



UCSB Audit and Advisory Services
Internal Audit Report

Marine Science Institute

December 14, 2012

Performed by:

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Approved by:

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Report No. 08-13-0003

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AUDIT AND ADVISORY SERVICES
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December 14, 2012

To: Mark Brzezinski
Director, Marine Science Institute

Re: **Marine Science Institute**
Audit Report No. 08-13-0003

As part of the 2012-13 annual audit plan, Audit and Advisory Services conducted an audit of the Marine Science Institute (MSI). Enclosed is the audit report detailing the results of our review.

The primary purpose of the audit was to assess whether business processes and internal controls established by MSI are in compliance with University and sponsor regulations. The review included discussions with MSI staff and limited testing of sponsored projects. The scope of the audit included:

- Sponsored projects practices, including direct charging, overdrafts, cost transfers, subawards, and project closeout.
- Related department administrative processes, including procedures for reconciliation of the department's IT Works system and the campus general ledger.

Based on the results of the work performed within the scope of the audit, the institute generally has very good processes in place for the areas reviewed. However, MSI had several account-funds in overdraft as a result of past budget cuts and other factors. To ensure compliance with sound budgeting and accounting practices, MSI should continue to work with the Office of Research and establish a definitive timetable for bringing all account-funds into balance.

We have included a copy of our detailed observations and management corrective actions. The management corrective actions provided indicate that each recommendation was given thoughtful consideration and that positive measures have been planned to implement the corrective actions. The cooperation and assistance provided during the review by MSI personnel was sincerely appreciated. Please feel free to contact me if you have any questions.

Respectfully submitted,

A handwritten signature in black ink that reads "Robert Tarsia". The signature is written in a cursive style with a long horizontal line extending from the end.

Robert Tarsia
Director
Audit and Advisory Services

Director Mark Brzezinski
December 14, 2012

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Enclosure

cc: Chancellor Henry Yang
Associate Vice Chancellor Ron Cortez
UCSB Audit Committee
Senior Vice President and Chief Compliance and Audit Officer Sheryl Vacca
Vice Chancellor for Research Michael Witherell
Assistant Vice Chancellor for Research Karen Hanson
Tim Schmidt, Management Services Officer

PURPOSE

The primary purpose of the audit was to assess whether business processes and internal controls established by the University of California, Santa Barbara (UCSB) Marine Science Institute (MSI) are in compliance with University and sponsor regulations.

SCOPE, OBJECTIVES AND METHODOLOGY

The scope of the review was limited to sponsored projects and financial transactions that occurred during fiscal year 2011-12.¹ Audit objectives were developed for review of:

- Sponsored projects practices, including direct charging, overdrafts, cost transfers, subawards, and project closeout.
- Related department administrative processes, including procedures for reconciliation of the department's IT Works system and the campus general ledger.

Table 1 details the audit objectives for each review area. To accomplish our objectives, we gained an understanding of current University requirements and MSI's processes, policies, and procedures. We held discussions with MSI management and staff to gain an understanding of MSI's procedures for administering sponsored projects. We evaluated MSI's business practices to determine whether they incorporate adequate internal controls, and performed detailed testing in several areas to determine whether internal controls are in place and operating as intended.

This audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

BACKGROUND

The Marine Science Institute (MSI) was established at UCSB in 1969, and is the focus for marine, coastal zone, and freshwater research; marine policy studies; and educational outreach in marine science. MSI administers and supports research projects involving faculty, professional researchers, technical staff, graduate students, and undergraduate students from 14 disciplines.

Over the decades, the scope of marine science at UCSB has expanded and become highly interdisciplinary, with professionals from the departments of biology, geology, ecology, geography, chemistry, materials engineering, oceanography, environmental science, and public policy engaged in teaching and research at MSI. Throughout its history, educational outreach has been a priority at MSI, which has programs for students at all levels of education.²

MSI Administration mainly supports MSI, National Center for Ecological Analysis and Synthesis (NCEAS), and six of the UC Natural Reserve System (NRS) sites. MSI Administration works collaboratively with NCEAS and NRS, but does not control their budgets. MSI and NCEAS receive federal, state, and private funds; NRS receives state and private funds. MSI has implemented comparable processes and controls for processing transactions for MSI, NCEAS, and NRS, although the department primarily provides payroll support to NRS.

¹ National Science Foundation (NSF) awards were excluded from the audit scope due to recent audit coverage by the NSF-OIG.

² Source: MSI website, other sources.

UCSB Audit and Advisory Services
Marine Science Institute

Table 1 Audit Objectives	
Review Area	Objectives
Direct Charging Practices	<p>To determine whether expenses were:</p> <ul style="list-style-type: none"> • Allowable under the sponsor's terms and conditions. • Reasonable, or reasons for apparently excessive costs were documented and appropriate. • Processed in accordance with UCSB's procurement and payable procedures. • Properly approved. • Otherwise reasonable and supported.
Overdrafts	Identify the account-funds that had significant overdrafts and assess the underlying reasons for the overdrafts.
Cost Transfers	<p>To determine whether cost transfers were:</p> <ul style="list-style-type: none"> • Properly approved. • Appropriate and in compliance with UCSB cost transfer policies. • Supported by adequate justifications. • Completed within 120 days of the initial charge. • Reasonable and otherwise supported.
Sub-awards	<p>To determine whether:</p> <ul style="list-style-type: none"> • The required Subrecipient Commitment forms were completed. • Costs were allowable, allocable, and reasonable. • Costs were incurred within the period of performance of the subaward. • Invoices were approved by the principal investigator. • If applicable, the Subaward Close-Out Certification was completed.
Project Closeout	To determine whether closed out contracts were properly reviewed, reconciled, and approved.
Account Reconciliation	To determine whether IT Works sub-ledger was reconciled timely and accurately to the campus general ledger.

Source: Auditor analysis

MSI uses IT Works grant management software as its sub-ledger. IT Works is a comprehensive grant management program for both pre-award and post-award grant management; the software provides detailed project accounting and real-time data to principal investigators for their review and monitoring. Data between IT Works and the campus general ledger is reconciled monthly to ensure accuracy. MSI has developed department procedures covering most administrative and financial processes, including account reconciliation, payroll, travel, invoice processing, transfers of expense, effort reporting, and other areas.

MSI administered 257 awards totaling \$111 million in fiscal year 2010-11, and 251 awards totaling \$104 million in fiscal year 2011-12, according to data provided by MSI. Included in those awards, were 115 new awards totaling \$18.9 million in fiscal year 2010-11, and 110 new awards totaling \$21.9 million in fiscal year 2011-12. The majority of the awards were NSF grants. Although the total award amount increased between the fiscal years, MSI Administration staff was reduced due to budget issues. Department management indicated to us that the department streamlined processes and procedures in response to budget issues, but has maintained a high level of accountability and internal control.

SUMMARY OPINION

Based on the results of the work performed within the scope of the audit, the institute generally has very good processes in place for the areas reviewed. However, MSI had several account-funds in overdraft as a result of past budget cuts and other factors. To ensure compliance with sound budgeting and accounting practices, MSI should continue to work with the Office of Research and establish a definitive timetable for bringing all account-funds into balance.

Audit observations and management corrective actions are detailed in the remainder of the audit report.

DETAILED OBSERVATIONS AND MANAGEMENT CORRECTIVE ACTIONS

A. Account-Funds in Overdraft

As detailed in Table 2, MSI had six account-funds in overdraft at the time we started our audit, shortly after the end of fiscal year 2011-12. The MSI Management Services Officer indicated to us during the audit that there are plans to reduce and eliminate the overdrafts, which were the result of past budget cuts, recharge activities, and other factors. In some cases, eliminating the overdrafts would require additional appropriations and assistance from the Office of Research. To ensure compliance with sound accounting practices, MSI should continue to work with the Office of Research and establish a definitive timetable for bringing all account-funds into balance.

Table 2	MSI Overdrafts at June 30, 2012	
Account-Fund	Fund Type	Amount of Overdraft
448750-07427	Endowment and Similar Funds	\$101,195
448752-75711	Reserves (Equipment)	\$116,631
448752-61808	Recharge	\$119,090
448750-05397	Endowment and Similar Funds	\$191,786
448752-61802	Recharge	\$444,033
448750-19900	General Funds (State)	\$462,974

Source: Auditor analysis of general ledger data in UCSB Data Warehouse.

Management Corrective Actions

Table 2 identifies six account-funds in overdraft as of June 30, 2012, which MSI is working on resolving, as follows:

- 448750-07427: Although described as “endowment and similar funds” this is one of MSI’s administrative operating accounts. As of the close of fiscal year 2011-12, it was in overdraft of \$101,195. In a prior period, MSI was required to write off as uncollectable about \$132,000 as a result of the inability of a company that issued UCSB a research award to pay for research costs incurred. This has been discussed thoroughly with the Office of Research, which has informed MSI that they will cover this cost. This account was also used to write off about \$20,000 of a contract with Lockheed-Martin as a result of a PI failing to complete the requirements of an extramural contract. MSI has worked closely with the Office of Research on this situation.

MSI receives \$75,000 per year in this account to support infrastructure needs. In fiscal year 2011-12, MSI’s Scientific Computing Committee recommended to the MSI Director that MSI begin replacing critical hardware supporting MSI’s IT infrastructure by upgrading the data storage system, at a cost of \$125,000. This plan was approved and the purchase made. The fiscal year 2012-13 allocation of \$75,000 will cover the deficit created by this purchase.

Lastly, this is the operating account that MSI uses when it is necessary to advance funds for extramural projects. This typically occurs when awards are not processed in time to meet field research needs. Once the awards are set up, transfers of expense are processed but the lag creates a steady deficit condition. Absent any additional write-offs, this account will have a positive balance at year-end.

- 448752-75711 & 448752-61808: This is the reserve account and recharge account for a piece of equipment known as a cell sorter. This recharge activity has not proven as robust as originally proposed and the department is taking steps to sell the equipment and shut down the recharge account. The Office of Research is aware of the situation.
- 448750-05397: This account-fund was used for the return of overhead to MSI. Historically, overhead to the department was allocated to 19900. That was then switched to 69750, which was then switched to 05397, and now it is in 07427. Because the fund source has often been changed well into a fiscal year, we experience a mismatch of appropriations vs. expenditures, which creates large deficits as the allocations migrate to new fund types while the expenditures continue in the previous fund type. We will clear up this overdraft by swapping funds when available.
- 448752-61802: This is the recharge account for MSI's Analytical Lab. This overdraft balance is overstated by approximately \$200,000 since it does not reflect the balance in the reserve account linked to this activity, nor does it adjust for the outstanding receivables from non-UC clients. The remaining overdraft is being addressed by revising the lab's rates and adjusting the department subsidy.
- 448750-19900: This is MSI's main administrative operating account. Over the past several years, MSI has experienced significant loss of funding due to cuts of its permanent budget, temporary support, turnover savings, and shifting of overhead return from benefits-subsidized fund sources to no-benefits-subsidized fund sources. The result is that MSI has reduced its administrative staff from 22 FTE to slightly less than 12 FTE. MSI senior management and MSI's advisory committee continue to communicate this situation with the Office of Research.

Audit and Advisory Services will follow-up with MSI and the Office of Research by September 1, 2013, on the status of MSI's management corrective action plan.