

Report on the Effects of Graduate Tuition Charges to Grants¹

Senate University Budget Committee

April 27, 2015

In 2009, the University adopted the policy of charging graduate tuition to grants. Previously tuition for graduate research assistants (henceforth “research GAs” or “GRAs”) included on grants was waived. The new policy went into effect on July 1, 2009 and requires that all proposals submitted through the Office of Sponsored Programs (now Sponsored Programs Services, or SPS) include in their budget a line item for 60% of full time in-state graduate tuition for each graduate student whose salary would be paid by the grant, unless prohibited by the granting agency. The charge is included as a direct cost and is not subject to facilities and administrative costs (F&As, also known as indirect costs). Where tuition charges are prohibited by the sponsor, there is no charge to the investigator, the department, or the school/college. The policy also stipulates that funds received under the policy are to be used for research and/or graduate education.²

As directed by the Senate on April 6, 2009, the University Budget Committee (UBC) monitored the impact of the policy change for the next three years (FY10-FY12) and reported back in March 2013. The report’s conclusions were as follows: less money is collected from tuition charges than originally projected; there is no evidence that the charges generate any new revenue at all; the funds collected are being used appropriately for new expenditures on graduate education (i.e., supporting graduate students on nationally competitive fellowships); and there was insufficient data to determine what effect, if any, the policy was having on the number of GRAs at the University. Following the report, the Senate directed the UBC to continue monitoring the policy’s impacts for another two years and report again. We do so here.

In summary, our findings are (1) that the amount collected from tuition charges exceeds that required to provide supplementary support for graduate students with prestigious, nationally competitive fellowships and awards, (2) that most but not all of the funds are being used for research and graduate education as originally intended, (3) that the charges are having a negative effect on the number of GRAs at the University, and (4) that there is (still) no evidence that tuition charges increase net revenues to the University. In light of these conclusions, and considering the other factors driving up the cost of research at the University, we recommend that the tuition charges be eliminated or at least substantially reduced, that the Graduate School and OVPR identify another mechanism for providing supplementary support, and that the Graduate School review the awards eligible for such support.

¹ The Budget Committee would very much like to thank VPR Jeff Seemann, CFO Scott Jordan, and Graduate Dean Kent Holsinger for meeting with us repeatedly to discuss these and related issues. We also thank Budget Director Katrina Spencer and Jennifer Pelletier, Manager of Effort and Data Reporting Services, for helping us first to obtain and subsequently to understand the data.

² The memo instituting the policy can be found at http://research.uconn.edu/wp-content/uploads/sites/351/2014/07/tuition_grant_policy_guidelines.pdf. The policy implementation guidelines are available at <http://research.uconn.edu/wp-content/uploads/sites/351/2014/02/Tuition-on-Grants-Guidelines.pdf>.

1. Revenues

Funds recovered from tuition charges are collected in an account and transferred to the Graduate School at the end of each fiscal year. As of April 24, 2015, a total of \$6,355,625 has been charged to research grants since the policy's inception in 2009, as shown in Table 1.

Table 1. Graduate Tuition Analysis, Restricted Sponsored Programs Accounts in KFS

Data Source: KFS & FRS as of 4/24/2015

Type of Accounts	Accounts	Total Grant Budget	Grad Tuition Budget	Grad Tuition Actual Expenditures
Tuition Eligible -- Tuition Budgeted	959	\$189,468,264	\$11,841,799	\$6,138,511
Tuition Eligible -- No Tuition Budget	1,144	\$103,845,225	\$- 0	\$94,971
Not Tuition Eligible	2,054	\$544,716,075	\$- 0	\$- 0
Total Restricted Sponsored Programs Accounts - in KFS	4,157	\$838,029,564	\$11,841,799	\$6,233,482
Pre-KFS Only Accounts	48	\$3,503,230	\$170,380	\$122,143
TOTAL Graduate Tuition to Date			\$12,012,179	\$6,355,625

** Amounts are cumulative since the inception of the Graduate Tuition policy (FY11). Amounts on accounts closed before KFS implementation are listed in the Pre-KFS Only Accounts line. All budget and actual expenditures figures reflect the full amounts currently posted on the accounts over the entire course of the accounts.*

*** This analysis only includes SPS grant accounts. Graduate tuition charges posted on other accounts (while likely minimal) are not included.*

Projecting through the end of the current fiscal year, the Graduate School estimated in October 2014 that it will receive approximately \$1.6 million from tuition charges in FY 2015, bringing the total received since the policy went into effect to approximately \$6.7 million (Table 2). As also shown in Table 2, \$700,000 from the charges collected in FY 15 has been redirected by the Administration to help close the deficit in the University's budget brought on by rescission of State support. Otherwise, it appears that the tuition charges are being transferred to the Graduate School as intended.

Table 2. Summary of cash flow since inception			
	Funds received	Expenditures	Balance
FY 2011	\$424,689	\$146,034	\$278,655
FY 2012	\$1,125,983	\$168,385	\$1,236,253
FY 2013	\$1,350,089	\$457,757	\$2,128,586
FY 2014	\$2,182,585	\$1,833,361	\$2,477,810
FY 2015 (projected)	\$1,626,718*	\$1,895,797	\$2,208,730
Totals	\$6,710,064	\$4,501,334	n/a
* An additional \$700,000 was diverted by the administration in FY2015 to help close the deficit created by the rescission of State support for the University budget.			

2. Expenditures

The Graduate School uses funds received from tuition charges to supplement tuition and health benefits for graduate students with prestigious, nationally competitive fellowships or awards as well as graduate students supported on training grants. Because the amount collected has so far exceeded the amount required to supplement those benefits, the Graduate School has been using some of the surplus to fund doctoral dissertation fellowships and doctoral student travel. Total expenditures since inception are just over \$4.5 million, as detailed in Table 3.

The practice of providing supplemental tuition and health benefits for students with fellowships and awards is covered by two policies which went into effect in 2012: the Policy on Competitive Federal Graduate Awards³ and the Policy on Non-Federal Fellowship Awards⁴. These fellowships and awards typically provide students with a stipend, usually between \$2K and \$10K per year. They cover some portion of tuition and health insurance premiums but usually leave a significant shortfall (as much as \$15-20K per student per year). Before the aforementioned policies went into effect in 2009, the University was unable to cover the difference and consequently unable to compete for such students.

Since the University began supplementing fellowships and awards, however, the number of such students has steadily increased, from 7 in 2009 to more than 50 in 2012. As of October 2014, the Graduate School was providing supplemental tuition and health benefits for more than 100 such students:

- 9 National Science Foundation Graduate Research fellows
- 1 NIH NRSA fellow
- 1 on Eisenhower Transportation fellowship
- 2 EPA STAR fellows
- 1 Mellon fellow
- 92 on training grants:
 - 19 students on NSF Bridge to the Doctorate
 - 5 on Department of Homeland Security
 - 33 students on DOE GAANN
 - 7 students on NSF GK-12

³ <http://policy.uconn.edu/?p=966>.

⁴ <http://policy.uconn.edu/?p=2542>.

- 16 on NIH (2 projects)
- 7 on NSF IGERT
- 2 on NIOSH
- 3 on USDA NN

We expect soon to receive further data showing amounts expended to support students on each of these forms of funding. Based on the breakdown above, however, it would appear that the bulk of the supplemental support from tuition charges is going to support students on training grants rather than students with national fellowships or awards of their own.

Table 3. Expenditures detail

	Tuition	Health insurance	Other graduate support	Doctoral dissertation fellowships	Doctoral student travel	National fellowships
FY 2011*	\$146,034					
FY 2012*	\$168,385					
FY 2013*	\$457,757					
FY 2014	\$678,414	\$137,521	\$6,427	\$796,000	\$200,000	\$15,000
FY 2015 (projected)	\$720,373	\$432,591	\$6,500	\$500,000	\$213,333	\$23,000

*Tuition and health insurance subsidy combined

3. Effects on Research GAs

One of the main questions we have sought to answer is what effect, if any, the tuition charges are having on the number of research GAs at the University. To that end, we have (with varying degrees of success) sought data on (a) the number of research GAs actually *supported* off grants and how that number has changed since 2007, and (b) the number of GAs *requested* on grant proposals and how that number has changed during the same period. Regrettably, the University's data systems do not make it possible to obtain all the data requested, despite the best efforts of people in the Budget Office, Graduate School, and OVPR. The data we have obtained, however, support the hypothesis that the tuition charges have a negative effect on both the number of GAs requested and the number funded.

a. Research GAs supported on grants. Based on figures provided by the Budget Office (Table 4), the enrollment figure for research GAs at the University has dropped by about 10% since the policy went into effect.

Level	2007	2008	2009	2010	2011	2012	2013	2014
Research	1,238	1,274	1,158	1,213	1,186	1,181	1,086	1,139
Teaching	1,016	1,011	967	908	942	957	987	950
Split	253	236	297	299	311	297	309	287
Prst. Intern†							39	42
sub-total	2,507	2,521	2,422	2,420	2,439	2,435	2,421	2,418
Not GA	3,976	4,135	4,285	4,440	4,344	4,324	4,277	4,563
TOTAL	6,483	6,656	6,707	6,860	6,783	6,759	6,698	6,981

*An enrollment count is not a headcount; students enrolled in more than one field of study are counted in each field.

† The Prst. Intern line refers to students who are part of the Provost's Professional Internship Program (<http://policy.uconn.edu/?p=2992>).

A more informative measure would be the number of GA Full-Time Equivalents (FTEs) supported on restricted (i.e., grant) funds. Table 5 gives the numbers, Table 6 the percentages.

Fund type	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
Unrestricted	341.9554	339.4646	324.8684	314.9519	328.9946	335.0549	346.153	354.068
Restricted	128.1961	133.6647	150.4339	153.3919	141.7896	140.3458	129.377	119.198
Total FTEs	470.1515	473.1293	475.3023	468.3438	470.7842	475.4007	475.53	473.266
Total GAs	2297	2310	2193	2172	2197	2192	2211	2189

* The Budget Office counts a full GA as 1/4 FTE. Also, the "Total GAs" line includes many half GAs (1/8 FTE), which is why that total is not exactly four times the number of FTEs.

Fund type	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
Unrestricted	73%	72%	68%	67%	70%	70%	73%	75%
Restricted	27%	28%	32%	33%	30%	30%	27%	25%

Highlighted cells may reflect funding through American Recovery and Reinvestment Act

As one can see, the number of GA FTEs paid for out of restricted funds rose dramatically after the tuition charges went into effect (highlighted cells). However, the initial increase is attributable largely if not entirely to the effect of the American Recovery and Reinvestment Act. Since the ARRA ended, the number of GRAs has fallen until it is now about 7% less than the number in 2007. On the other hand, total expenditures from externally sponsored research rose with the ARRA and have since remained flat (see Table 7). Overall, expenditures from grants have risen by \$36.3 million since 2007, or about 42%. Similarly, the number of postdocs paid off of grants has increased by about 18%, from 106 in 2007 to 125 in 2014 (Table 8).

Seen in context, the decline in the number of research GAs is significant. However, the decline cannot be attributed entirely to the tuition charges as other factors are at work. Fringe rates have also increased, for instance. Still, the reduction in the number of research GAs is not surprising.

The tuition charges add approximately \$15,000 (about 20%) to the cost of employing a GA. In some circumstances, it may still, even with the surcharge, be more cost effective to hire a GA than a technician or postdoc. That depends on a number of factors, including the salary at which other personnel must be hired, the qualifications of those available, the amount of training they would require, and so on. Still, we would expect that the tuition charges have a drag on the number of research GAs, and that does appear to be the case.

Table 7. Expenditures on Sponsored Programs (Storrs)

	2007	2008	2009	2010	2011	2012	2013	2014
Extramural Sponsored Program Expenditures	\$86.1	\$90.3	\$101.9	\$109.3	\$117.0	\$123.3	\$123.0	\$122.4
Federal Expenditures	\$65.4	\$70.2	\$78.0	\$85.0	\$98.8	\$103.5	\$97.2	\$91.0
Corporate Expenditures	\$4.6	\$4.6	\$6.1	\$5.2	\$4.5	\$5.1	\$7.2	\$8.9
Full-time Faculty	1202	1233	1254	1222	1230	1252	1312	1408
Research Proposals (#)	1287	1097	1442	1390	1276	1269	1215	1486
Research Awards (#)	772	785	834	909	907	763	855	970

Table 8. Postdocs

Term	Extract date	# Postdocs
Fall 14	12/19/2014	125
Fall 13	11/12/2013	122
Fall 12	12/5/2012	141
Fall 11	12/2/2011	129
Fall 10	11/3/2010	115
Fall 09	12/10/2009	100
Fall 08	12/16/2008	97
Fall 07	12/17/2007	106

b. Research GAs requested in grant proposals. There is a great deal of anecdotal evidence that the tuition charges are negatively affecting the number of GAs that PIs request in their proposals. Some PIs report requesting fewer GAs than they otherwise would; others say they have ceased writing GAs into their proposals altogether. However, we are unable to obtain data to settle the question either way, as SPS does not track, and does not have any way of tracking, the number of GAs requested on proposals.⁵

⁵ In September 2014, the UBC discussed surveying the faculty to learn how many GAs they were requesting in all of their proposals, funded or not, and how that number has changed. In consultation with the SEC, however, it was decided that the UBC should postpone any survey until it became clear that it was necessary. At this time, we think that it is unnecessary and that we have enough information to make recommendations.

In any case, the number of consequence is the number of GAs actually paid out of grants, not the number requested. Given the way the tuition charge policy works, the number requested is bound to be smaller than the number actually supported. According to the implementation guidelines, the budget must contain a line item for 60% of full time tuition on 9 credits.⁶ Post-award, however, the grant pays 60% of the student's *actual* tuition, which is typically lower since GAs are considered full time students if they have 6 credits, and tuition is pro-rated. The balance may be used to pay additional GAs or re-budgeted for other purposes. Furthermore, it is not uncommon to include a request for GAs and thus for tuition in the original budget but then to decide to hire some other type of personnel (e.g., a technician), depending on who is available, with what qualifications, at what cost. Nor is it uncommon to request a technician or postdoc but to employ a GA instead. Thus, even if we found that the tuition charges had a significant effect on the number of GAs requested (which, based on anecdotal evidence, it does), it would be difficult to draw from that finding any conclusions about the effect the policy has on the number of GAs actually supported off grants.

4. Conclusions

Based on the foregoing, we think that a number of conclusions may with some confidence be drawn.

Conclusion 1. The amount of tuition charged to grants exceeds the amount the Graduate School requires for the purpose of providing supplemental tuition and health benefits for graduate students with prestigious national fellowships. At present, 90% of the students receiving supplemental support off this money are students on training grants who might be supported in other ways.

Conclusion 2. Some of the money collected from tuition charges is not being used for research and graduate education, as originally intended. So far, \$700,000 has been reallocated for deficit mitigation in FY 2015.

Conclusion 3. The tuition charges are probably having a negative effect on the number of research GAs at the University. The number has fallen by 7% since 2007 (before the policy went into effect) and by 20% since 2009 (the year the policy went into effect). In comparison, the number of postdocs is up by 15% since 2007 and by 20% since 2009. Meanwhile, total research expenditures have risen by 42% since 2007 and by 20% since 2009. Seen in context, the decline in GRA numbers is thus quite significant. Since other factors are at work here (e.g., increased fringe rates), it is difficult to estimate the size of the effect of the tuition charges. Nonetheless, they do seem to be taking a toll.

Conclusion 4. There is (still) no evidence that tuition charges on grants result in a net increase in revenue to the University. While it is true that expenditures and awards have increased since

⁶ These guidelines are described in a memo entitled "Implementation Guidelines: Charging Tuition to Grants" available at <http://research.uconn.edu/wp-content/uploads/sites/351/2014/02/Tuition-on-Grants-Guidelines.pdf>. The policy of including a line item of 60% of tuition on 9 credits is built into the online tuition calculator at http://apps.research.uconn.edu/sps/calc_tuition.cfm. The tuition calculator also assumes a 6% annual increase in the tuition rate, which exceeds the average increase since FY 2012.

the policy went into effect in FY 2009, the increase is attributable first to the ARRA and subsequently to the increase in the number of proposals being submitted by a growing faculty. Furthermore, it remains the case that many grants are capped by the sponsor, in which case charging tuition merely shifts expenses from one budget line to another. Since tuition charges are not subject to F&As, the policy may actually produce a net loss for the University by shifting expenses from budget lines that are subject to F&As.

5. Recommendations

In view of the foregoing, **we recommend, first, that the portion of tuition charged to grants be substantially reduced if not eliminated altogether.** The cost of doing research at the University has increased considerably since 2009, driven mainly by increases in fringe rates. As recently announced, the fringe rates for personnel on sponsored projects will jump again in FY16. The fringe rate for grads will increase 57% (from 17.6% in FY15 to 27.7% in FY16); the rate for professional employees will increase by 17.2% (from 53.8% in FY15 to 71.0% in FY16); and the rate for faculty by 16.6% (from 36.4% to 53.0%).⁷ The tuition charges increase the cost of a GA by another \$15,000, about 20%. Add in the 3% pay raise for GAs provided in the new collective bargaining agreement between the University and the Graduate Employees Union, and the cost of funding a GA on a grant will soon be prohibitive. (A cost comparison is included as an Appendix.) Eliminating the tuition charges would not solve the problem, but it would be an important first step. (Incidentally, we welcome VPR Jeff Seemann's recent proposal to cover some of the jump in fringe rates out of indirect cost returns.)

The only reason not to eliminate the tuition charges altogether, in our view, is the need somehow to provide supplemental funding for students with prestigious national fellowships or awards. Since the University began providing this supplemental funding, the number of students who have received such awards has increased sharply, benefiting several graduate programs and the University's scholarly reputation. We believe that such support ought to continue.

Thus, our second recommendation, if the tuition charges are eliminated altogether, is that the Graduate School, together with the OVPR, identify an alternative mechanism for securing the funds necessary to support students with national fellowships and awards.

Although we have not had the opportunity to study the question in detail, we suggest that one method would be to fund them out of the increased return on F&As that would presumably result from eliminating the tuition charges. For as noted above, the tuition charges serve primarily to transfer expenses from lines that *are* subject to F&As to lines that *are not* subject to F&As. At an F&A rate of 58%, eliminating the tuition charges might increase F&A recovery almost enough to cover the supplemental benefits by itself.

Third, we recommend that some appropriate body (such as the Graduate Faculty Council) undertake a review of the fellowships and awards that currently qualify for supplemental support under the existing policies. As noted above, only about 10% of the students receiving supplemental support are coming in with prestigious national fellowships which they have won. Almost 90% are on training grants. We suggest reviewing these grants to determine (a) if all of

⁷ Based on "Fiscal 2016 Approved Sponsored Fringe Rates", <http://research.uconn.edu/wp-content/uploads/sites/351/2015/04/Fiscal-2016-Approved-Sponsored-Fringe-Rates.pdf>.

them serve the purposes for which the tuition charges were instituted and (b) if an alternate source of supplemental funding could be found for them or for future training grants.

Fourth, in case no other mechanism can be found to provide supplemental benefits, we conditionally recommend that the tuition charges be continued at a reduced rate of perhaps 25% to allow the Graduate School to support at least those students coming in with their own prestigious fellowships or awards. Further study would be required to determine what rate is appropriate. But we are hopeful that another source of funds can be identified in due course, in which case our recommendation is, again, to eliminate the charges altogether.

