

August 16, 2016

KIM BARRETT
Dean, Graduate Division
0003

**Subject: *Graduate Student Funding
Report 2016-10***

The final report for Graduate Student Funding, Report 2016-10, is attached. We would like to thank all members of the department for their cooperation and assistance during the review.

Because we were able to reach agreement regarding management action plans in response to the audit recommendations, a formal response to the report is not requested. The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the management action plans.

UC wide policy requires that all draft reports be destroyed after the final report is issued. We also request that draft reports not be photocopied or otherwise redistributed.

David Meier
Director
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AUDIT & MANAGEMENT ADVISORY SERVICES

Graduate Student Funding
Report No. 2016-10
June 2016

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ATTACHMENT A – Graduate Student Funding Model Overview

I. EXECUTIVE SUMMARY

Audit & Management Advisory Services (AMAS) has completed a review of Graduate Student Funding as part of the approved audit plan for Fiscal Year 2015-16. The objective of our review was to gain an understanding of the graduate student funding model, evaluate key controls in administrative processes, and evaluate potential federal audit risks. This report summarizes the results of our review.

We concluded that the Graduate Division funding model is designed to support eligible graduate students in various disciplines to ensure that support commitments and student needs are met. The Graduate Division maintains transparency by coordinating with each academic program in determining tuition and fee remission rates, and methodically adjusting succeeding academic years with over or under assessment of those rates. Quarterly reports and updates regarding the allocations, adjustments, and fund activity are provided regularly to each academic unit in the seven graduate program groups. We also concluded that the Graduate Division maintains effective controls in ensuring that graduate student financial support is reasonably allocated and used appropriately in support of the students.

We concluded that full-time Graduate Student Researcher (GSR) total compensation paid for the nine-month academic period appeared to be reasonable in comparison to the total compensation paid to a first-year, postdoctoral scientist performing comparable work. The Graduate Division regularly reviewed and compared GSR compensation based on published salary and tuition and fee remission (TFR) rates at the institutional level. In addition, the Graduate Division coordinated and communicated with the Offices of Contract and Grant Administration (OCGA) and Post Award Financial Services (OPAFS) to ensure the reasonability of GSR compensation. We noted that GSR compensation may exceed a first-year post-doctoral employee as a result of overlapping academic year and federal award year. Additional monitoring is required to further mitigate this risk. Total compensation charged to federal grants could exceed the NIH limitation for GSR compensation if not consistently monitored.

Management Action Plan

The Graduate Division will perform consistent monitoring of GSR compensation including all federal funding in consultation with OPAFS and OCGA. In addition, department fund managers will be provided additional training with regard to existing University guidelines in accordance with federal regulations.

Observations and related management corrective actions are described in greater detail in section V. of this report.

II. BACKGROUND

Audit & Management Advisory Services (AMAS) has completed a review of Graduate Student Funding as part of the approved audit plan for Fiscal Year 2015-16. This report summarizes the results of our review.

The Graduate Division houses the administrative offices of the Dean of Graduate Studies and provides a wide range of services to UCSD graduate students and campus departments to include financial support. The Graduate Student Financial Support Unit (FSU) oversees financial assistance for merit-based financial support and academic appointment policies and procedures. They also administer stipend, tuition, fee payments, and GSR TFR.

Graduate students play an important role in research, as they work on sponsored research projects under the direction of a faculty member. In return they are compensated for their effort, which may include salary, benefits and TFR. Graduate Student employment¹ provided 62% of graduate student financial support in AY 2014-15. Graduate students must be registered full-time² to be employed above 25% during the academic year. UC graduate student employment policy states that a full-time graduate student may be employed a maximum of 50% time (20 hours per week) and up to 100% time (40 hours per week) during the summer³ months with home department approval.

Eligible graduate students admitted to and enrolled in academic programs at UCSD may receive financial support through their home academic department or program units and/or the Graduate Division office. The financial support is available through various sources, including federal and corporate.⁴ Graduate financial support is made available to students as merit-based aid and/or through academic employment. A total of \$159.1 million merit-based and academic employment funds⁵ were received and managed by the FSU during the academic year (AY) 2014-15 as shown in Table 1 below.

¹ Teaching Assistant, Reader, Tutor, Associate or Graduate Student Researcher appointed by a department, group or program, or employed in student staff positions. (Source: Graduate Division http://grad.ucsd.edu/_files/financial/jobopportunities.pdf)

² A minimum of 12 units is required for full time status. Students registered in less than 12 units are eligible for 25% time appointments upon department approval.

³ The summer is defined as the day after the spring quarter ends and the day before the fall quarter begins.

⁴ "Available Financial Support is discipline-specific, more federal money is available for the sciences and more corporate money is available for engineering." – Graduate Division (OGS Presentation: Graduate Financial Support)

⁵ Information obtained from the Graduate Division statistics report.

Table 1

Revenue Sources for Merit-based Aids and Academic Employment	Amount (% of Total)
Graduate Student Employment (Salary and fee remission) ⁶	\$51.8 M (33%)
Teaching Assistant (TA) Employment (Salary and fee remission)	\$46.7 M (29%)
Department Fellowship/Traineeship	\$24.1 M (15%)
Block Grant	\$20.4 M (13%)
Student-Initiated Awards	\$10.5 M (7%)
Diversity/Others	\$5.6 M (3%)

Financial support for Graduate Students typically falls into two categories and are discipline-specific. The Doctoral Program is related to departments such as Health Sciences, Biology Division, Scripps Institution of Oceanography, and School of Engineering. The programs are extremely competitive and funded through federal and private grants during the student's enrollment in the graduate programs. Approximately 4,500 students, 77% of which were in the Doctoral program, received graduate student financial support in AY 2014-15.

Eligible GSR's must satisfy all required conditions in order to qualify for TFR as an employment benefit. One of the conditions is to have an appointment of 25%⁷ for the full quarter in which tuition and fees are paid. The funding source that pays the GSR salary is assessed an average monthly charge for the cost of the GSR TFR and rates are determined by the Graduate Division in coordination with the student's academic department or program. Graduate Division Fellowship funds (Block Grants) may also be used to support GSR salary and TFR.

Charging TFR to federally sponsored research grants and contracts was approved by the Department of Health and Human Services (DHHS) on August 3, 1984 for UCSD. Requests for GSR salaries on grant proposals should include TFR at the average rate projected for the GSR's academic home department's graduate program. The appropriate TFR for State General funds and individual extramural funds that do not accept the TFR assessment are initially charged against a TFR Clearing Account maintained by the Graduate Division. This charge is then transferred or recharged quarterly to the appropriate funding source identified by the GSR's home academic department.

The Graduate Division also collaborates with OCGA in providing guidance to the departments and determining reasonability of GSR compensation. For instance, OCGA performed a thorough review of GSR compensation in light of NIH requirements in 2013, and published guidelines⁸ for the campus community. OCGA noted that the potential impact did not become evident until tuition remission rates began to escalate over the last several years, as a function of rising tuition (especially non-residents).

There are seven separate TFR pools that correspond to the seven graduate program groups. Each pool has a corresponding GSR TFR payroll title code as shown in Table 2. The payroll title code determines

⁶ Research grants from federal and private sources typically cover salaries, benefits and tuition fee remission.

⁷ Even though a GSR is appointed at 25% or more during a quarter, they may not be eligible for the TFR program if they receive tuition and fees from other sources.

⁸ On their web page, OCGA published guidelines on this topic: <http://blink.ucsd.edu/research/preparing-proposals/sponsors/federal/nih/budget.html#Graduate-Student-Compensation>

the salary rate and TFR for eligible GSR's charged on a monthly basis to the salary fund source (department and/or federal sources). Each year in July/August the Graduate Division works with the departments to determine and recommend monthly average rates which would go into effect the following October 1. The average monthly rate for each TFR Pool is published by the Office of Contract and Grant Administration (OCGA) and updated on their website in August/September each year.

Table 2

Academic GSR TFR Pool	Payroll Title Code	TFR Revenue Account	AY 2014-15 Number of Students*	AY 2015-16 Number of Students*
Computer Science Engineering (CSE)	3262	112458	105	128
Mechanical and Aerospace Engineering (MAE)	3263	112459	127	177
Structural Engineering (SE)	3264	112461	30	40
General (GEN) ⁹	3284	112450	416	416
Electrical and Computer Engineering (ECE)	3285	112455	151	156
Physics (PHY)	3286	112456	82	75
Scripps Institution of Oceanography (SIO)	3287	112457	111	103

**Average number of students on TFR for 3 quarter-periods*

The TFR funds collected are then credited to a revenue account maintained by the Graduate Division for each corresponding TFR pool. A separate expense account for each pool is also maintained for issuing actual quarterly tuition and fees payments to the Registrar on the student's behalf. At the end of the fiscal year, the revenue and expense accounts are reconciled, and the total revenue in each TFR account is transferred to the corresponding expense account. Any resulting surplus or deficit is rolled over to each of the TFR expense account for the following fiscal year. The surplus and/or deficits are not shared with other pool accounts but are taken into consideration in the calculation of the following academic years TFR rates for six of the seven individual pools.

The Executive Vice Chancellor for Academic Affairs (EVCAA) funds the Block Grant each year to provide

⁹ The General Pool includes all other Academic programs not explicitly identified in the table (including the School of Medicine, and Division of Biological Sciences).

discretionary fellowship support for eligible graduate students. Block Grant funding is available to all doctoral programs, Masters of Fine Arts (MFA) programs, and all degrees in the School of Global Policy and Strategy (GPS) and the Department of Educational Studies (EDS). The funds are allocated each year in January to eligible academic programs based on a lump sum year end request. Allocations to eligible academic programs in the General Pool are adjusted by any TFR surplus or deficit. Departments/program units are allowed to carry-forward the remaining Block Grant balance at June 30 up to 20% of the year's allocation.

In 1985, Department Chairs agreed that those departments in the General Pool (and using title code 3284) would have their fellowship Block Grant adjusted by the amount of the department's over or underpayment of TFR to the General Pool, instead of the TFR rate for the following year.

Academic departments may request a component of the remaining available Block Grant allocation to pay for graduate student travel expenses and recruitment costs. The Graduate Division reviews and approves these requests, and transfers the amount to a program index. When FSU sends out annual notice on Block Grant requests, the notice includes a reminder on the allowable use of Block Grant funds, and the responsibility to retain supporting documentation in the event of an audit. The Graduate Division provides a quarterly and annual summary of the Block Grant allocations and activity to each academic program unit, as well as a report of surplus or deficit due to over or under assessment of TFR. (*Attachment A*)

Table 3 summarizes the Block Grant adjustments for departments/programs in the General Pool based on actual and estimated tuition and fee assessments for the three-year period, AY 2014-15 through 2016-17.

Table 3

Block Grant Over or Under Adjustment	2014-15 Actual	2015-16 2nd Estimate*	2016-17 1st Estimate* (Jan.2016)	2016-17 Projected Total Adjustment
Campus	(\$73,438)	(\$318,672)	\$437,258	\$45,148
Health Sciences	(\$33,356)	(\$66,315)	\$443,282	\$343,610
Total	(\$106,793)	(\$384,988)	\$880,540	\$388,759

* *Difference between Estimated TFR Assessment against Grants compared with Estimated GSR tuition and fee payments to students*

OMB Circular A-21, *Cost Principles for Educational Institutions* requires TFR and other forms of compensation charged to federally sponsored research are reasonable and applicable to the performance of necessary work. The circular also states that compensation covers all costs, including salaries, wages, and fringe benefits paid currently or accrued by an institution for employee services rendered during the grant performance period.

To determine reasonability of graduate student compensation, NIH issued NIH NOT-OD-02-017, which states "In general, graduate student compensation will not be considered reasonable if in excess of the amount paid to a first-year postdoctoral scientist at the same institution performing comparable work." The notice further states that the maximum compensation awarded to support a graduate student on a research grant or a cooperative agreement is tied to the zero level National Research

Service Award (NRSA) stipend in effect at the time the grant award is issued.”

III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES

The objective of our review was to gain an understanding of the graduate student funding model, evaluate key controls in administrative processes, and evaluate potential federal audit risks.

In order to achieve our objective, we performed the following:

- Reviewed prior audits related to graduate student financial support;
- Reviewed the Graduate Division’s policies and procedures and guidelines for graduate student financial support, as well as the graduate student employment processes;
- Reviewed the Graduate Division’s current student funding model to include support for fiscal year 2014-15;
- Reviewed payroll data for GSR salary and benefits and TFR paid for the academic year 2014-15, (Oct - June) and fiscal year 2014-15 (Jul-June);
- Obtained information from central offices including OCGA and the Office of Post-Award Administration (OPAFS) on GSR compensation guidelines and compliance monitoring;
- Interviewed the following:
 - FSU Director and Manager,
 - Selected Academic Department/Program’s Business Officers, Assistant Business Officers and Student Affairs Directors and/or Staff ;
- Reviewed applicable federal guidelines including OMB Circular A-21 Cost Principles for Educational Institutions (A-21), the National Institutes of Health Notification NOT-OD-02-017, and Ruth L. Kirschstein NRSA NOT-OD-16-048 *Stipends, Tuition/Fees & Other Budgetary Levels Effective for Fiscal Year 2015*;
- Reviewed available data for GSR appointment level, title codes, and actual compensation paid to GSR’s and postdoctoral employees;
- Selected and evaluated a sample of GSR total compensation in comparison with first year postdoctoral students; and
- Selected and evaluated a sample of charges to Block Grant funds, and examined supporting documents for student travel and recruitment expenditures.

Sampling and Evaluation Methodology

We selected and reviewed payroll data for GSR salary and benefits during the audit scope and compared the data with institutional salary and benefits for first year Postdoctoral employees. Based on the funding sources of the sampled GSR data, we then selected and reviewed the total compensation charged to NIH and other federal sources during the grant budget year.

In reviewing reasonability of GSR compensation, we selected a judgmental sample based on three academic departments with GSR’s showing total work percentage above 49.99% during the fiscal year July 01, 2014 through June 30, 2015. We then focused on seven GSR’s that had charges for graduate student compensation on federal funds including NIH (2) and NSF (6). We compared each GSR’s compensation with the amount paid to a first-year, postdoctoral scientist performing comparable work at the University and with the National Research Service Award stipend in effect at the time of the

award. To make these comparisons, we obtained the University guidelines on graduate student researcher compensation, and the salary and benefits rate paid to first-year postdoctoral scientists.

In reviewing the use of Block Grant funds, we selected a small sample of departments that received Block Grant transfers and reviewed corresponding expenditures and examined available supporting documents.

IV. CONCLUSION and SUPPORTING COMMENTS

Based on our review, we concluded that the Graduate Division funding model is designed to support eligible graduate students in various disciplines to ensure that support commitments and student needs are met. The overassessment of tuition and fees for students in the General pool provided funding for the underassessment in the six academic programs/departments that shared a higher percentage of international students. This model requires periodic evaluation of funding requirements based on tuition rates and the number of resident and non-resident graduate students enrolled and eligible for TFR. The Graduate Division maintains transparency by coordinating with each of the academic program units in determining TFR rates, and methodically adjusting succeeding academic years with over or under assessment of those rates. Quarterly reports and updates regarding the allocations, adjustments, and fund activity are provided regularly to each of the academic units in the seven pools. We also concluded that the Graduate Division maintains effective controls in ensuring that graduate student financial support is reasonably allocated and used appropriately in support of the students.

We concluded that full-time GSR total compensation paid for the nine-month academic period appeared to be reasonable in comparison to the total compensation paid to a first-year, postdoctoral scientist performing comparable work. The Graduate Division regularly reviewed and compared GSR compensation based on published salary and TFR rates at the institutional level. In addition, the Graduate Division coordinated and communicated with OCGA and OPFS to ensure the reasonability of GSR compensation. Table 4 provides an example of actual compensation paid to GSR's for the academic period October 2014 through June 2015. For purposes of comparison, an entry-level postdoctoral employee at the University, during the period selected for review, was paid at the rate of \$43,692 plus 20.7 % benefits, or a total compensation of \$52,736. The actual first year-postdoctoral-employee compensation for FY2015 showed an average of \$46,719, with a benefit rate averaging 22%.

Table 4

Sample GSR	Salary and benefits	Tuition Remission	Total Compensation
1	\$21,941	\$24,479	\$46,420
2	\$21,941	\$24,408	\$46,349
3	\$21,941	\$23,301	\$45,242
4	\$21,941	\$23,301	\$45,242
5	\$20,686	\$18,533	\$39,219
6	\$20,686	\$19,368	\$40,054
7	\$19,150	\$19,368	\$38,518

We did identify one opportunity for improvement regarding the oversight and monitoring of GSR compensation charged to federal awards. The details are provided in the remainder of this report.

V. OBSERVATIONS REQUIRING MANAGEMENT CORRECTIVE ACTION

A.	GSR Compensation Charged to Federal Grants
During our review we noted that GSR compensation may exceed a first-year post-doctoral employee as a result of overlapping academic year and federal award year. Additional monitoring is required to further mitigate this risk.	
Risk Statement/Effect	
Total compensation charged to federal grants could exceed the NIH limitation for GSR compensation if not consistently monitored.	
Management Action Plan	
A.1	The Graduate Division will perform consistent monitoring of GSR compensation including all federal funding in consultation with OPAFS and OCGA. In addition, department fund managers will be provided additional training with regard to existing University guidelines in accordance with federal regulations.

A. GSR Compensation Charged to Federal Grants

During our review, we selected a judgmental sample of GSR’s and reviewed (1) the salaries, benefits and TFR paid during the nine-month academic period October 2014 through June 2015, (2) the total salaries, benefits and TFR during the 12-month period fiscal period July 2014 through June 2015, and (3) the total salaries, benefits and TFR charged to federal grants during the grant budget timeframe falling within the period of 2014 – 2015.

We noted that GSR compensation could potentially exceed that of the first year postdoctoral employee if a GSR appointment exceeded the total 49.99% considered as full-time in an academic year, as eligible GSR’s are allowed to work up to 100% during summer months. In addition, Principal Investigators are generally advised to use extramural funds to support graduate students up to the maximum allowed by the agency in order to maximize the availability of funds for the campus. As a result, the total compensation charged to federal grants could exceed the NIH limitation for GSR compensation if not consistently monitored.

Based on the sample we reviewed, the selected GSR's did not exceed total compensation of first year postdoc's for the nine academic months. However, if total compensation included the amount paid during the summer months, total compensation could potentially exceed the limit. We noted two federal grant sources that were charged GSR compensation slightly above the limit as total compensation included summer salaries. Similarly, when GSR compensation for a fiscal period (12 months) which includes summer employment, three of the six selected GSR compensation reviewed

showed total compensation exceeding that of an entry-level postdoc.

Total Compensation Paid Within the Grant Budget Period

Selected Sample	Grant Accounting Period	Total GSR Compensation Charged	Postdoc Compensation	Over
1	Oct – Sept 2015	\$38,069	\$52,736	
2	Mar – Feb 2015	\$34,105	\$52,736	
3	Aug – July 2015	\$21,296	\$52,736	
4	Sept – Aug 2015	\$54,451	\$52,736	\$1,715
5	Aug – Jul 2015	\$54,146	\$52,736	\$1,410
6	May – Apr 2015	\$35,091	\$52,736	
7	Dec – Nov 2015	\$42,774	\$52,736	

Total Compensation Paid within the 12-Month Fiscal Year Period July 2014-June 2015

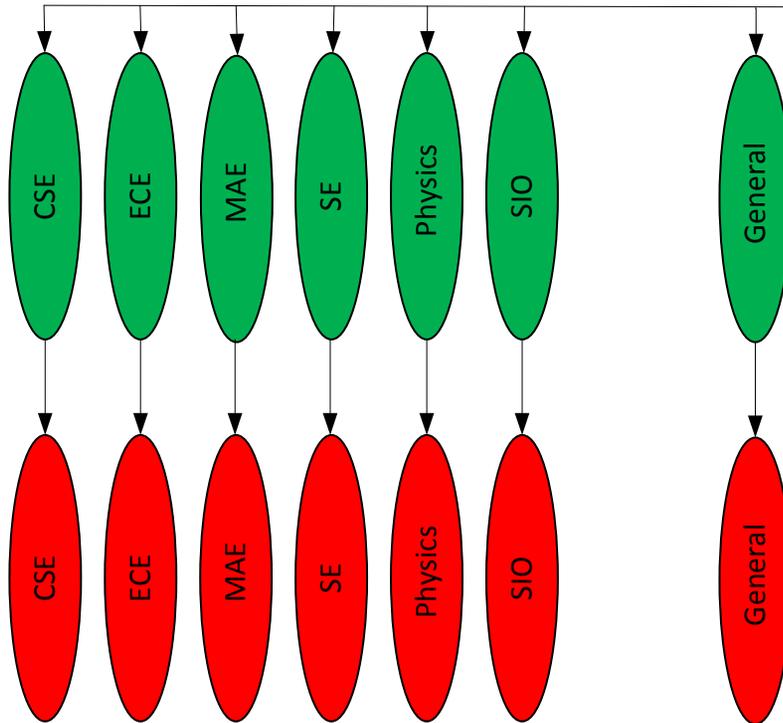
Selected Sample	Total GSR Compensation Charged	Postdoc Compensation	Over
1	\$60,157	\$52,736	\$7,421
2	\$60,066	\$52,736	\$7,330
3	\$45,242	\$52,736	
4	\$58,511	\$52,736	\$6,075
5	\$46,170	\$52,736	
6	\$47,016	\$52,736	
7	\$44,902	\$52,736	

The Graduate Division performs periodic reviews of GSR compensation. However, the months included in determining total compensation paid to GSR's are limited to the nine academic months when a GSR is a full-time student. Compensation paid during the summer months may fall within the grant budget period, when eligible GSR's could be appointed above the 49.99%, but may not be considered as part of the review. If considered, the total compensation could exceed that of a first year postdoctoral employee.

Although OCGA and OPAFS provide guidance and advice, the responsibility for monitoring is left up to the departments. Additional oversight and periodic monitoring would be beneficial in ensuring compliance and eliminating or mitigating the potential risk of disallowance of the amount in excess of the limit charged to the grants. In addition, department fund managers would also benefit from additional training with regard to existing University guidelines in accordance with federal regulations.

Graduate Student Funding Model Overview
 AMAS Project 2016-10
 Attachment A

Graduate Division Revenue Accounts – Tuition and fee remission charged on a monthly basis to the department and/or federal sources employing eligible graduate student researchers.



Graduate Division Expense Accounts – Surplus and/or deficits are rolled over to the following academic years calculation of tuition and fee remission rates, and not shared with other groups. Actual quarterly tuition and fees are paid to the Registrar on behalf of the students.

Graduate
Division

Graduate Division sends a Block Grant summary memo to each academic program units to provide transparency.

Block
Grant

Block Grant funding is available to all doctoral programs, Masters of Fine Arts programs and all degrees in GPS and EDS.

The General Pool resulting surplus or deficit tuition and fee remission is NOT applied to the tuition and fee remission rates for the following academic year, instead it is applied to the Block Grant funds. The Graduate Division manages this process.

The Graduate Division has overall fiscal responsibility for managing the seven Graduate Student Researcher Tuition and Fee Remission accounts

This model depicts a portion of the overall model. What is not included is the IFIS/ISIS detail for each department, for simplicity.