, we have modified our recommendation slightly to parallel the language of the regulation at 42 CFR § 50.604(g)(3). OIG also continues to recommend that NIH work with the Department of Health and Human Services (HHS) to amend the current regulation to request details regarding the nature and management of conflicts at grantee institutions.

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Regarding OIG's recommendation that NIH increase its oversight of grantee institutions, NIH highlighted a number of initiatives designed to enhance its oversight of and promote grantee compliance with Federal regulation. OIG recognizes NIH's continued efforts in increasing oversight of grantee institutions. However, despite these efforts, vulnerabilities continue to exist at grantee institutions in their identification, management, and oversight of conflicts. Therefore, OIG maintains its position that increased oversight of grantee institutions is needed to ensure that conflicts are reported and managed appropriately. NIH provided a summary of its oversight activities over the last decade and asked that we incorporate the information in the report. The summary is included in the full text of NIH's comments presented in Appendix C.

NIH will consider OIG's recommendation on developing and disseminating guidance on methods to verify researchers' conflicts. With respect to OIG's recommendation that grantee institutions maintain proper documentation, NIH will continue to emphasize grantee institution compliance with documentation requirements established by Federal regulation.

In response to the remaining five OIG recommendations, NIH referred to the recently developed Advanced Notice of Proposed Rulemaking (ANPRM). It stated that many of the observations made by OIG are addressed in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process. OIG understands that NIH is engaged in rulemaking regarding some of the very vulnerabilities we identified in our report. OIG will review the proposed rule and provide comments or clearance during the Department's internal review process.

Financial Conflict-of-Interest Regulations

Text taken directly from 42 CFR § 50.603

A Significant Financial Interest means:

Anything of monetary value, including but not limited to, salary or other payments for services (e.g., consulting fees or honoraria); equity interests (e.g., stocks, stock options or other ownership interests); and intellectual property rights (e.g., patents, copyrights and royalties from such rights). The term does not include:

- (1) Salary, royalties, or other remuneration from the applicant institution;
- (2) Any ownership interests in the institution, if the institution is an applicant under the SBIR Program;
- (3) Income from seminars, lectures, or teaching engagements sponsored by public or nonprofit entities;
- (4) Income from service on advisory committees or review panels for public or nonprofit entities;
- (5) An equity interest that when aggregated for the Investigator and the Investigator's spouse and dependent children, meets both of the following tests: Does not exceed \$10,000 in value as determined through reference to public prices or other reasonable measures of fair market value, and does not represent more than a five percent ownership interest in any single entity; or
- (6) Salary, royalties or other payments that when aggregated for the Investigator and the Investigator's spouse and dependent children over the next twelve months, are not expected to exceed \$10,000.

Small Business Innovation Research (SBIR) Program means the extramural research program for small business that is established by the Awarding Components of the Public Health Service [PHS] and certain other Federal agencies under Pub. L. 97-219, the Small Business Innovation Development Act, as amended. For purposes of this subpart, the term SBIR Program includes the Small Business Technology Transfer (STTR) Program, which was established by Pub. L. 102-564.

Text taken directly from 42 CFR § 50.604

Each institution must:

- (a) Maintain an appropriate written, enforced policy on conflict of interest . . . and inform each investigator of that policy, the Investigator's reporting responsibilities, and of these regulations. If the Institution carries out the PHS-funded research through subgrantees, contractors, or collaborators, the Institution must take reasonable steps to ensure that Investigators working for such entities comply with this subpart, either by requiring those Investigators to comply

with the Institution's policy or by requiring the entities to provide assurances to the Institution that will enable the Institution to comply with this subpart.

(b) Designate an institutional official(s) to solicit and review financial disclosure statements from each investigator who is planning to participate in PHS-funded research.

(c) (1) Require that by the time an application is submitted to PHS each Investigator who is planning to participate in the PHS-funded research has submitted to the designated official(s) a listing of his/her known Significant Financial Interests (and those of his/her spouse and dependent children): (i) That would reasonably appear to be affected by the research for which PHS funding is sought; and (ii) In entities whose financial interests would reasonably appear to be affected by the research. (2) All financial disclosures must be updated during the period of the award, either on an annual basis or as new reportable Significant Financial Interests are obtained.

(d) Provide guidelines . . . for the designated official(s) to identify conflicting interests and take such actions as necessary to ensure that such conflicting interests will be managed, reduced, or eliminated.

(e) Maintain records of all financial disclosures and all actions taken by the Institution with respect to each conflicting interest for at least 3 years from the date of submission of the final expenditures report. . . .

(f) Establish adequate enforcement mechanisms and provide for sanctions where appropriate.

(g) Certify, in each application for the funding to which this subpart applies, that: (1) There is [in] effect at that Institution a written and enforced administrative process to identify and manage, reduce or eliminate conflicting interests with respect to all research projects for which funding is sought from PHS, (2) Prior to the Institution's expenditure of any funds . . . the Institution will report to the PHS Awarding Component the existence of a conflicting interest (but not the nature of the interest or other details) found by the institution and assure that the interest has been managed, reduced or eliminated . . . and, for any interest that the Institution identifies as conflicting subsequent to the Institution's initial report under the award, the report will be made and the conflicting interest managed, reduced, or eliminated, at least on an interim basis, within sixty days of that identification; (3) the Institution agrees to make information available, upon request, to the HHS regarding all conflicting interests identified by the Institution and how those interests have been managed, reduced, or eliminated to protect the research from bias; and (4) The Institution will otherwise comply with this subpart.

▶ A P P E N D I X ~ B

Table B-1: Methods Employed by Grantee Institutions To Manage, Reduce, or Eliminate Conflicts Reported to NIH From October 1, 2005, Through September 30, 2006

Methods	Number of	Number of Reports ²
Disclosing conflict in publications, in presentations, to human research subjects, to other staff working on grant, and to Institutional Review Boards	142	164
Protecting other staff working on grant from inappropriate pressure	62	75
Notifying grantee institution of relationship changes with outside company	46	56
Ensuring open exchange of research results through publication and/or presentations	35	45
Monitoring/overseeing grant research or other activity related to the grant research	35	39
Limiting or prohibiting research involving human subjects	35	33
Updating grantee institution regarding research and/or technology developed as a result of research	30	35
Prohibiting outside company related to conflict from sponsoring research; requiring approval for outside company to sponsor research	25	30
Preapproving/overseeing purchases of goods/services from affected company by grantee institution	22	25
Ensuring that no technology/intellectual property is inappropriately shared with outside company	21	27
Limiting/prohibiting role in decisions affecting outside company; prohibiting service in specific roles at outside company	20	26
Monitoring use of institution facilities; prohibiting use of institution facilities/resources to further the interests of affected company	20	23
Modifying or limiting researcher's role in the research (e.g., allowing no role in subject selection or role in data analysis)	16	14
Certifying that primary commitment is to grantee institution	12	14
Agreeing to abide by financial conflict-of-interest policies and procedures	11	14
Facilitating financial conflict-of-interest training in research lab	9	12
Prohibiting the designation of the researcher as having management responsibilities on outside company's Web site or in publications	9	12
Submitting a report of compliance regarding management plan	9	10
Ensuring that an adequate level of peer review on research is performed by grantee institution	7	10
Prohibiting the alteration of scope of research; informing institution of changes to research	7	7
Restricting the sale of stocks; notifying grantee institution before stocks are sold; placing stocks in escrow	5	7
Assuring that Federal funds are used for grant research	5	4
Limiting amount of time spent on conflicting activity	4	5
Prohibiting use of grantee institution name in connection with outside company without prior approval	4	5

continued on next page

A P P E N D I X ~ B

Table B-1: Methods Employed by Grantee Institutions To Manage, Reduce, or Eliminate Conflicts Reported to NIH From October 1, 2005, Through September 30, 2006 (Continued)

Methods	Number of Researchers ¹	Number of Reports ²
Prohibiting outside company from competing for grants and/or research contracts that the grantee institution would otherwise accept	4	5
Management of conflict not needed because conflict had already been eliminated by researcher	4	5
Divestiture	4	4
Removing research staff from research or from role as study chair/primary researcher	4	4
Requiring that if other faculty/staff have financial interest in company, it be disclosed to grantee institution for approval	4	3
Prohibiting clinical trials without approval from grantee institution	3	5
Prohibiting clinical trials at grantee institution	3	4
Meeting with grantee institution to monitor management plan	3	3
Communicating with NIH regarding outside relationship	2	4
Notifying grantee institution of any decisions outside company makes that could affect financial interest in company	2	4
Monitoring use of Federal funds by grantee institution	3	3
Disclosing management plan to outside company	3	2
Clarifying whether acting on behalf of grantee institution or outside company when dealing with third parties	3	2
Prohibiting activities for the outside company that may appear to duplicate grant work	3	2
Requiring royalties associated with grant to be placed in a nonprofit organization; having researcher's company sell technology to grantee institution at cost so no profits accrue to company or researcher	3	2
Providing NIH with updates regarding technology/inventions via grant progress reports	2	2
Limiting compensation for conflicting activity	2	2
Filing a Request for Exemption that allows researcher to conduct conflicting activity	2	2
Prohibiting subcontract work for outside company	2	2
Requiring sole-source justification ³	2	2
Requiring researcher to gain approval of the grantee institution's Medical-Industry committee in order to consult	1	3
Requiring review of contracts between outside company and grantee institution	1	3
Terminating conflicting activity	1	1
Other methods	15	15

Source: Office of Inspector General analysis of grantee institution survey responses.

¹Although the total number of researchers with conflicts equals 165, the number of researchers in this column does not equal 165 because a researcher could have more than one type of conflict.

²Although the total number of reports equals 184, the number of reports in this column does not equal 184 because one report could be related to more than one type of conflict.

³In these instances, sole source is used to indicate that only one supplier exists that is capable of providing a particular product or service.

▶ A P P E N D I X C

Agency Comments



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

AUG 24 2009

TO: Stuart Wright
Deputy Inspector General
for Evaluations and Inspections, HHS

FROM: Director, NIH

SUBJECT: Comments on the Office of Inspector General's Draft Report:
How Grantees Manage Financial Conflicts of Interest in
Research Funded by the National Institutes of Health,"
OEI-03-07-00700

Attached are the National Institutes of Health's comments on the Office of Inspector General's draft report entitled "How Grantees Manage Financial Conflicts of Interest in Research Funded by the National Institutes of Health" (OEI-03-07-00700).

We appreciate the opportunity to review and comment on this important topic. Should you have questions or concerns regarding our comments, please contact Meredith Stein in the NIH Office of Management Assessment at 301-496-2461.

/s/

Francis S. Collins, M.D., Ph.D.

Attachment

Comments by the National Institutes of Health on the Office of Inspector General Draft Report, "How Grantees Manage Financial Conflicts of Interest in Research Funded by the National Institutes of Health" (OEI-03-07-00700)

The National Institutes of Health (NIH) appreciates the review conducted by the OIG and the opportunity to provide comments on this draft report. We wish to preface these comments by reiterating that NIH takes its compliance oversight responsibilities very seriously and is committed to preserving the public trust in objective scientific research. NIH strongly believes that it is vital that all research be conducted with the highest scientific and ethical standards. The introduction of bias in the conduct of NIH-supported research is antithetical to these principles and will not be tolerated. NIH has demonstrated its commitment to oversight activities and continues to make them an agency priority.

To this end, NIH conducted a comprehensive review of its system of oversight of grantee compliance with 42 CFR Part 50, Subpart F (the Federal financial conflict of interest (FCOI) regulation) for the purpose of ensuring that a vigorous and effective system is in place. As a result of this intensive effort, NIH identified several areas for oversight enhancement and has implemented a number of actions designed to monitor and promote grantee compliance. This and other NIH initiatives are discussed more fully in the following comments.

Further, to facilitate regulatory compliance and effective oversight, NIH, on behalf of the Department of Health and Human Services (HHS) and the Public Health Service (PHS), developed an Advanced Notice of Proposed Rulemaking (ANPRM) to invite public comments on possible revision of the FCOI regulation (the comment period closed on July 7, 2009). Many of the observations made by the OIG in the report are addressed in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process. The ANPRM is organized into the following six areas:

1. Expanding the scope of the regulation and disclosure of interests (including questions addressing a new requirement for grantees to provide details regarding the nature of financial conflicts of interest and how they are managed, reduced, or eliminated)
2. Definition of "significant financial interest"
3. Identification and Management of Conflicts by Institutions
4. Assuring Institutional Compliance
5. Requiring Institutions to provide additional information to the PHS
6. Institutional Conflict of Interest (a topic which currently is not addressed by the Federal regulations on FCOI in PHS grants)

General Comments

While the report addresses the three stated objectives of the OIG's review, many of the findings and supporting discussion included in the report were not made within the context of the current FCOI regulation (42 CFR Part 50, Subpart F). As a result, many of the recommendations are difficult to assess and/or cannot be implemented because NIH is bound by the requirements of the current regulation, which anticipates a system that relies on awardee institutions to monitor and enforce investigator compliance. For example, the report finds that grantee institutions do not require researchers to provide

Comments by the National Institutes of Health on the Office of Inspector General Draft Report, "How Grantees Manage Financial Conflicts of Interest in Research Funded by the National Institutes of Health" (OEI-03-07-00700)

specific amounts of equity or compensation on financial disclosure forms nor do grantee institutions routinely verify all researchers' identified financial interests; however, the report does not make clear that neither of these actions is required by the current regulation. Our comments below offer additional examples of statements in the report that anticipate actions beyond the requirements of the current regulation. To make the scope of NIH's current authority and the extent of grantees' current obligations more clear, we respectfully request that the OIG consider incorporating more direct references to the regulatory framework within the report's analysis, particularly within its discussion of "findings," e.g., by characterizing statements that exceed the requirements of the current regulation as "observations" and/or "suggested modification to the current regulation."

Specific Comments on the Report Recommendations

1. Require grantee institutions to provide details to NIH regarding the nature of financial conflicts of interest and how they are managed, reduced, or eliminated at the time grant funds are issued.

The OIG recommends that NIH use the current authority at 42 CFR 50.604(g)(3) to request details about the conflict and how it was managed, reduced, or eliminated.

The OIG further recommends that NIH request that 45 CFR 50.604(g)(2) [*sic*] be amended to require grantee institutions to report certain details to NIH about the nature and management of conflicts at the time grant funds are issued to the grantee institution or for any conflicts that the grantee institutions identified after the initial report.

While NIH appreciates this recommendation (and understands that it is a reiteration of a recommendation previously made in the OIG report dated January 10, 2008, *National Institutes of Health: Conflict of Interest in Extramural Research* (OEI-03-06-00460), for which NIH offered similar comments), the responsibility for identifying and managing conflicts belongs with grantee institutions, as assigned by the current FCOI regulation.

Under the current regulation, NIH has the discretion to request information that is relevant to evaluating regulatory compliance under the specific circumstances of individual cases. In fact, NIH has developed a FCOI Review Protocol as guidance for NIH staff in evaluating Institutional FCOI reports to determine if additional information is needed. However, should NIH request this additional information from grantees with such frequency that the request amounts to a "de facto" requirement to submit additional information to the agency, it could be argued that the practice constitutes a rule, which would need to be issued consistent with notice and comment procedures. Therefore, NIH does not agree that 42 CFR 50.604(g)(3) provides sufficient authority for NIH to require grantee institutions to provide details to NIH regarding the nature of FCOIs and how they are managed, reduced, or eliminated at the time grant funds are

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issued. However, the prospect of expanding NIH's authority in this regard is included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.

2. Require grantee institutions to collect information on all significant financial interests held by researchers and not just those deemed by researchers to be reasonably affected by the research.

The OIG further recommends that 45 CFR 50.604(c)(1) [*sic*] be amended to require researchers to report all significant financial interests to the grantee institutions.

This is not a requirement of the current FCOI regulation; however, the issue is included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.

3. Require grantee institutions to collect information on specific amounts of equity and compensation from researchers.

This is not a requirement of the current FCOI regulation; however, the issue is included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.

4. Develop and disseminate guidance on methods to verify researchers' financial interests.

Verification of researchers' financial interests is not a requirement of the current regulation and was not specifically included in the ANPRM. However, NIH appreciates this recommendation and will take it into consideration, though the means and resources for its implementation are unclear at this time.

5. Ensure that grantee institutions are providing adequate oversight of subgrantee compliance with Federal financial conflict of interest regulations.

The OIG further recommends that NIH should suggest to grantee institutions that they outline subgrantee procedures for reporting conflicts to both the grantee institutions and NIH.

NIH emphasized subrecipient oversight as a compliance concern several years ago and has been diligently addressing this issue with grantee institutions through site visits, policy reviews, educational outreach activities, and resources posted on the NIH Web site, including Frequently Asked Questions, the FCOI Tutorial, and resource documents.

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The NIH will continue to emphasize compliance with this aspect of the FCOI regulation. This issue is also included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.

6. Ensure that grantee institutions are maintaining proper documentation as outlined in the Federal financial conflict of interest regulations.

The NIH has clearly communicated this requirement through site visits, policy reviews, educational outreach activities, and resources posted on the NIH Web site, including Frequently Asked Questions and the FCOI Tutorial. The NIH will continue to emphasize compliance with this aspect of the FCOI regulation.

7. Ensure that grantee institutions take appropriate actions against researchers who do not follow grantee institutions' financial conflict of interest policies and procedures.

The OIG suggests that NIH consider collecting information regarding noncompliant researchers and any sanctions taken against them to determine whether grantee institutions are appropriately handling researcher noncompliance.

While NIH appreciates this recommendation, we note that grantee institutions are responsible for their employees' conduct, including compliance with the FCOI regulation and institutional policies. It is the grantee institution that has the authority and responsibility to monitor, direct, and enforce regulatory requirements pertaining to its Investigators. For example, under the FCOI regulation, the Institution must take corrective action when the failure of its investigator(s) to comply with the conflict of interest policy of the Institution has biased the design, conduct, or reporting of the NIH-funded research and must promptly notify NIH of the corrective action taken or to be taken under those circumstances. NIH will then consider the situation and, as necessary, take appropriate enforcement action or refer the matter back to the Institution for further action. NIH can also inquire into the Institutional procedures and actions at any time. This is the approach under the current regulatory framework to ensure that appropriate actions are taken. However, the issue of enforcement actions in the event of noncompliance is included in the ANPRM and will be further considered by NIH and HHS during the formal rulemaking process.

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8. Increase oversight of grantee institutions to ensure that financial conflicts of interest are reported and managed appropriately.

The OIG also recommends that NIH provide guidance regarding how financial conflicts should be managed so that management methods are used consistently across grantee institutions. This issue is included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.

As reported to the OIG review team in February, NIH has instituted a host of initiatives designed to enhance NIH oversight of and promote grantee compliance with the FCOI regulation. The NIH continues to make significant progress in enhancing its oversight of a complex system that relies on awardee institutions to monitor and enforce investigator compliance with existing regulatory requirements governing FCOI. The NIH was disappointed that the OIG chose not to include this important information in the draft report. The absence of this information may lead some to erroneously conclude that NIH has not been diligent in addressing oversight and promoting FCOI grantee compliance. Therefore, we respectfully request incorporation of this information as the report is finalized. The following summary provides highlights of NIH's FCOI compliance and oversight activities over the last decade, with an emphasis on the past few years to account for the dialogue between NIH and the OIG during that time.

- Developed and posted for comment in the *Federal Register* an Advanced Notice of Proposed Rulemaking (ANPRM) to gain public input on potential changes to the FCOI regulations. The comment period for the ANPRM closed on July 7, 2009.
- Developed an electronic research administration (eRA) Commons FCOI module/reporting tool for grantee institutions to report FCOIs to NIH in a consistent format. This module is integrated with the current NIH FCOI Web-based database to provide NIH with a full spectrum of tracking, management, and oversight tools for institutional FCOI reports. The eRA Commons module has been in use since 2008. NIH made its use by grantee institutions mandatory effective July 1, 2009.
- Posted an additional resource document for NIH staff use when evaluating institutional compliance with the FCOI regulation. The document provides a list of institutions for which OER has completed a FCOI policy review. (2009)
- Developed and conducted mandatory NIH-wide training for extramural program staff on managing and reviewing institutional FCOI reports. (2008)
- Created an on-line Web-based FCOI tutorial – a training module intended primarily for extramural investigators and institutional officials. (2008)
- Updated, expanded, and posted Frequently Asked Questions for FCOI. (2008 and 2009)
- Conducted an internal NIH study of NIH's system of oversight of FCOI to determine what changes may be needed to enhance NIH's oversight, provide clarification, and promote best practices in the community. (2008)
- Developed an FCOI Review Protocol for use by NIH staff in evaluating Institutional reports. (2008)

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- Established an FCOI Liaison group consisting of representatives from each of the NIH Institutes and/or Centers (IC), with the assistance of the Office of Extramural Research, to discuss FCOI issues and guide FCOI activities in their respective ICs. (2008)
- Developed and included "Notice of Award" language to highlight FCOI requirements. (2008)
- Developed the NIH Pilot Compliance Program on FCOI – a program to assess institutional implementation of and compliance with the FCOI regulation applicable to NIH grants and cooperative agreements. The program's objective was to analyze FCOI policies and related information from grantee institutions, provide feedback on their compliance with the regulation, and address weakness and/or deficiencies in institutional FCOI policies. (2007-2008)
- Developed a Web-based reporting and tracking tool for mandatory use by NIH staff to improve our ability to monitor and manage FCOI reports from institutions. This tool enabled NIH to maintain a central database to house institutional reports that were formerly maintained by individual NIH Institutes and Centers. (2007)
- Conducted Targeted Site Reviews - an initiative that focused specifically on compliance with the FCOI regulation applicable to NIH grants. The Targeted Site Reviews were developed to determine if: (1) awardee institutions are fully and correctly implementing the FCOI regulations; and (2) reporting requirements are being met. An observational document was posted on NIH's Web site as a resource. (2006)
- Conducted Proactive Compliance Site Visits – a series of site visits to assess institutional understanding of Federal policies and regulations, including Financial Conflict of Interest; minimize or eliminate noncompliance; and nurture a productive partnership between the NIH and its grantee institutions. A document summarizing the observations and comments from these visits was posted on NIH's Web site as an educational tool to promote awareness of, and compliance with, NIH policies. (2000-2004)
- Conducted a review of COI Policies of Grantee Institutions – a document summarizing observations and findings was posted on NIH's Web site as a resource. (2002)
- Conduct in-depth reviews of alleged FCOI involving extramural grantees. (Ongoing)
- Evaluate and analyze FCOI policies and practices for over 50 grantee institutions and provide technical assistance to address policy/procedural weaknesses and deficiencies, as necessary. (Ongoing)
- Continuously raise awareness among the extramural community – NIH staff members frequently present on FCOI issues to a variety of audiences in multiple forums across the United States. (Ongoing)
- Emphasize FCOI issues and compliance requirements in education and outreach activities across the United States, in *NIH Guide Notices*, in articles in the Nexus extramural newsletter, and in resource postings on the NIH Web site. (ongoing)

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9. Develop regulations that address institutional financial conflicts of interest.

The OIG states that because there is the potential for grantee institutions to have financial conflicts of interest related to grant research, NIH should develop regulations that address these interests.

This issue is included in the ANPRM and will be considered by NIH and HHS during the formal rulemaking process.



A C K N O W L E D G M E N T S

This report was prepared under the direction of Robert A. Vito, Regional Inspector General for Evaluation and Inspections in the Philadelphia regional office, and Linda M. Ragone, Deputy Regional Inspector General.

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