

NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

MEMORANDUM

Date: June 30, 2009

To: Mary F. Santonastasso
Division Director, Division of Institution and Award Support
(BFA/DIAS)

Karen Tiplady
Division Director, Division of Grants and Agreements (BFA/DGA)

From: Michael R. Kuklok
Senior Audit Manager

Subject: NSF OIG Report Number 09-1-009
Audit of Effort Reporting System, Georgia Institute of Technology

Attached is the final report prepared by McBride Lock and Associates, an independent public accounting firm, on the audit of the payroll distribution and effort reporting system used by the Georgia Institute of Technology to support salary and wages charged to NSF grants. The University's comments to the draft report have been summarized after the recommendations for each audit finding and our response has been provided to these comments. The full text of the University's comments is included as *Appendix A* to the audit report.

Our audit disclosed that Georgia Tech generally has a well established labor effort reporting system with the exception of internal controls over prospective workload allocation changes (prospective changes), labor cost transfers, uncharged but committed labor effort and NSF reimbursement limitations to principal investigators. However, the lack of adequate controls over prospective changes and labor cost transfers serves to lessen the reliability of the labor effort reporting process at Georgia Tech. Insufficient controls over changes to the data underlying the effort reports could allow improper charges to Federal awards to remain undetected, thus jeopardizing the reliability of not just effort reports, but also Federal award financial reports. This is critical since labor charges to NSF awards totaled \$16 million in FY 2007. The amount of labor effort charges to other Federal agencies by Georgia Tech, totaled \$49 million.

We consider Georgia Tech's internal control procedural weaknesses identified in the audit findings to be significant. Accordingly, we request that your office work with Georgia Tech and the cognizant audit agency, the Office of Naval Research (ONR), to develop a written Corrective Action Plan detailing specific actions taken and/or planned to address each audit recommendation. Milestone dates should be provided for corrective actions not yet completed.

To help ensure the recommendations are resolved within six months of issuance of the audit report pursuant to *Office of Management and Budget Circular A-50*, please coordinate the development of the Corrective Action Plan with our office during the resolution period. Each audit recommendation should not be closed until NSF, in coordination with ONR, determines that Georgia Tech has adequately addressed the recommendation and proposed corrective actions have been satisfactorily implemented. Please note that we have sent a copy of the audit report under separate cover to [REDACTED].

OIG Oversight of Audit

To fulfill our responsibilities under Generally Accepted Government Auditing Standards, the Office of Inspector General:

- Provided a detailed audit program for the agreed upon procedures review and ensured McBride Lock and Associates approach and planning for the audit was appropriate;
- Evaluated the qualifications and independence of the auditors;
- Monitored progress of the audit at key points by accompanying McBride Lock auditors on-site at the grantee;
- Coordinated periodic meetings with McBride Lock and OIG management to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by McBride Lock, to ensure compliance with *Generally Accepted Government Auditing Standards* and the NSF Audit Program; and
- Coordinated issuance of the audit report.

McBride Lock and Associates is responsible for the attached audit report on Georgia Tech's payroll distribution and effort reporting system and the conclusions expressed in the audit report. The NSF OIG does not express an opinion on the audit report's conclusions.

If you have any questions, please feel free to call me at 703-292-4975 or Mark Kim at 703-292-8531.

Enclosure

cc: Gilbert Tran, Technical Manager, Office of Management and Budget
Thomas Cooley, Director and Chief Financial Officer, BFA/OAD
Alexander Wynnyk, Branch Chief, BFA/DIAS
Charles Zeigler, Special Assistant, BFA/DIA

Audit of Payroll Distribution System

Georgia Institute of Technology
Atlanta, Georgia

For the Period July 1, 2006 to June 30, 2007

National Science Foundation
Office of Inspector General

June 30, 2009
NSF OIG 09-1-009

Audit Performed by:
McBride Lock & Associates
Certified Public Accountants
1111 Main Street
Kansas City, Mo. 64105

This page intentionally left blank.

EXECUTIVE SUMMARY

This audit report provides the results of our review of the payroll distribution and labor effort reporting system used by the Georgia Institute of Technology (Georgia Tech) to validate salaries and wages charged to National Science Foundation (NSF) grants. In Fiscal Year 2007, Georgia Tech's charges to federal sponsored projects totaled approximately \$347 million, of which \$61 million, or about 18 percent, were charges to NSF. Of this amount, more than \$16 million, or 26 percent, related to labor costs directly charged to NSF awards. This audit is one of a series of Office of Inspector General's (OIG) reviews of the labor effort distribution systems being conducted at NSF's top-funded universities in order to assess the adequacy of internal controls to ensure salaries and wages claimed on NSF grants are properly managed, accounted for, and monitored.

Our audit disclosed that Georgia Tech generally has a well established labor effort reporting system with the exception of internal controls over prospective workload allocation changes (prospective changes), labor cost transfers, uncharged but committed labor effort and NSF reimbursement limitations to principal investigators (PI). However, the lack of adequate controls over prospective changes and labor cost transfers serves to lessen the reliability of the labor effort reporting process at Georgia Tech. For example:

- Policies and practices allow prospective changes to labor effort allocations to be made without documentation of justification or independent approval.
- Similarly, cost transfers within 60 days of posting to the payroll system can be made without documentation of justification or approval. Those beyond 60 days require justification. However, many justifications were inadequate, with little or no follow-up to ensure they were valid.
- Departmental financial managers had the ability, by independently processing labor allocation adjustments and cost transfers, to make changes to the labor effort system without adequate checks and balances.
- The University has not established policies and procedures to provide for accurate reporting of uncharged but committed labor effort requested for the PI, and to ensure compliance with NSF's rule limiting PI's summer salary to two months.

An effort reporting system is compromised by undocumented, potentially unauthorized or improperly recorded changes. Insufficient controls over changes to the data underlying the effort reports could allow improper charges to Federal awards to remain undetected, thus jeopardizing the reliability of not just effort reports, but also Federal award financial reports. This is critical since labor charges to NSF awards totaled \$16 million in FY 2007. The amount of labor effort charges to other Federal agencies by Georgia Tech, totaled \$49 million.

Georgia Tech officials believe its PIs and departmental finance managers have sufficient knowledge and training to be vested with sole approver authority over prospective workload allocation changes and timely cost transfers. However, Georgia Tech had not implemented an adequate internal control structure to prevent, detect and mitigate noncompliance with Federal and NSF grant requirements pertaining to labor cost charges to sponsored awards. Similarly, internal

controls were not adequate to ensure compliance with uncharged but committed PI effort obligations and NSF's two months' salary limitations.

To address the control weaknesses, we made recommendations to improve Georgia Tech's internal control structure for effort reporting management and oversight. The recommendations were primarily directed toward enhancing the University's oversight of the labor effort reporting system by (i) addressing policies concerning these issues, (ii) requiring documentation of justification and approval of changes to monthly workload allocation reports and cost transfers, (iii) requiring follow-up on inadequately justified labor cost transfers, and (iv) ensuring proper training and oversight of these activities.

A draft audit report requesting comments on the findings and recommendations was issued to Georgia Tech. The University stated that they have revised or plan to revise various policies and procedures, enhance and thereby increase the effectiveness of the monthly electronic workload assignment system, expand and update their training curriculum, and review manpower requirements to support stronger monitoring efforts.

Georgia Tech's responses, once implemented, should address our audit recommendations. NSF should work with the cognizant audit agency and/or Georgia Tech to ensure the University develops an acceptable corrective action plan to resolve each audit recommendation. We have summarized Georgia Tech's responses and provided our comments after each recommendation in the report. We also included Georgia Tech's response to our draft report in its entirety as Appendix A.

Table of Contents

EXECUTIVE SUMMARY	i
INTRODUCTION	
Background	1
Audit Objectives, Scope and Methodology	2
FINDINGS AND RECOMMENDATIONS	
1. Internal Controls Over Prospective Workload Allocation Changes and Labor Cost Transfers are Inadequate.....	5
2. University’s Policies and Procedures Do Not Address Certain Federal and NSF Grant Requirements	13
APPENDIX	
Appendix A – Georgia Institute of Technology’s Response to the Draft Audit Report.....	18
ACRONYMS	
NSF	National Science Foundation
OIG	Office of Inspector General
OMB	U. S. Office of Management and Budget
PI	Principal Investigator
OSP	Office of Sponsored Projects
G&C	Office of Grants & Contracts Accounting
Georgia Tech	Georgia Institute of Technology
ASR	Annual Statement on the Reasonableness of Salary Charges
EWAF	Employee Workload Allocation Form

INTRODUCTION

Background

Approximately one-third of the National Science Foundation (NSF) award funds are provided to universities for salary and wages, amounting to about \$1.3 billion annually. Also, in recent years, there have been several civil settlements involving overcharges of labor costs to Federal grants at several major universities, amounting to millions of dollars, including some funded by NSF. Because of these legal actions and the material amounts of labor costs paid from NSF awards, the Office of Inspector General (OIG) is undertaking a series of reviews of the labor effort distribution systems at NSF's top-funded universities in order to assess the adequacy of internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored. This audit, involving the Georgia Institute of Technology (Georgia Tech or the University) is one of the planned reviews of such labor effort distribution systems.

Georgia Tech is a major research institution located in Atlanta, Georgia. As a unit of the University System of Georgia, the mission of Georgia Tech is to provide the State of Georgia with the scientific and technological base, innovation, and workforce it needs to shape a prosperous and sustainable future and quality of life for its citizens. It has top-ranked programs in the sciences, technology, engineering, computing, architecture and related areas. Georgia Tech's campus occupies 400 acres and enrolls approximately 12,600 undergraduate and 6,200 graduate students. The University employs over 5,300 staff, including over 2,500 academic and research faculty. Georgia Tech derives the majority of its funding from sponsored research projects, student tuition, and state subsidies. In FY 2007, Federal expenditures totaled \$347 million, of which \$61 million was funded by NSF.

Georgia Tech's management and oversight of Federal grant programs is shared between the Office of Sponsored Programs (OSP) and the Office of Grants & Contracts Accounting (G&C). OSP is primarily responsible for pre-award and non-financial post-award grant functions. G&C is responsible for administering the post-award accounting and reporting functions and ensuring that Georgia Tech complies with Federal grant regulations and sponsoring agency requirements. As such, G&C develops Georgia Tech's policies and procedures for Federal grants management and is charged with implementing appropriate training programs.

Within each Academic Department, Principal Investigators (PIs) and Business Administrators are tasked with the management and oversight of sponsored projects to ensure compliance with Federal and University policies and procedures. The Business Administrators typically assist and advise faculty members and are responsible for ensuring that awards and their budgets are created accurately in the University's financial systems, award expenditures are monitored on a monthly basis, and labor effort certifications are reviewed and approved by the employee or PI for these projects. Specifically, PIs, in conjunction with the Business Administrators, have primary responsibility for all aspects of the sponsored projects, including

approving of all charges and ensuring that the research is conducted in accordance with the award terms and conditions.

Objectives, Scope, and Methodology

Audit Objectives: Our audit objectives were to: (a) evaluate whether Georgia Tech's internal controls are adequate to properly manage, account for, monitor, and report salary and wage costs on NSF grants in accordance with OMB and NSF grant requirements and (b) determine if salaries and wages charged to NSF awards are allowable, allocable, and reasonable in accordance with Federal cost principles and NSF award terms and conditions.

Scope and Methodology: The audit effort focused on Georgia Tech's effort reporting system which is comprised of monthly workload allocation reports (EWAFs) that are summarized into an Annual Statement of Reasonableness (ASR). Our audit procedures included the review of internal controls for ensuring that labor costs charged to NSF (i) were actually incurred, (ii) benefited NSF awards, (iii) were accurately and timely recorded and charged to NSF, and (iv) were for allowable and allocable-type activities as required by Federal and NSF requirements. In addition, the level of PI effort pledged in grant proposals and award documents was evaluated in relation to the effort actually contributed by the faculty member to accomplish award objectives.

To address each of these control objectives, the NSF OIG engaged a statistician to provide expert advice in selecting a statistical sample of employee salary records for testing. The use of statistical tools and methodology is designed to facilitate projecting the audit results to the entire population of universities to be included in the planned reviews of payroll distribution systems nationwide. However, due to the small statistical sample size of 30 employees tested, we are not able to make any projections to the total Georgia Tech population of labor costs charged to NSF grants. Specifically, the FY 2007 salary and wage costs for the 30 sample employees tested amounted to \$427,958. Our statistical sample was derived from a total population of 1,356 Georgia Tech employees, who charged salaries of \$15,939,222 to NSF grants during FY 2007. This population excluded (a) any employee with total salary costs of \$100 or less and (b) all salary charges for undergraduate students. These amounts were excluded because of their small dollar value and the difficulty in locating undergraduate students for personal interviews.

We compared Georgia Tech's policies and procedures to Federal and NSF requirements for allocating labor costs to Federal awards, and we interviewed Georgia Tech personnel to gain an understanding of the controls in place to ensure salary and wages charged to NSF awards were reasonable and allowable. For each statistically selected salary record, we obtained the following documentation to determine whether labor costs Georgia Tech charged to NSF awards met the control objectives:

- ASR effort reports or time records documenting 100 percent of each employee's compensation allocated to sponsored and non-sponsored projects for each reporting period.

- Appointment letters or other documents supporting the approved annual salary for employees.
- Payroll expense distribution reports detailing the actual salary and wages charged to sponsored projects and other activities for each employee during each reporting period.
- Award documents to determine whether the grant had any terms and conditions that would affect allowable labor charges to the award.

To ensure that salary and wage costs charged to NSF awards were incurred and benefited NSF awards, we corroborated the information on ASR reports and monthly time records by interviewing the 30 sampled employees. We inquired whether (a) the labor charges documented were actually incurred on projects and activities, (b) the approximate percentage of effort actually worked on each sponsored project and/or activity was reasonably consistent with NSF labor charges, and (c) the type of work performed on NSF projects was generally consistent with the scope of the awards. We also interviewed selected administrative grants managers in Academic Departments to determine procedures for processing and monitoring employee salary charges to Federal grants. Additionally, we interviewed selected PIs to determine the number of projects and personnel they were responsible for and their processes for verifying work performance prior to approving and signing ASR effort reports.

To confirm that faculty effort pledged in grant proposals was actually contributed to accomplish grant objectives, we reviewed processes for reporting and tracking PI effort and whether the associated salary costs were properly included in the organized research base for computation of the University's indirect cost rate. For each faculty member in our sample, we reviewed award documents for NSF grants that the faculty member worked on during FY 2007 to determine the effort pledged on each project and compared this proposed effort to the approximate percentage of actual effort worked on the project. In addition, we determined how Georgia Tech tracked and documented PI effort on sponsored projects when no faculty salary support was requested or reimbursed by the Federal Government.

To determine whether labor costs were accurately recorded and charged to NSF, we compared the amounts in appointment letters or other documentation supporting salaries and wages paid to the amounts recorded in the Georgia Tech's payroll expense distribution reports for each individual in our selected sample. We recalculated salary and wage costs charged to NSF projects by using the salary shown on supporting documentation and apportioning it by the period of time represented on the ASRs or monthly time records. We also reviewed labor transactions to determine whether Georgia Tech followed Federal, NSF, and University requirements applicable to charging labor costs to NSF projects.

To evaluate whether Georgia Tech officials approved and signed ASRs in a timely manner, we compared the date the ASR reporting period ended to the date the reports were approved and signed. Timeliness was tested against Georgia Tech's internal policy requiring that all ASRs pertaining to the year ended June 30 be certified and returned by the following August 31.

Finally, we reviewed prior audit reports on Georgia Tech's Federal grants management program performed by the University's internal auditors as well as prior audit reports and working papers prepared by the University's independent A-133 auditors to determine whether

there were audit findings and recommendations on the labor effort reporting system. Specifically, we interviewed Internal Audit staff and reviewed the working papers, as needed, to gain an understanding of the scope and procedures used in their audits of Georgia Tech's payroll distribution reporting system and/or University management of labor costs charged to Federal projects. Review of A-133 audit reports and working papers was performed to ascertain the actual audit scope and the audit procedures used to support any findings of noncompliance or internal control weaknesses relating to payroll distribution or effort reporting.

We were engaged to conduct the audit by the NSF OIG. We performed our on-site audit work at the Georgia Tech campus during a two week period in November 2007 and an additional two week period in January 2008. The audit was conducted in accordance with the Comptroller General's *Government Auditing Standards*. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

FINDINGS AND RECOMMENDATIONS

1. Internal Controls Over Prospective Workload Allocation Changes and Labor Cost Transfers are Inadequate

Georgia Tech did not establish an adequate system of internal controls for the proper documentation and approval of prospective changes and labor cost transfers. Further, department finance managers have the ability to alter workload allocations and to initiate cost transfers without independent approval, monitoring or notification to those responsible for the award, the Principal Investigators (PI), unless the PI performs the optional review of monthly project cost reports. Georgia Tech's policies allow prospective changes to be processed without documentation of justification or independent approval. Cost transfers only required written justification if initiated beyond 60 days of the posted transaction. Even so, when justifications for cost transfers were required many were not adequate. These control deficiencies do not adhere to Federal requirements for the proper authorization and documentation of these types of transactions. These weaknesses may serve to undermine the reliability of Georgia Tech's entire effort reporting system. Consequently, to the extent that improper workload allocation changes and labor cost transfers affected Georgia Tech's labor charges to NSF grants, we could not determine the reliability of such labor charges. Total labor charges to NSF grants approximated \$16 million in FY 2007, and total labor charges to other Federal agencies were approximately \$49 million. The weakness in controls resulted from Georgia Tech's position that prospective and timely changes to payroll allocations should be the prerogative of the PI, without independent review.

Background on Prospective Workload Allocation Changes and Labor Cost Transfers

The initial allocation of workload distribution, or appointment summary, is developed at the time an award is granted and is integrated with the payroll system. Therefore, the appointment summary mandates how an employee's effort is funded. Appointment summaries and planned award staffing, as set forth in the grant proposal, are subject to review by the Department Chair. The Department is then responsible for ensuring that charges to funding sources for each employee's time and effort properly reflect actual effort expended. This responsibility is ultimately delegated to the PI over the award since the PI has first-hand knowledge of planned and actual grant activities.

Prospective changes and cost transfers shift encumbrances and costs, respectively, to or from NSF and other Federal awards. The distinction between the two transactions rests with the timing of the transaction. Prospective changes are made to the pre-established allocation plan and are initiated prior to the labor cost posting to the general ledger and the payroll system. These changes affect future labor costs planned for allocation to NSF and other Federally-funded awards. Cost transfers are changes initiated to retroactively change costs that have already posted to the payroll and labor effort reporting system. Cost transfers, unlike prospective changes, only impact the payroll and effort reporting system one time. Since a cost transfer makes a retroactive change to the general ledger, where the labor charges were previously

approved, it poses a higher risk and therefore requires stricter scrutiny to ensure that the transfer is appropriate.

OMB Circulars and Georgia Tech's Policies Applicable to Prospective Changes and Cost Transfers

Federal regulations require documentation to support charges to Federal awards. Documentation provides an audit trail and the means to support the propriety of transactions, and therefore, is crucial to effective oversight and monitoring of award charges by an independent party. OMB Circular A-110, C.21.b.(7) states that "Recipients' financial management systems shall provide foraccounting records including cost accounting records that are supported by source documentation." Also OMB Circular A-21, C.4.d.(1) states that "The recipient institution is responsible for ensuring that costs charged to a sponsored agreement are allowable, allocable and reasonable under these cost principles."

With respect to prospective changes, OMB Circular A-21, J.10.c.(1)(d) requires that "Whenever it is apparent that a significant change in work activity which is directly or indirectly charged to sponsored agreements will occur or has occurred, the change will be documented over the signature of a responsible official and entered into the system." Regarding cost transfers, the University's own policy reflects recognition of the importance of monitoring cost transfers resulting from retroactive workload changes. The policy states the following:

"Changes in an employee's workload distribution for future periods are generally acceptable, but any retroactive change in payroll distribution must be subjected to the closest scrutiny. Such a change would indicate a contradiction of previous monitoring reviews and, for that reason, should be limited to the correction of errors. *If a retroactive change should be made, it must be supported by a full explanation and must be approved in accordance with written institutional policy. Specific reasons for the transfer must be provided in the explanation.*"¹

In addition to the above criteria from OMB Circulars A-21 and A-110 and University's policies, OMB Circular A-21, C.4.d(2) requires adequate policies to ensure proper segregation of duties over key processes. It specifically states that "The institution's financial management system shall ensure that no one person has complete control over all aspects of a financial transaction."

¹ This policy is inconsistent with Section 3.6 of Georgia Tech's Grants & Contracts Policies & Procedures Manual which does not require documentation for "timely" labor cost transfers, and states "a salary distribution change made within 60 days after the posting date of the payroll transaction will be considered timely. For example, a salary distribution change for charges incurred on July 31 can be processed without additional supporting documentation until September 30.

Prospective Changes and Labor Cost Transfers are Processed Without Documentation of Justification and Approval

A. Prospective Changes

Georgia Tech did not establish the controls to properly document the justification of prospective changes to planned workload allocations established for accurately charging future labor efforts to NSF and Federal awards. Furthermore, all processing is implemented by departmental financial managers. Georgia Tech has implemented an internal control procedure which involves distributing monthly employee workload allocation forms, known as EWAFFs, to employees assigned to sponsored projects, requiring each employee to review the workload allocations and to notify his/her departmental financial manager or supervisor of any required changes. However, the University does not require formal documentation of justification or approval before the change is accepted and entered into the labor effort and accounting systems by departmental financial managers. Managers stated they accepted both verbal and e-mail requests for change. However, there was no policy to retain e-mails to support any requested changes. Further, departmental financial managers independently enter prospective changes into the effort reporting system. Monthly project cost reports can be accessed on-line by the PIs and provide a control that could alert the PI to changes made in the effort reporting system. However, this access by the PI is optional and, in the event that the financial manager performs the monthly review of project costs on behalf of the PI, this alert may not occur. No other documents or reports are required to be provided to PIs to validate the changes made. Therefore, there is no assurance that the PI or other responsible official approved or was aware of the requested change.

To illustrate this weakness, in our sample of 30 employees, we found one instance in which a PI inappropriately added a graduate student's labor allocation, and thus payroll charges, to a NSF award although the PI knew that this graduate student was not assigned to work on the NSF award. The PI also certified the effort reports for this student. The PI stated that another graduate student who worked on this NSF award had been inadvertently charged to another award, and to correct the accounting error, the PI charged labor effort of another graduate student (our sample employee) who was working on another (non-NSF) award, to this NSF award. During our interview with the subject graduate student, ■■■ stated that ■■■ was not familiar with the award and was not aware that it was listed on her effort report. By correcting the accounting entry in this manner, the PI incorrectly certified the effort report as being accurate, although she knew that it was incorrect. Since this was a prospective workload change that modifies future labor effort allocations, this improper allocation of labor costs to the awards could have been incorrect throughout the life of the project.

Further, a Georgia Tech Internal Audit Report analyzed workload changes over a nine-month period in 2007, and determined that there were approximately 15,000 changes, which represent 3,691 transactions. Similar statistics have been reported by Internal Audit since 2004, however, the matter was not identified as an internal control weakness and thus no recommendations were made to effect change in the internal control environment. However, the propriety of changes to payroll allocations is key to the reliability of labor effort charging and

reporting on NSF and other federal awards.

B. Cost Transfers

In addition, Georgia Tech's current policy does not provide for an adequate system of internal controls over the cost transfer process. Specifically, the University permitted the processing of labor cost transfers without documentation of justification or approval if such transfers were initiated within 60 days of posting to the payroll. For cost transfers initiated more than 60 days after the effective date, the University lacked adequate procedures to ensure that transfers with "inadequate" justifications were sufficiently justified prior to being processed. Georgia Tech had two conflicting sections in the same policy concerning documenting cost transfers. The more stringent requirement required full documentation and justification for any retroactive change in payroll distribution (cost transfer). However, the University followed the less stringent 60 day policy. Cost transfers occurring more than 150 days (revised in 2008 to 120 days) after the payroll period require additional documented approvals. However, this requirement has been interpreted to allow for the portion of the labor costs originally charged prior to the 150 day cutoff to be transferred without further approval, even as the remainder of the transfer is held up pending appropriate approval as required by policy.

Labor cost transfers impacted 15 of the 30 sampled employees, representing \$427,958 of salary costs, excluding fringe benefits, in FY 2007. The net effect of these transfers was to increase salary costs charged to the sampled NSF awards by eight percent or \$33,690. This net increase was comprised of cost transfers increasing NSF-funded salary costs by \$61,487, offset by transfers reducing salary costs in the amount of \$27,797. Because a justification for cost transfers initiated within 60 days of incurring the cost is neither documented nor retained, we could not evaluate the propriety of such labor cost transfers processed during Fiscal Year 2007, and whether the net increase to NSF of \$33,690 was appropriate.

Additionally, when cost transfers were initiated after 60 days, the University processed cost transfers regardless of whether the justifications provided were adequate. For example, we found notations such as "Just received new information from PI about accounts" or "Moving salary that was posted to Project A (project number redacted), which start date is 02/01/07." For three of the four sample transfers that were initiated more than 60 days after their effective date, we found inadequate documentation to support the purpose and appropriateness of the cost transfers. When we inquired about these poorly documented transfer requests, G&C personnel informed us that they did not possess other documents that further clarified or justified these transfers.

Similarly, a Georgia Tech internal audit also reported that 80.5 percent of all transfers covering a nine-month period in Fiscal Year 2007 were initiated within 60 days and therefore, did not require documentation or justification. These cost transfers involved NSF-related transfers in Fiscal Year 2007 with a dollar impact of approximately \$607,000. Because of the lack of documentation of justification or approval to support the majority of labor cost transfers, the reasonableness of overall labor cost transfers affecting NSF awards was not readily determinable.

Georgia Tech’s internal audit reports identified similar unacceptable explanations related to cost transfers. According to the Georgia Tech Internal Audit Department, the percentage of “unacceptable” justifications has dropped from 67.4 percent in 2004 to 21.8 percent in Fiscal Year 2007. Fiscal Year 2007 represents only the three quarters from October 1, 2006 through June 30, 2007. However, even with the progress that appears to have been made, the percentages of unacceptable justifications that have been identified since 2004 remains significant. The following table, extracted in part from the above-referenced Internal Audit report, provides an indication of the extent of the “unacceptable justification” issue.

Fiscal Year	Percentage of Changes > 60 Days “Unacceptable”
2004	67.4
2005	58.0
2006	39.2
2007	21.8

Increased Risk of Unreliable Effort Reporting and Misallocation of Labor Costs to NSF Grants

The lack of internal controls over prospective workload changes and cost transfers undermines other effective controls the University has established over the effort reporting process. Effort reporting is the mandated method of certifying to the granting agencies that the effort charged to each award has actually been expended. It is intended to provide an additional internal control in the form of the historical review of effort and payroll charges for all activities by someone with first-hand knowledge of the actual effort expended. An effort reporting system is compromised by undocumented, potentially unauthorized or improperly recorded changes. Insufficient controls over changes to the data underlying the effort reports could allow improper charges to Federal awards to remain undetected, thus jeopardizing the reliability of not just effort reports, but also Federal award financial reports. These weaknesses in internal controls diminish the reliability of labor charges to NSF awards, which totaled \$16 million in FY 2007. Further, the reliability of an estimated \$145 million labor charges to other Federal agencies is also uncertain. Although the total labor charges to other Federal agencies were not readily available, we estimated these charges by applying the same ratio of NSF labor charges to total NSF awards to the total of other Federal agency awards.

Factors Contributing to the Control Weakness over Prospective Changes and Cost Transfers

Georgia Tech’s management views the PI as an appropriate decision-maker with respect to their sponsored awards, and they do not consider documentation or monitoring of the PI’s actions with respect to prospective changes to be necessary. We were informed that, because PIs have authority to determine staffing on their awards, it is reasonable that they have authority to request and approve changes to staffing in the form of prospective changes. Although we do not disagree with management’s view, this position does not recognize the possibility that the PI may be unaware of the workload allocation changes to the PI’s award that he/she is charged with monitoring since no notification is sent to the PIs or any other independent party when changes are made. Rather, the University depends on the PI to access his on-line monthly project cost

reports to identify the effects of workload allocation changes after the changes have resulted in payroll charges to the sponsored award. Additional reliance is placed on the EWAFs and certified ASRs for each employee. The University's position does not recognize the essential role that additional controls and documentation play in providing support required for effective monitoring by an independent party and to justify and explain the transaction in the event of future questions. Management's views and actions may have limited the University from establishing the following control elements which we believe are required for an effective control environment.

- Clear and accurate guidance over prospective workload changes and cost transfers regarding the requirements for conformance with OMB requirements including proper documentation of justification or approval.
- Separation of duties with respect to initiating, processing, and reviewing transactions entered into the Salary Planning and Distribution (SPD) system. The departmental financial managers have the ability to make prospective workload changes and cost transfers within 60 days of the payroll posting date without documentation of justification or approval. Although we did not identify any improper entries, the overall weakness centering on lack of documentation would make identification difficult. Thus the risk is high that errors could occur without detection.
- Consistent policy statements and procedural guidance over the documentation required for cost transfers. Within the same policy, guidance allows transfers initiated within 60 days of the posting date to be processed without documentation of justification and review by a second party, even though other guidance in the same policy states that retroactive changes "must be supported by a full explanation and must be approved in accordance with written institutional policy." As noted, the University's practices are consistent with the less demanding policy.
- Sufficient staffing to ensure justifications for cost transfers are adequate before the transfer is posted to the accounting system or proper follow-up is conducted if a justification is not deemed adequate. The University may not have sufficient staffing in this area. For example, only one staff member in Grants and Contracts (G&C) is assigned responsibility to review all cost transfers initiated more than 60 days after the effective date by reviewing a data file containing a large volume (thousands) of transfers. If the G&C employee identifies a cost transfer lacking adequate justification, this event is added to a record of other such transfers for subsequent compilation of notices to be sent to the initiating department. However, G&C performs no additional follow-up, and the improperly justified transfer remains in the accounting system regardless of whether a proper justification is provided as it has already been processed. Although monthly summary statistics identifying inadequately justified current year transfers (greater than 60 days) were compiled and sent to the respective Financial Managers and Department Chairs, there were no requirements for departments to provide more comprehensive justifications. Considering the percentage of unacceptable justifications, the staffing may not be sufficient to allow proper identification and follow-up on inadequate justifications.

- Effective oversight by Georgia Tech central administration over the decentralized research departments at the University. Although the University delegated the responsibility for the management of their Federal awards to the departmental level, the University is still responsible for the overall compliance with Federal requirements. However, Georgia Tech has not developed adequate oversight processes for the review of prospective workload changes and cost transfers even though the issue of inadequate cost transfer justifications has been identified with respect to the area of cost transfers since 2004 by Georgia Tech's own internal audit function.

Recommendations:

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to require Georgia Tech to implement the following recommendations:

- 1.1 Update the University's policies to provide that all prospective changes to the monthly workload/payroll distribution systems and labor cost transfers require written justification at an appropriate level of detail and approval/confirmation by the PI to allow for an effective independent review.

Georgia Tech Response

The University stated they will implement the following corrective actions:

1. Update policies to provide that all labor cost transfers to sponsored projects require written justification at an appropriate level of detail. This information will be reported to the Office of Grants and Contracts Accounting and appropriately monitored. Written justification at an appropriate level of detail and additional central review and authorization approvals are currently required for all prior year cost transfers and cost transfers to sponsored projects beyond 120 days of the original expense posting.
2. Enhance the monthly electronic workload assignment reporting system (EWAFF) by including a notification regarding changes made to workload allocations since the last report and appropriate action steps when reported changes are not initiated promptly by departmental finance officers.
3. Develop a web-based training program with testing and confirmation capabilities to ensure that training participants understand the Plan Confirmation System and acknowledge their individual responsibilities for reviewing, confirming or initiating timely changes to workload allocations, including future period allocations. This on-line training will be offered in addition to Plan Confirmation System Booklets (with Acknowledgement Forms) that are now used.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 1.2 Establish procedures to ensure departmental financial managers advise PIs and G&C of all prospective changes and cost transfers, including explanation, to provide for independent monitoring of changes to labor effort reporting.

Georgia Tech Response

The University stated they will ensure that labor cost transfers, including explanations, are reported to Grants and Contracts Accounting and are appropriately monitored. The University also stated that they will develop procedures and centralized reporting systems to permit timely PI review and approval/confirmation of all charges posted to his/her sponsored projects.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 1.3 Require Georgia Tech to develop and implement oversight procedures for the periodic review of departmental compliance with University and OMB requirements regarding the management of Federal awards. These procedures should include interviewing PIs to ensure they understand and correctly fulfill their roles and responsibilities.

Georgia Tech Response

The University stated they will enhance existing oversight procedures and/or establish additional oversight procedures for the periodic review of departmental compliance with Georgia Tech and OMB requirements regarding the management of Federal awards.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 1.4 Update the guidance on labor cost transfer requests to ensure consistency within its own policies and with OMB requirements for justification and documentation.

Georgia Tech Response

The University concurred with the recommendation and stated they will update guidance on labor cost transfer requests to ensure consistency within Georgia Tech policies and with OMB requirements.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 1.5 Review the manpower requirements needed to effectively oversee the prospective workload change and cost transfer justifications and the related follow-up processes. This review should be conducted after changes are made for the recommendations above as these may increase the effectiveness of labor effort reporting.

Georgia Tech Response

The University concurred with the recommendation and stated they will review manpower requirements needed to effectively oversee cost transfer justifications, related follow-up processes, and overall compliance.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 1.6 Incorporate the changes set forth in recommendations 1.1 and 1.2 into Georgia Tech's effort reporting training and promptly communicate the changes to everyone working on sponsored projects.

Georgia Tech Response

The University stated they will incorporate all related changes into the Plan Confirmation System training and promptly communicate changes to employees working on sponsored projects.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

2. University's Policies and Procedures Do Not Address Certain Federal and NSF Grant Requirements

The Federal government provides various regulations and guidance to provide adequate direction to universities over the effort reporting process. In addition, NSF provides more specific guidance with respect to NSF awards. All grant recipients receiving Federal funds are required to abide by all Federal requirements and agency-specific grant requirements. Our audit revealed that Georgia Tech lacked policies and procedures to comply with a Federal grant requirement to account for voluntary committed cost sharing arising from awards for which no PI labor reimbursement was requested. We also found that Georgia Tech's policy did not incorporate NSF's requirement that limits PI summer salary to two months. While we noted no

instances of noncompliance in these two areas, the absence of definitive policies weakens the system of internal controls over faculty effort reporting, and reduces assurance that Georgia Tech's PIs are charging no more than two summer month's salary to NSF awards.

A. Internal Control Improvements Needed Over Voluntary Committed Cost Sharing

OMB Guidance Related to Internal Controls and Voluntary Committed Cost Share

A January 2001 OMB Clarification Memorandum² provides guidance for verification requirements for PI effort on sponsored projects. The Memorandum states that, when sponsored projects do not include any faculty (or senior researcher) effort, paid or unpaid, an estimated amount must be computed and included in the University's organized research base used for computing its negotiated Federal indirect cost rate. Specifically, the OMB Memorandum clarifies that faculty effort on organized research includes: (i) PI salary and wages directly charged to sponsored projects, (ii) PI effort required as mandatory cost sharing, and (iii) PI effort pledged and quantified as "voluntary committed cost sharing" in a proposal. Voluntary committed cost sharing is defined as effort not required by the sponsor, but proposed in the sponsored project narrative and/or budget with no corresponding funding requested.

Georgia Tech's Policy Does Not Address Proper Accounting for Imputed PI Effort as Voluntary Committed Labor Cost Share

Our review of Georgia Tech's policies revealed that there was no policy to address the OMB Clarification Memorandum. As such, Georgia Tech did not require estimating PI time expended on sponsored awards for which no PI or other senior researcher time was requested.

We were advised that the University does, at times, elect not to request PI or senior researcher effort, although effort is incurred. We also inquired about sponsored projects for which no PI effort was requested in the proposal budget, and were informed that such effort was charged to State funds.

The University does not appear to have given consideration to the requirement to estimate and impute PI effort when no PI or senior researcher time has been included in the proposal budget. Management noted that few awards would be subject to this requirement, and our sample of employees funded by NSF did not include any proposals that omitted PI or senior researcher effort.

However, the absence of policies and procedures to properly account for such a situation constitutes an internal control weakness.

² OMB Memorandum M-01-06, dated January 5, 2001, *Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission Costs*

B. Georgia Tech's Policies Do Not Acknowledge NSF's Two-Ninths Rule

Guidance on the Two-Ninths Rule

OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organization*, requires entities receiving Federal awards to establish and maintain internal controls that are designed to reasonably ensure compliance with Federal laws, regulations, and program compliance. During Fiscal Year 2007, NSF limited to two months the number of summer months that could be funded by NSF. The relevant provision was contained in the National Science Foundation's *Grants Policy Manual, Section 611.1.b.2*, which read as follows:

"Periods Outside the Academic Year. During the summer months or other periods not included in the period for which the base salary is paid, salary is to be paid at a monthly rate not in excess of the base salary divided by the number of months in the period for which the base salary is paid. NSF policy on funding of summer salaries (known as NSF's two-ninths rule) remains unchanged: proposal budgets submitted should not request, and NSF-approved budgets will not include, funding for an individual investigator which exceeds two-ninths of the academic year salary. This limit includes summer salary received from all NSF-funded grants."

This rule has subsequently been revised to allow the two months of effort funded by NSF to occur at any time during the calendar year. Nonetheless, NSF continues to limit funding for academic personnel to two months per year.

Georgia Tech's Policy Does Not Address NSF's 2/9th Rule

We noted that the University does not have a policy addressing the NSF's two-ninths rule. Instead, the University policy allows payment for an entire three month summer session that may be allowed by other Federal agencies. However, by omitting the NSF's two-ninths rule from its policy statements, and thus omitting the limitation to two months annually of charges to NSF awards, the risk that faculty, staff or both are unaware of these restrictions is heightened. Further we found no evidence of a training program or other communication informing PIs of the NSF funding restrictions. Lack of information about the NSF two month limitation reduces the likelihood that reviews of Current and Pending Support forms will recognize and highlight violations of the rule. While our sample did not disclose any over charges to NSF concerning the two-ninths rule, should the University inadvertently claim three months of compensation, the third month is subject to disallowance.

The Absence of this Policy Is the Result of an Affirmative Decision of the University

We were informed that due to the broad spectrum of federal funding agencies working with Georgia Tech, the University does not attempt to include in its policies every requirement or prohibition that may be unique to a particular funding agency. This position fails to recognize

the fact that, by adopting policies that specifically allow three months of summer award charges, and neglecting to state that three months of NSF award charges are *not* allowed, the University has created an environment in which misunderstanding and misinterpretation could contribute to noncompliance with NSF requirements.

Recommendations:

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to require Georgia Tech to implement the following recommendations:

- 2.1 Establish written policies to include a methodology for the identification, estimation and allocation of voluntary committed labor cost share to a cost share account. The policies should provide guidance for identifying unreported PI committed effort, estimating the effort, calculating the related salary costs, and documenting the calculations.

Georgia Tech Response

The University stated they will develop a policy to require a minimum level of committed faculty (or senior researcher) effort on sponsored programs, paid or unpaid by the federal government. The committed effort, whether mandatory or voluntary, will be separately budgeted and accounted for by way of either the federally sponsored project account or a companion GIT cost sharing account. This new policy and the existing methodology GIT uses in its F&A rate calculations to compensate for any impact uncommitted PI effort would have on the organized research base, will eliminate the need to estimate and impute PI effort.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

- 2.2 Establish a policy limiting charges to NSF sponsored projects to two months of the faculty member's base institutional compensation in any calendar year.

Georgia Tech Response

The University concurred with the recommendation and stated that, during FY2009, Georgia Tech developed guidance limiting charges to NSF sponsored projects to two months of the faculty member's base institutional compensation in any calendar year.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

2.3 Incorporate the changes set forth in recommendations 2.1 to 2.2 into Georgia Tech's effort reporting training and promptly communicate the changes to everyone working on sponsored projects.

Georgia Tech Response

The University concurred with the recommendation and stated they will incorporate all related changes into the Plan Confirmation System training and promptly communicate changes to employees working on sponsored projects.

Auditors' Comments

Georgia Tech's response met the intent of the recommendation.

* * * * *



June 18, 2009

[REDACTED]

McBride, Lock & Associates
1111 Main Street, Suite 900
Kansas City, MO 64105

Re: Response to DRAFT Audit Report of the Payroll Distribution
System at the Georgia Institute of Technology

Dear Ms. McBride:

The attached document provides our response related to the audit findings and recommendations contained in the Draft Report of the Audit of the Payroll Distribution System.

We appreciate your time, effort and open communication during the audit process. We look forward to implementing corrective actions that will strengthen our Effort Reporting system.

Let us know if you have any questions regarding our response.

Sincerely,

[REDACTED]

Cc:

[REDACTED]

Finding 1: Internal Controls Over Prospective Workload Allocation Changes and Labor Cost Transfers

Each Georgia Tech PI is responsible for effectively overseeing and managing his/her sponsored projects based to a considerable extent upon his/her knowledge of the field of study and his/her capabilities to conduct the projects in an efficient and productive manner. Although we believe that PIs and authorized departmental financial managers have sufficient knowledge and training that allows them to initiate proper prospective workload allocation changes and timely cost transfers, each employee paid from a sponsored project also has certain formalized responsibilities.

Georgia Tech Plan Confirmation System written procedures, training materials, and reports recognize the individual employee's responsibility for reviewing, confirming and initiating corrections to their workload allocations based on how their time was spent or is currently planned. Training materials are provided to each covered employee and a signed "Acknowledgement Form" is also required of each employee to ensure and document their understanding of these responsibilities. Electronic Workload Assignment Forms (EWAFs) are provided monthly to all covered employees to report planned and incurred effort distributions. This monthly report also includes a reminder of their individual responsibilities and required action steps under the Plan Confirmation System procedures. Additionally, annual Effort Certification reports (ASRs) are provided and are to be certified, first and foremost, by each individual employee. These formalized employee-level responsibilities and reports represent additional internal controls and work together to demonstrate appropriate segregation of duties/responsibilities and proper documentation, review, and certification of salary charges.

In response to the recommendations for Finding 1, Georgia Tech will agree to implement the following corrective actions:

- 1.1 Update policies to provide that all labor cost transfers to sponsored projects require written justification at an appropriate level of detail. This information will be reported to the Office of Grants and Contracts Accounting and appropriately monitored. Written justification at an appropriate level of detail and additional central review and authorization approvals are currently required for all prior year cost transfers and cost transfers to sponsored projects beyond 120 days of the original expense posting.

Enhance the monthly electronic workload assignment reporting system (EWAF) by including a notification regarding changes made to workload allocations since the last report and appropriate action steps when reported changes are not initiated promptly by departmental finance officers.

Develop a web-based training program with testing and confirmation capabilities to ensure that training participants understand the Plan Confirmation System and acknowledge their individual responsibilities for reviewing, confirming or initiating timely changes to workload allocations, including future period allocations. This on-line training will be offered in addition to Plan Confirmation System Booklets (with Acknowledgement Forms) that are now used.

- 1.2 Ensure that labor cost transfers, including explanations, are reported to Grants and Contracts Accounting and are appropriately monitored.

Develop procedures and centralized reporting systems to permit timely PI review and approval/confirmation of all charges posted to his/her sponsored projects.

- 1.3 Enhance existing oversight procedures and/or establish additional oversight procedures for the periodic review of departmental compliance with Georgia Tech and OMB requirements regarding the management of Federal awards.

Finding 1: Internal Controls Over Prospective Workload Allocation Changes and Labor Cost Transfers (Continued)

- 1.4 Update guidance on labor cost transfer requests to ensure consistency within Georgia Tech policies and with OMB requirements.
- 1.5 Review manpower requirements needed to effectively oversee cost transfer justifications, related follow-up processes, and overall compliance.
- 1.6 Incorporate all related changes into the Plan Confirmation System training and promptly communicate changes to employees working on sponsored projects.

Finding 2: Policies and Procedures to Address Certain Federal and NSF Grant Requirements

In response to the recommendations for Finding 2, Georgia Tech will agree to implement the following corrective actions:

- 2.1 Georgia Tech will develop a policy to require a minimum level of committed faculty (or senior researcher) effort on sponsored programs, paid or unpaid by the federal government. The committed effort, whether mandatory or voluntary, will be separately budgeted and accounted for by way of either the federally sponsored project account or a companion cost sharing account. [REDACTED] to compensate for any impact uncommitted PI effort would have on the organized research base, will eliminate the need to estimate and impute PI effort.
- 2.2 During FY 2009, Georgia Tech developed guidance limiting charges to NSF sponsored projects to two months of the faculty member's base institutional compensation in any calendar year.
- 2.3 Incorporate all related changes into the Plan Confirmation System training and promptly communicate changes to employees working on sponsored projects.