# NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard ARLINGTON, VIRGINIA 22230



**DATE:** July 23, 2004

**TO:** Anthony A. Arnolie,

Director, Office of Information and Resource Management

FROM: Déborah H. Cureton

Associate Inspector General for Audit

**SUBJECT:** Audit of Costs Associated with Visiting Personnel, OIG Report #04-2-006

Attached please find the final report on our *Audit of Costs Associated with Visiting Personnel*. We provided you with an initial draft report and based on your comments, we made changes, we considered appropriate.

In accordance with OMB Circular Number A-50, please furnish our office with a time-phased action plan to address the report recommendations within 60 calendar days of the date of this report.

I would like to express my appreciation for the courtesies and assistance provided by your staff during the audit. If you have any questions, please contact Karen Scott or Debbie Hunter at (703) 292-7100.

Attachment

# **Audit of Costs Associated With Visiting Personnel**

# **National Science Foundation Office of Inspector General**

July 23, 2004 OIG 04-2-006



# **Audit of Costs Associated with Visiting Personnel**

# **TABLE OF CONTENTS**

INTRODUCTION	1
Background	1
Objective, Scope & Methodology	2
RESULTS OF AUDIT	5
Incremental Costs Associated Visiting Personnel	5
Administrative Improvements for IPA and VSEE Programs	9
APPENDICES	
AGENCY RESPONSE	13
INDIVIDUAL RESEARCH AND DEVELOPMENT PLANS ESTIMATES	14

# **Audit of Costs Associated With Visiting Personnel**

# INTRODUCTION

# Background

The National Science Foundation's (NSF) mission is to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. NSF accomplishes this mission by initiating and supporting, through grants and contracts, scientific, engineering, and education research. In order to stay in the forefront of scientific initiatives and innovation, NSF relies on the services of highly qualified scientists and engineers in a broad spectrum of fields. NSF constantly refreshes and supplements its permanent professional staff with individuals borrowed from the nation's finest research and education institutions, organizations and industry. The Federal Government's Intergovernmental Personnel Act Mobility Program, and NSF's Program for Visiting Scientists, Engineers and Educators (VSEE) are known as "rotator" programs, and are NSF's primary vehicles for employing temporary professional personnel.

# **Intergovernmental Personnel Act Mobility Program**

The Intergovernmental Personnel Act (IPA) of 1970<sup>1</sup> established a Federal employment program that allows the temporary assignment of personnel between Federal agencies and other governmental, academic, tribal, and eligible non-profit organizations. The Act permits individuals to serve in a temporary capacity for a period of up to four years. Consistent with the intent of the Act, IPA assignments can strengthen management, assist in the transfer and implementation of new technology, involve officials of other organizations in developing and implementing Federal policies and programs, and enhance the professional abilities of the participants. Most IPAs return to their home institutions following their tour of duty bringing with them their newly acquired knowledge, benefiting both Federal agencies and non-Federal organizations.

Although IPAs are considered employees of the borrowing agencies for many purposes, in actuality, they remain employees of their home institutions. Thus, they are not entitled to pay from the borrowing agencies and are not subject to federal pay benefits and limitations. NSF reimburses the home institution for an IPA's salary and benefits using grants funded through its Research and Related Activities (R&RA) and Education and Human Resources (EHR) Activities appropriations and therefore, does not expend funds from the Salaries and Expenses (S&E) appropriation, used to pay its permanent staff.

# **Visiting Scientists, Engineers, and Educators**

The National Science Foundation Act <sup>2</sup> gives the Director the authority, "in accordance with such polices as the National Science Board chooses to prescribe, to appoint to the

<sup>&</sup>lt;sup>1</sup> Intergovernmental Personnel Act of 1970, Pub. Law 91-648, 84 Stat. 1909, § 401 and 5 U.S.C. § 3371 – 3376.

<sup>&</sup>lt;sup>2</sup> 42 U.S.C. § 1873 (a) (2).

agency for a limited term or on a temporary basis, scientists, engineers, and other technical and professional personnel on leave of absence from academic, industrial, or research institutions." Like the IPA program, individuals appointed under this authority and serving under the Visiting Scientists, Engineers, and Educators (VSEE) program benefit both the Foundation and the VSEE participants' home organizations. It provides NSF with professionals active in scientific, engineering, and education fields, and provides the VSEEs and their organizations with active exposure to the philosophy and mechanisms of Federal support for research. VSEEs are appointed for a period of one year and the appointment may be extended for an additional year.

As temporary federal employees, NSF pays the salaries of the VSEEs directly through its S&E appropriation. Although VSEEs are federal employees for salary purposes, they do not receive federal benefits and continue to receive benefits through their home organizations.

# **Administration of Visiting Personnel**

The Division of Human Resource Management (HRM) administers the IPA and VSEE programs for NSF. In addition to its normal recruiting, hiring, processing, and retaining activities for permanent and other non-rotational staff, HRM continually performs these activities, as well as additional processing, for rotators in the two programs. HRM calculates participants' salaries, coordinates with the IPAs' and VSEEs' home organizations to determine salary and fringe benefit reimbursements, and coordinates with NSF's Division of Financial Management to establish grants and reimbursement accounts. The efforts required by HRM are incessant because of the continual turnover associated with the programs. In the past two years, HRM serviced approximately 220 IPAs and VSEEs annually, with a staff of 3 full-time and 3 part-time personnel. The additional administration associated with the continual turnover of rotators is a basic cost of the programs that we did not quantify.

# Objectives, Scope & Methodology

Our audit objectives were to determine if NSF is managing IPA and VSEE appointments in accordance with established federal guidelines and to identify the factors affecting the costs associated with rotator personnel. This audit addresses NSF's compliance with rules and regulations governing only the IPA and VSEE programs and identifies the costs associated with appointing IPAs and VSEEs; this audit did not evaluate the costs of other programs NSF uses to hire temporary scientists, engineers, and educators. We also did not assess the extent that the intended benefits of the IPA and VSEE programs were realized. The National Academy of Public Administration made this assessment in its report, *National Science Foundation: Governance and Management for the Future*, issued in April 2004.

To accomplish our audit objectives, we obtained all the IPA and VSEE data from NSF's personnel system as of March 31, 2004. We verified the data were accurate and complete by comparing it to the rotators' personnel files. We used Audit Command Language (ACL) software to analyze the data, including identifying the various cost sources and incremental costs of the IPA and VSEE programs.

We also included the estimated travel costs of Individual Research and Development Plans (IR/Ds) in our analysis. An IR/D is an optional benefit available to all NSF employees but IPAs and VSEEs are the primary users. Therefore, the costs associated with IR/Ds must be considered in our analysis. We reviewed 100 percent of the IR/Ds active as of May 21, 2004, to determine whether each participant was appointed to NSF as a permanent, IPA, VSEE, or other temporary employee. Specifically, 73 percent of the currently appointed IPAs and 77 percent of the currently appointed VSEEs have IR/Ds. Furthermore, IPAs and VSEEs together account for 75 percent of the active IR/Ds approved by NSF. Permanent and other categories of temporary employees have the remaining 25 percent. Because of time constraints, we limited our analysis to the costs estimated by the individual researchers and approved by NSF. As such, we reviewed each IR/D proposal to determine the participant's estimated days away from NSF, the estimated number of trips the research would require, and the estimated travel costs of these trips. We did not verify whether IR/D participants actually used the stated number of research days and travel costs.

To determine if NSF is managing IPA and VSEE appointments properly, we used applicable laws and regulations, as well as OPM's and NSF's guidance. We selected the 30 highest paid VSEEs and 30 highest paid IPAs to verify that NSF obtained all required documentation and performed appropriate background checks. We also verified that NSF did not exceed federal regulations regarding the length of these assignments.

To determine if NSF supported payments for lost consulting income appropriately, we reviewed 100 percent (48) of the IPAs receiving payments for lost consulting. Because NSF did not have guidance defining acceptable supporting documents for consulting income, we obtained HRM's agreement as to minimum criteria for adequate documentation. We then compared the supporting documentation submitted by the IPAs to the minimum criteria to assess whether the consulting income was supported adequately.

We selected a random sample of 58 of the 147 IPAs and recomputed their salary calculations to determine the accuracy of NSF's salary compensation computations. In addition, we analyzed these computations to identify trends and reasons for errors. Finally, as we used a random sample, we statistically projected the pay computation results to the entire IPA universe, at a 95 percent confidence level.

To identify potential duplicate payments in cost of living adjustments, we reviewed the Economic Research Institute's methodology for computing the cost of living percentages that NSF applies to salaries of VSEEs who relocate to Arlington, Virginia.<sup>3</sup> In addition, we reviewed the President's Federal Pay Council's methodology for establishing the federal rate of locality pay, to identify the components included in locality pay. Further, we reviewed the NSF Act to identify the pay authority for VSEEs and rules concerning the pay authority and reviewed the National Science Board's minutes from 1988 to 1995. Finally, we reviewed the 30 highest paid VSEEs' files to determine the number of VSEEs that received cost of living adjustments and the amount of those adjustments.

\_

<sup>&</sup>lt;sup>3</sup> NSF uses software developed by Economic Research Institute to determine the cost of living percentage it pays VSEEs.

# **Incremental Cost**

An incremental cost is defined as the difference in cost between any two alternatives. In our audit, we identified costs associated with appointing rotators. NSF would incur some of these costs regardless of whether permanent federal employees or rotating personnel were used. However, some of these costs are only incurred as a result of using rotators. For example, IPAs' salaries are not subject to federal pay limitations; therefore, the difference in salary that an IPA receives compared to what a federal employee would receive in the same position is an incremental cost. Incremental costs also include payments to rotating personnel for lost consulting income because federal employees do not receive the payments.

We conducted our audit work between March 2004 and June 2004, in accordance with the Comptroller General's standards for audits contained in the *Government Auditing Standards*.

# **RESULTS OF AUDIT**

Consistent with the intent of the Intergovernmental Personnel Act (IPA) Mobility Program and NSF's Visiting Scientist, Engineer and Educator (VSEE) program, NSF's use of rotating professionals helps it stay abreast of scientific initiatives and innovations. However, for these highly qualified scientists, engineers, and educators, NSF incurs additional costs in the form of higher salaries (IPAs only) and other benefits.

In addition to identifying the additional costs associated with the use of rotating personnel, we reviewed VSEEs' and IPAs' pay calculations and identified opportunities for improving NSF's administration of these programs. Specifically, HRM needs to provide criteria for acceptable documentation to support consulting income paid to rotators, improve the accuracy of IPAs' salary computations, and remove duplicative factors considered in computing VSEEs salaries.

# **Incremental Costs Associated with Visiting Personnel**

NSF's policy is to ensure that participants in the IPA and VSEE programs receive salaries that are equivalent to those they receive from their respective home organizations, and that they are not adversely affected financially by accepting temporary assignments at NSF. As such, NSF funds a number of personnel compensation and benefit costs for IPA and VSEE participants that it would not incur if permanent federal employees filled these positions.

As of March 31, 2004, NSF employed 147 IPAs and 39 VSEEs at an approximate annual cost of \$23 million and \$4.6 million respectively. NSF's additional annual cost for relying on IPAs rather than permanent employees was approximately \$1.3 million, an average of \$8,518 per IPA. For VSEEs, NSF does not incur any additional salary and benefit costs. If one includes estimated travel costs associated with Individual Research and Development Plans, the annual incremental cost for IPAs and VSEEs increases to approximately \$2.4 million. The incremental costs of these two rotator programs are comprised of a number of factors reflected in the following table and explained below.

<sup>&</sup>lt;sup>4</sup> NSF avoids a future cost obligation by using rotators because they are not eligible to receive federal retirement benefits. This obligation is not quantified. Retirement benefits from the rotators' home organizations may be reimbursed for the term of the rotators' NSF assignments, along with other fringe benefits.

Table 1: Annual Incremental Costs for IPAs and VSEEs

Annual Incremental Costs	IPAs	VSEEs	Total
Salary	\$1,311,778	\$0	\$1,311,778
Fringe Benefits	\$0	\$0	\$0
Lost Consulting	\$311,121	\$0 <sup>5</sup>	\$311,121
Relocation/Per Diem	\$0	\$0	\$0
IPAs' Home Institution Cost Sharing	(\$370,795)	\$0	(\$370,795)
Total Annual Incremental Costs to	\$1,252,104	\$0	\$1,252,104
NSF			

Estimated Annual IR/D Costs	IPAs	VSEEs	Total
Estimated IPA and VSEE Individual			
Research & Development Plans (IR/D)	\$1,152,398	\$162,317	\$1,314,715
Travel Costs			
Estimated Permanent and Other			(\$188,551)
Temporary Employee IR/D Travel Costs			
Total Incremental Estimated IR/D Travel			\$1,126,164
Costs			
Total Annual Incremental Costs to			\$2,378,268
NSF including IR/Ds.			

Salaries: Although IPAs' salaries, on average, are paid at levels comparable to Federal employees, 49 of the 147 (or 33 percent) of the IPAs' salaries exceeded Federal pay limitations. When an IPA's salary exceeds the maximum Federal pay for a position filled by an IPA, the excess salary is an incremental cost. Since NSF pays the cost of these higher salaries, NSF incurred an incremental cost of \$1,311,778 to fund these 49 IPAs.

NSF does not incur any incremental costs for the VSEEs' salaries because their salaries are limited by the federal pay scale for the positions they occupy. If an IPA's or VSEE's salary at their home organization is less than the minimum Federal salary for the NSF position they occupy, NSF increases their salary to that minimum amount.

Fringe Benefits: NSF pays the home organization's contribution to the IPAs' and VSEEs' fringe benefit package. NSF's average percentage for fringe benefits paid on behalf of its permanent employees is approximately 22 percent. The average percentage NSF pays for an IPA's fringe benefit is 25 percent and 14 percent for VSEEs. Consequently, as the fringe benefit costs for IPAs and VSEEs are similar to those for permanent employees, NSF does not incur any material incremental fringe benefit costs for rotators.

Lost Consulting: An IPA is eligible for up to \$10,000 annually for consulting income lost due to accepting an appointment at NSF, if the IPA agrees to forego consulting activities while at NSF.<sup>6</sup> Because permanent federal employees do not receive payments for lost consulting income, this is an incremental cost to NSF. NSF pays 48 of the 147 IPAs (or 33 percent) lost consulting payments totaling \$572,719 over the term of the IPAs'

<sup>6</sup> If the IPA chooses to continue his/her consulting activities, then the IPA must obtain written permission from NSF's Designated Agency Ethics Official.

<sup>&</sup>lt;sup>5</sup> For VSEEs, lost consulting amounts are included in the employee's salary, which is limited by the Federal pay scale for the position.

assignments. The \$311,121 list in Table 1 is the annual amount NSF paid for the IPAs during the first year of their assignment.

NSF does not incur an additional cost for VSEEs because they do not receive a separate payment for lost consulting, but are paid at the Federal salary rate applicable to the position. Consulting fees are added to the VSEEs' organizational base salary to establish the federal salary.

Relocation/Per Diem: It is likely that highly qualified temporary scientists, engineers, and educators will come from the same geographic areas to work for NSF as permanently employed scientists, engineers, and educators. Permanent employees, IPAs, and VSEEs are all eligible to receive a household move and/or partial reimbursement for lodging, meals and incidental expenses for relocating to the Washington, D.C. Metropolitan Area. Consequently, NSF does not incur additional relocation costs for IPAs and VSEEs.

Cost Sharing: Institutional cost sharing reduces NSF's costs for IPAs. The Office of Personnel Management's IPA guidance<sup>7</sup> states that the home institution may agree to pay all, some, or none of the costs associated with an IPA assignment. To the extent that the home institution agrees to provide cost sharing, NSF's cost for the IPA is reduced. While it is NSF's policy to request at least 15 percent cost sharing, not all institutions contribute or they contribute at a lesser level. Currently, 35 of the 147 (or 24 percent) IPAs' home institutions share the salary costs, thereby reducing NSF's costs by \$370,795. Although not an incremental cost, an IPA's home institution may also share fringe benefit costs. Fourteen of the 35 (or 40 percent) IPA home institutions cost share at the NSF requested rate of 15 percent.

Individual Research and Development Plans: An Individual Research and Development Plan (IR/D) is a method NSF uses to provide all of its permanent employees the opportunity to maintain professional competencies, and to provide its rotators and other temporary employees the opportunity to maintain involvement with their ongoing research. Under an IR/D, the employee receives both the time away from regular duties and the travel costs necessary to conduct research. Because NSF's rotational employees are the primary users of IR/Ds, we subtracted NSF's permanent and other temporary employees' estimated travel costs from the IPAs' and VSEEs' estimated travel costs to determine NSF's incremental cost. IPAs and VSEEs annual estimated travel costs related to IR/D activities were \$1,314,715 and permanent and other temporary employees annual estimated travel costs were \$188,551. The total annual IR/D incremental cost for IPAs and VSEEs is \$1,126,164.

NSF's senior management must approve an individual's IR/D proposal and the proposed research and development activities may not interfere with other assigned duties. The research activities must also relate to accomplishing NSF's goals. In order to take advantage of this opportunity, an IR/D participant must provide NSF with a proposal containing a description of the research or development activity, an estimate of the time he/she expects to be away from NSF, estimated travel costs, and a description of how

<sup>&</sup>lt;sup>7</sup> Provisions of the IPA Mobility Program is found at <a href="https://www.opm.gov/programs/ipa/Mobility.asp">www.opm.gov/programs/ipa/Mobility.asp</a>

the research results will be reported. NSF will allow up to 50 days per year away from regular NSF duties for the individual's research.

Although IR/Ds are available to all employees, IPAs and VSEEs are the main participants. As of May 21, 2004, NSF had 183 active IR/Ds on file of which 137 (or 75 percent) were for IPAs and VSEEs, and 46 (or 25 percent) were for permanent or other categories of temporary NSF employees. Therefore, it is more likely that NSF will incur the additional costs of the IR/D benefit with its IPA and VSEE program participants than with permanent program staff. To the extent that the estimates provided in the IR/D proposals are realized, NSF will annually contribute 5,238 staff days or 20 full-time positions and \$1.3 million in travel costs to support IPA and VSEE independent research.

To determine the incremental cost associated with IPAs' and VSEEs' IR/Ds, we used the participants' estimated days and estimated travel costs listed in their approved IR/Ds. We did not verify whether the participants actually used the stated number of research days or travel costs. Appendix B of this report contains detailed IR/D estimates by NSF appointment type.

\_

<sup>&</sup>lt;sup>8</sup> Reporting on the results of an employee's research helps to ensure accountability. Reporting results methods include discussing IR/D activities in Division meetings, providing a list of publications resulting from IR/D support (if required), and providing periodic written and oral reports to Associate and Division Directors. NSF has not implemented specific requirements for reporting IR/D results.

<sup>&</sup>lt;sup>9</sup> Of the approximately 1100 permanent and other categories of temporary employees, only 46 had approved IR/Ds.

<sup>&</sup>lt;sup>10</sup> A full-time federal employee works 261 days per year. Total estimated days for IPAs' and VSEEs' IR/D activities of 5,238, divided by 261 days per year equals the equivalent of 20 full-time positions.

# Administrative Improvements for IPA and VSEE Programs

Overall, we found that NSF complies with Office of Personnel Management and NSF rules and regulations governing rotator assignments. NSF is obtaining required certifications for such items as "no lobbying" and "drug-free work place" assurances, performing background investigations, and obtaining the information necessary to process rotator assignments. NSF is computing VSEEs' salaries and fringe benefits correctly, but is not always computing IPAs salaries accurately.

We identified three areas where NSF could further improve its administration of the IPA and VSEE programs:

- 1) NSF needs to obtain better documents to support lost consulting payments.
- Because the calculations to determine IPAs' salaries are complex and manually computed leading to errors, NSF should consult with an information technology professional to determine the feasibility of automating the computation.
- NSF should explore alternative methodologies for computing VSEEs' salaries to eliminate consideration of duplicative factors for per diem, health benefits, taxes, and locality pay.

# **Consulting Income Documentation**

Although acceptable under NSF's guidance, HRM obtained documentation supporting consulting income that, in our opinion, is inadequate for 44 (or 92 percent) of the 48 IPAs that are receiving lost consulting payments. The inadequately supported payments totaled \$494,200 (or 86 percent), of the total \$572,719 lost consulting payments over the term of the assignments for the 48 IPAs.

For example, for 31 (or 70 percent) of the 44 payments NSF accepted either the IRS Schedule C, *Profit or Loss From Business*, or the IRS Form 1099, *Miscellaneous Income* as evidence of the amount of consulting income an IPA has historically received and was foregoing in order to work for NSF. While these forms support an IPA's gross income, neither supports that the income received was for consulting services as opposed to other services or business activities.<sup>11</sup>

Neither NSF's Personnel Manual nor the Office of Personnel Management provides guidance concerning acceptable forms of documentation to support lost consulting payments. At a minimum, NSF should require documentation from its rotators that clearly evidences consulting services were rendered, such as the dates of service, confirmation of amounts paid, and a description of services provided for each consultee.

Detailed supporting documentation minimizes the risk of fraud and misrepresentation of consulting income for lost consulting payments. In addition, it ensures that IPAs are receiving proper and accurate lost consulting payments from NSF.

<sup>&</sup>lt;sup>11</sup> The Schedule C only lists gross income, total expenses by category, and net profit or loss, and the Form 1099 only provides the name of the payee and a total amount paid.

# **Recommendation 1-1**

We recommend that the Director, Division of Human Resource Management, incorporate criteria into the NSF Human Resource Management policy and procedures that, at a minimum, clearly evidences the existence and amount of lost consulting income for which NSF is making payment. NSF should also train HRM personnel to implement the new policy.

# **Agency Comments**

NSF concurred with this recommendation.

# **Pay Computations**

NSF did not always correctly calculate IPAs' salaries and fringe benefits. Specifically, our review of 58 IPA personnel files found 31 errors affecting the accuracy of payments made for 24 (or 41 percent) IPAs. While the average error was an overpayment of \$338, the errors ranged on an individual basis from an underpayment of \$22,000 to an overpayment of \$19,750.

Arithmetical mistakes were most common, accounting for 9 of the 31 errors. NSF did not include the second part of the 2003 federal pay raise in the salary adjustments for four IPAs and did not verify the accuracy of salary and fringe benefit amounts submitted by eight IPAs' home institutions.

The effect of these errors is that NSF underpaid salaries and benefits for 15 IPAs by a total of \$44,278, while overpaying \$24,653 for 7 other IPAs. It is probable that NSF incorrectly computed the compensation of between 45 and 65 of the 147 IPAs. <sup>12</sup>

We attribute these errors to the complex nature of the pay computations for IPAs. Numerous rules govern these computations, all of which are performed manually. Further, once calculated, adjustments to an IPA's salary are often required several times a year to include salary increases from the IPA's home institution as well as federal pay increases. When a federal pay raise occurs, NSF needs to ensure that the IPA is receiving at least the new minimum salary of the position.

An automated program to compute the IPA salary and other benefit payments would facilitate a more accurate and efficient computation process. Such an automated program would better ensure consistent and accurate computations and significantly reduce the time required by HRM personnel to perform and verify calculations.

#### **Recommendation 2-1**

We recommend that the Director, Division of Human Resource Management in coordination with the Director, Division of Information Systems, develop a program to automate the IPA salary and benefits computation process.

<sup>&</sup>lt;sup>12</sup> Statistical projection is at the 95 percent confidence level.

# **Agency Comments**

NSF concurred with this recommendation.

# **VSEE Cost of Living Adjustments**

NSF paid 25 of 30 VSEEs a Cost of Living Adjustment (COLA) as well as per diem, taxes, health benefits, and locality pay, thereby paying twice for the same costs. These duplicative COLA payments totaled \$317,325, or an average of \$12,693 annually, per VSEE.

To compensate VSEEs for the increased cost of living in the Washington, D.C. Metropolitan Area (WMA), <sup>13</sup> NSF includes an additional amount in the VSEE's salary payment. This COLA is based on software developed by the Economic Research Institute (ERI) and reflects costs paid by individuals living in the WMA. ERI determines the cost of living for a geographic area based on the following categories: 1) Consumables, 2) Transportation, 3) Health Services, 4) Housing, 5) Income and Payroll Taxes, and 6) Miscellaneous. <sup>14</sup> The health services, housing, and taxes categories of ERI's cost of living percentage duplicate the health benefits, per diem, and partial income tax reimbursement that NSF pays directly to the VSEE. <sup>15</sup> ERI's cost of living percentage also includes a transportation category, although VSEEs are eligible to participate in NSF's commuting benefits such as, its Public Transportation Subsidy Program. Also, NSF's VSEE Cost of Living Adjustment policy specifically excludes commuter costs from being included in VSEEs' cost of living payments.

- Health Services: VSEEs continue to receive health insurance benefits from their home organizations. NSF pays the home organizations' contribution to those health benefits on behalf of VSEEs through its fringe benefit payment. However, the COLA NSF pays VSEEs also includes a health services category of which health benefits are a major part. When NSF pays the VSEEs' home organizations health benefits directly, it duplicates this portion of the COLA.
- Housing: NSF pays partial per diem directly to VSEEs to offset housing and living expenses the participants incur while completing their appointment at NSF. The COLA also includes a housing category. When NSF pays partial per diem directly to the VSEEs, it duplicates another portion of the COLA.
- Income and Payroll Taxes: For VSEEs receiving partial per diem, NSF also pays an Income Tax Reimbursement Allowance (ITRA)<sup>16</sup> for federal, state and local taxes incurred on the per diem if the assignment is 12 months or longer. When NSF pays VSEEs the income tax allowance, it duplicates the income and payroll taxes category already included in the COLA payment.

<sup>13</sup> VSEEs only receive COLA if the cost of living in the WMA is greater than the cost of living at their home organizations.

<sup>15</sup> Fringe benefits, including health benefits, may be paid directly to the VSEE, the VSEE's home organization, or the VSEE's health benefit provider.

<sup>&</sup>lt;sup>14</sup> The Economic Research Institute miscellaneous category includes charitable contributions, tuition for dependent (or childcare), insurance premiums or deferrals, personal savings, investments, credit card debt payments, vacations, etc.

<sup>&</sup>lt;sup>16</sup> Income Tax Reimbursement Allowance is authorized by the *Federal Travel Regulation* (41 CFR Part 301.11).

 Transportation: Because commuter costs are a part of the transportation category of the COLA that VSEEs receive, NSF subsidizes the VSEEs' commuter costs. Yet, NSF policy states that the COLA is not intended to subsidize commuting costs.

Similar to the COLA, locality pay is also intended to compensate employees for the additional cost of living in the WMA. Locality pay is paid to federal workers and ensures that federal salaries are comparable to private sector salaries in the locality area. The U.S. President's Pay Agent, the Federal Pay Council, establishes the locality pay percentage for the areas. In determining the locality pay percentages, the Council uses data from the Bureau of Labor Statistics' Occupational Compensation Survey Program, which also incorporates cost of living allowances included in general wage increases for federal employees in a specific geographic area. A cost of living allowance is already included in the pay data used to calculate locality pay. Therefore, paying VSEEs both a COLA and locality pay appears duplicative.

According to the United States Code, <sup>17</sup> NSF's Director has the authority to, "in accordance with such policies **as the National Science Board chooses** to prescribe, appoint for a limited term, or on a temporary basis, scientists, engineers, and other technical and professional personnel" and **determine the compensation payments of temporary personnel**. Therefore, NSF can use any reasonable methodology it deems appropriate to determine a VSEE's adjusted salary. However, NSF should present this methodology to the National Science Board **(the Board)** for its review and approval. We found no evidence of the Board prescribing or approving such policies.

#### **Recommendation 3-1**

We recommend that the Director, Division of Human Resource Management explore alternative methodologies for computing VSEEs' salaries such that NSF is not paying twice for the same costs. Whatever methodology NSF implements should be presented to the National Science Board for its approval, if the Board so chooses.

# **Agency Comments**

NSF's position is that the Director of NSF has responsibility for implementing policy that the National Science Board has established. We agree. However, we believe the United States Code also requires the Board's involvement in developing policy. As such, we have amended our recommendation to state that NSF should present this policy to the Board, rather than requiring NSF to obtain the Board's approval.

-

<sup>&</sup>lt;sup>17</sup> 42 USC 16 §1873 (a) (1) and 42 USC 16 §1873 (a) (2).



# Office of Information and Resource Management

# **MEMORANDUM**

DATE:

July 23, 2004

TO:

Karen M. Scott,

Senior Audit Manager

FROM:

Anthony A. Arnolie,

Director, Office of Information and Resource Management

**SUBJECT:** 

Agency Response to Official Draft of Audit of Costs Associated with

Visiting Personnel

Attached are NSF's written comments in response to the subject draft audit report. We appreciate the extension of your due date for these comments at our request.

Your audit team was very thorough and they conducted themselves professionally at all times. The draft report is balanced and raises important issues for NSF's consideration. We look forward to working with you on these issues in the future.

If you have any questions about NSF's response, please contact Joe Burt at (703) 292-8180.

#### Attachment

Cc:

Thomas N. Cooley Lawrence Rudolph Joseph F. Burt

# Agency Response to Official Draft Audit of Costs Associated with Visiting Personnel

# Value of the NSF Rotator Program

NSF's use of rotators fosters the interchange of information between NSF and universities throughout the country, and benefits both the government agency and the state or local communities by infusing new talent into NSF and providing these scientists and engineers with valuable information and knowledge to take back to their home institutions. Your draft report notes, on page 2, that the NSF rotator program, "...provides NSF with professionals active in scientific, engineering, and education fields, and provides the [rotators] and their organizations with active exposure to the philosophy and mechanisms of Federal support for research."

The recent NAPA report, entitled, "National Science Foundation: Governance and Management for the Future," cites the following findings related to NSF's current use of rotators:

- "NSF needs employees with substantive and current knowledge of research trends and developments, and awareness of current and emerging innovators. This requirement extends to a wide range of disciplines
- NSF also needs employees with knowledge of the changing practices and cultures of individual universities and colleges
- Both rotators and permanent employees in management come to their jobs with substantial post-doctorate experience in various areas relevant to their responsibilities and duties
- Other federal agencies involved in funding basic science report having positive experiences engaging members of the scientific community as temporary employees
- NSF has experienced few COI problems using rotators.

The [NAPA] Panel believes that: (1) NSF has attracted well-qualified scientists with substantial and diverse experience to serve in these critical positions, (2) their use is consistent with the practices of other scientific organizations, and (3) their use should be continued."

# Comments on Official Draft Report

Table 1 represents present incremental costs to NSF for IPAs and VSEEs. However, there is a significant future cost savings to the Federal government that results from NSF's use of IPAs and VSEEs, since the government incurs no future obligation to pay their retirement benefits. In fact, one driver behind the Competitive Sourcing initiative of the PMA is to reduce the future burden on Federal spending resulting from the costs of Federal retirees. These future cost savings resulting from NSF's use of IPAs and VSEE's no doubt represent a considerable offset to the incremental costs listed in Table 1.

Recommendation 1-1: NSF agrees in principle that it should require adequate supporting documentation for all consulting services that are used as the basis for determining NSF's lost consulting payments to IPAs. We will review our current procedures to determine a process that adequately supports NSF payments, with the understanding that the process must be commensurate with the level of risk involved in these payments and must not place undue burden on IPAs.

Recommendations 2-1 and 3-1: Due in part to issues raised during the course of this audit, the Division of Human Resource Management (HRM) instituted a comprehensive review of NSF's pay setting policies and procedures for IPAs and VSEEs. The review is intended to identify a consistent set of guidelines for determining pay and benefits for IPAs and VSEEs and to lay the groundwork for the development of an automated system for these computations.

Recommendation 3-1 states that any new methodology for computing VSEEs salaries should be presented to and approved by the National Science Board. Such action by the Board would be inconsistent with the language of the first sentence of section 14(a)(1) of the National Science Foundation Act of 1950, as amended [42 U.S.C. 1873(a)(1), below] and the second one in section 4(a) of our Act, which respectively authorize the Board to prescribe and establish policies. Responsibility for implementing such policies is given to the Director by that sentence and by section 5(b)(2) of the NSF Act [42 U.S.C. 1864(b)(2)].

SEC. 14. (a)(1) The Director shall, in accordance with such policies as the Board shall from time to time prescribe, appoint and fix the compensation of such personnel as may be necessary to carry out the provisions of this chapter...

# Individual Research and Development Plans Estimates by NSF Appointment Type as of May 21, 2004

# IPAs' and VSEEs' IR/D Estimates

Appointment Type	Annual Estimated Days	Annual Estimated Travel Costs
IPA	4,134	\$1,152,398
VSEE	1,104	\$162,317
Total IPAs & VSEEs	5,238	\$1,314,715

# Permanent and Other Temporary Employees' IR/D Estimates

	Annual	Annual Estimated
Appointment Type	Estimated Days	Travel Costs
Permanent	1,092	\$126,597
Other Temporary	387	\$61,954
Totals	1,479	\$188,551

# **Total IR/D Estimates**

1000.1142 =00000		
	Annual	Annual Estimated
Appointment Type	Estimated Days	Travel Costs
IPA	4,134	\$1,152,398
VSEE	1,104	\$162,317
Permanent	1,092	\$126,597
Other Temporary	387	\$61,954
Totals	6,717	\$1,503,266