UNIVERSITY of
MASSACHUSETTS
BOSTON
100 Morrissey Blvd.
Boston, MA 02125-3393

Office of the Vice Provost
for Research
617.287.5600
Fax: 617.287.5616

A Note Concerning Cost Sharing

The purpose of this note is to discuss a topic that continues to cause considerable aggravation among higher education administrators across the nation; namely, *cost sharing* on sponsored programs. Because the consequences of cost sharing are profound for both the PI and for the university, this note will provide in depth information about the policy and procedures in place at UMass Boston.

What is cost sharing?

Cost sharing is defined by the U.S. Office of Management and Budget (OMB) as follows[1]: "cost sharing or matching means that portion of a project or program costs not borne by the Federal Government." Given that UMass Boston enters into grant and contract agreements with sponsors other than the federal government, a more generic definition of cost sharing is:

> *Cost sharing (or matching) refers to the portion of the actual costs of a sponsored program that is not borne by the sponsoring agency and is itemized in the sponsored program's approved budget.*

In some cases, cost sharing is *mandatory*—that is, cost sharing is required by the sponsor as a condition of the award. One example of mandatory cost sharing is the requirement of the National Science Foundation that the university share 50% of the cost of certain research equipment awards. In recent years, a number of private agencies have instituted mandatory cost sharing in the guise of matching each dollar of the sponsor with a certain number of dollars of the university. Often this mandatory cost sharing escalates over the course of a multi-year sponsored program so that in later years the university must bear more of the cost of the project than the sponsor. In other cases, cost sharing is *voluntary*—that is, the university offers cost sharing even though the sponsor does not specifically require it. Although the reasons vary, PIs most often request shifting allowable direct costs of a project to voluntary cost sharing by the university in order to reduce the total costs to a limit stipulated by the sponsor.

The effect of cost sharing for the sponsor is an ability to award more grants and support more projects with the same budget. The effect of cost sharing for the university is the redirection of resources that would have supported core functions in order to conduct special projects. That is, the university is being asked to subsidize with university dollars the cost of the sponsored

[1] OMB Circular A-110: *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations*, Subpart A.2(i).

program. There are other long-term financial consequences to the university of cost sharing that will be presented in the last section of this note.

Does voluntary cost sharing increase the likelihood that a proposal will be favorably reviewed?

PIs occasionally think that including voluntary cost sharing in their proposal will increase the likelihood of it being favorably reviewed for an award by the sponsoring agency. A number of studies conducted by OMB reveal this is not true. Specialists in a particular research area, typically faculty members at U.S. institutions, review all proposals submitted to federal government agencies. Proposal reviewers are concerned with the merits of the research and not with cost sharing. It is only after the proposals are ranked, based upon the reviewers' scoring, that the proposal budget comes into consideration. The program officer at the agency selects highly ranked proposals for award up to the amount that is available in the agency's budget.

The *National Science Foundation Important Notice 124* issued June 11, 1999 specifically states: "cost sharing is considered an eligibility rather than review criterion." A clarification of cost sharing policies and practices of the federal government issued by the Office of Science and Technology Policy of the Executive Office of the President in January 2001 similarly states that cost sharing is "an eligibility criterion rather than a review criterion." It goes on to state that "any negotiation with proposers as to the level or amount of cost sharing will occur either prior to the review process to establish the project's eligibility for consideration or after merit review has been completed to adjust cost sharing to the agreed-upon amount of the award." On October 14, 2004 the National Science Board, the governing body of the National Science Foundation, issued a policy clarification that states: "cost sharing will no longer be a factor in the submission, or evaluation, of proposals submitted in response to NSF program announcements."

How is cost sharing on a sponsored program approved?

It is important to note that, if a sponsor selects a project proposal for an award and the proposal budget includes cost sharing, whether mandatory or voluntary, the cost sharing is included as a condition of the award to UMass Boston, and therefore subject to audit. Consequently, all proposed cost sharing must be approved by the administrator of the unit that will be providing the proposed cost share to the project and by the vice provost for research prior to submission of the proposal.

The PI obtains the approvals for cost sharing during the proposal routing process by completing a form to describe and specify the amount of the cost share, and to provide the account number for the fund that will be used to pay for this cost share. The administrator responsible for this fund must sign the form to indicate approval. All cost sharing on sponsored programs, for reasons to be explained below, must also be approved by the vice provost for research before the proposal can be submitted to the sponsor for consideration.

What are the criteria for determining if a sponsored program cost qualifies as cost sharing?

At UMass Boston, cost sharing takes one of three forms:

- Salaries, wages, and associated benefits of personnel[2];
- Cash contributed from unrestricted university budget sources for committed project supplies and materials (e.g., office supplies, lab supplies and chemicals, travel, communications, expendable equipment); and
- In certain special cases, that portion of the F&A costs associated with the project that will not be recovered from the sponsor[3].

The following examples are typically not allowable as cost sharing:

- Items treated as F&A costs (e.g., administrative support, utilities, library resources, value of existing university facilities, value of equipment used by the project),
- Costs being paid by another sponsored program award to the university,
- Costs being shared on another sponsored program award to the university,
- Costs incurred before or after the effective dates of the sponsored program, and
- Specifically unallowable costs (e.g., alcoholic beverages).

In order for a sponsored program cost to qualify for university cost sharing it must meet all of the following six explicit criteria[4]:

- Verifiable from the university's financial records[5],
- Not included as a cost share for any other sponsored program,
- Necessary and reasonable for the completion of the sponsored program,

---

[2] Cost sharing of personnel costs is different from the buyout of personnel time and effort by a sponsored program. In the case of buyout, the proposal states that a specific portion of an individual's salary and benefits will be paid by the sponsor. If the proposal is selected for an award, then the individual's salary and benefits will be split and paid from two sources—the buyout portion will be paid with sponsor dollars and the non-buyout portion is paid from with university dollars. Buyout is the subject of *A Note Concerning Buyout*.

[3] The sponsor must specifically state in the RFP that it allows F&A cost sharing or approve the proposed F&A cost sharing in writing before the proposal can be submitted. In the case of the federal government, F&A cost sharing is rarely allowed.

[4] OMB circular A-110, Subpart C, Paragraph 23.

[5] Based upon the Cost Accounting Standards in the U. S. Office of Management and Budget Circular A-21: *Cost Principles for Educational Institutions*, this means that the costs are captured in the university's PeopleSoft cost accounting system, reflected on financial reports provided to the sponsor, and incorporated into the calculation of the university's F&A rate.

- Allowable under applicable cost principles[6],

- Not paid by the federal government under another award, and

- Provided for in the sponsored program's approved budget.

These six criteria provide the basis for cost sharing on any sponsored program at UMass Boston, not just those awards from federal sponsors.

It is UMass Boston policy that *third-party cost sharing*[7] will not be approved due to the extraordinarily complex accounting procedures that are necessary to meet the sponsor's and the university's financial reporting requirements.

How is cost sharing on a sponsored program managed?

At UMass Boston, the Office of Research and Sponsored Programs (ORSP) is responsible for accounting for and reporting to the sponsor the university's cost sharing commitments. When a proposal containing cost sharing is being developed for submission to the sponsor, the professional staff in ORSP works with the PI and other university administrators to complete a cost sharing form that states the committed cost sharing resources and the project's cost sharing budget. If during award negotiations the sponsor dollars are reduced from the amount requested in the proposal's approved budget as submitted, then the amount of any approved mandatory cost sharing will be reduced in an equivalent proportion. Once established, the cost sharing budget can only be modified by ORSP and only with the approval of the vice provost for research.

For personnel cost sharing, OMB regulations require the reporting of salaries, wages, and benefits from a payroll system that integrates sponsored activities with all other activities—at UMass Boston, that means as reported from the PeopleSoft HR system. Note that a portion of the time of a university employee may be cost shared on several project grants simultaneously, and, therefore, percentages of the employee's salary and associated benefits must be correctly allocated to each project's cost sharing budget. The university's payroll system will not permit employees to cost share more than 100% of their time.

The costs associated with UMass Boston graduate students serving as research assistants on a sponsored program can be cost shared. In such cases, the PI must provide the name of the student, the period of the student's effort on the project, the total cost associated with the student's effort during that period, and the budget source that is paying the total cost. It is the responsibility of the PI to provide documentation to ORSP of the costs of the assistantship

---

[6] For example, personnel cost sharing must be based upon the appropriate percentage of the individual's actual UMass Boston salary and benefits, and values associated with cost shared supplies and expendable equipment must reflect the fair market value of the items or property at the time of the cost share.

[7] Third-party cost sharing includes: (a) contributions to pay project costs for an award to UMass Boston that are made by an organization other than UMass Boston and the sponsor, (b) contributions to pay project costs for an award to another institution that are made by UMass Boston when UMass Boston is the subcontractor on the other institution's project, and (c) contributions to pay project costs for an award to UMass Boston from one sponsor that are made by the sponsor of another award to UMass Boston.

together with the costs of the tuition remission, fee waiver, and health insurance premium corresponding to the cost sharing commitment.

For F&A cost sharing approved by the vice provost for research, the ORSP staff will set up the award with the necessary reduced F&A rate. The PI need not be concerned with this process as long as the sponsor funds are spent as budgeted. Any modifications to the project grant budget that change the F&A cost recovery will have consequences for F&A cost sharing. It is the responsibility of the PI to notify ORSP staff in this situation to discuss an appropriate budget solution.

The cost sharing may be satisfied early in the project period (e.g., to secure necessary equipment) or gradually over the life of the project. However, there can be no cost sharing balance remaining at the end of the project period if the sponsor funds have been fully expended. This situation, known as unmet cost sharing, will require that a proportionate amount of the project grant dollars be repaid to the sponsor. This may significantly impair the ability of the PI to complete the goals of the project. To avoid this situation, it is the responsibility of the PI to monitor the project spending to ensure that any remaining balance in the budgeted cost sharing will be expended according to the project proposal.

What is effort reporting and how is it related to cost sharing?

Beginning in the 1970s, the federal government introduced *effort reporting* into grant making rules and regulations[8] as an accountability measure. Whenever an award includes as cost sharing the time and effort of university personnel (e.g., faculty members, laboratory technicians, research fellows, staff members, graduate students), the PI becomes responsible for verifying and accurately reporting these commitments to the sponsor. Effort reporting at UMass Boston is done on a special *effort certification form* sent to the PI from ORSP. The form reports the percentage effort and the value of this effort of all individuals associated with the sponsored program as specified in the award document and the budget set up in the PeopleSoft accounting system. The form includes a line for the employee and the PI to sign to verify this amount of contributed effort.

Federal rules require that effort allocations must be "confirmed by responsible persons with suitable means of verification that the work was performed." The responsible person is the PI who should have knowledge of the actual (not only the budgeted) activities of everyone involved with the project. If UMass Boston does not meet its cost sharing commitment with the accumulated value associated with the reported and verified effort, then it must be met by other UMass Boston funding sources (i.e., cash cost share) as described previously.

Any effort committed in a project proposal, whether mandatory or voluntary, becomes a condition of the award and subject to audit. The detailed accounting involved places external constraints on the PI's time that could be better devoted to teaching and research. For these reasons, a number of universities (Harvard and MIT among them) have policies specifying that faculty members must refer to their participation on a sponsored program as an intention rather than a specific time commitment. These universities suggest that faculty members state

[8] OMB Circular A-21, section J.8.(a)-(e)

in their proposals that the university pays them fully for their efforts during the academic year with the understanding that they devote a substantial portion of their time to research, but not explicitly commit effort to a specific sponsored program.

The PI needs to take special care to avoid statements in the proposal narrative that may inadvertently lead the sponsor to conclude that the university is voluntarily committing a specific amount of the PI's time as cost sharing. For example, the PI should replace the statement:

> "Dr. Smith, a Pulitzer Prize winning journalist, will devote 20% of her time, with no cost to the project, if this proposal is funded."

with the statement:

> "Dr. Smith, a Pulitzer Prize winning journalist, intends to provide the PI with assistance and supervision on this project if this proposal is funded."

Are there any consequences of cost sharing to the university?

Gratuitous commitments of cost sharing carry significant financial consequences to the university beyond the costs associated with implementing and documenting the cost sharing. A previous note in this series[9] concerned the general costs of the university that are allocable to the operation of sponsored programs and recovered by the application of a negotiated and approved facilities and administrative (F&A) cost rate. General costs are organized into two major components: (a) the construction, maintenance, and operation of *facilities* in which the sponsored program is conducted (the *F* of F&A); and (b) *administrative* services that support the sponsored program, such as financial management, HR, purchasing, and the operation of the institutional review board (the *A* of F&A). In simplest terms, the F&A rate is the ratio of the total general costs allocable to sponsored programs (the numerator) to the total specific costs of sponsored programs (the denominator) during a reference period. This rate is determined through complex negotiations with UMass Boston's cognizant federal agency (the Department of Health and Human Services) following an analysis of financial reports and related materials.

In some cases, the principal investigator (PI) who is developing a project proposal may request that certain allowable project costs not be charged to the sponsor but rather be borne by UMass Boston. Because these costs are real costs of conducting the project, the PI is in effect requesting that the university share the costs of the project. According to OMB regulations[10], the total of the committed costs of sponsored programs shared by the university, whether mandatory or voluntary, must be included in the total specific costs of sponsored programs, the denominator of the F&A rate calculation formula. When the university includes cost sharing in a research proposal it is stating that these costs are essential to the successful completion of the sponsored program.

---

[9] Please refer to *A Note Concerning the Recovery of Facilities and Administrative Costs of Sponsored Programs.*

[10] OMB Circular A-21, section G

For example, assume that the university received a total of $100 million in the reference period for the specific costs of organized research. The university establishes and the cognizant federal agency concurs that, during the reference period, the general costs to the university for facilities and administrative services associated with these organized research projects totaled $50 million. Then the university's F&A rate is $50 million divided by $100 million or 50%. If the university had agreed to cost share a total of $11 million during the reference period on these organized research projects, then the denominator of the ratio would be $100 million plus $11 million or $111 million and the F&A rate would be $50 million divided by $111 million or 45%. In other words, university resources that are cost shared must be added to the specific costs of sponsored programs. This has the deleterious effect of distributing the university's general costs for facilities and administrative services over a greater base of specific costs of organized research.

Cost sharing, therefore, has double negative consequences for the university research enterprise. Not only does the university not charge the sponsor for the allowable costs of the project, but also the consequent reduction in the university's F&A rate prevents the recovery of the F&A costs of <u>all future</u> sponsored programs. The decision to approve cost sharing—mandatory and voluntary—must be made by weighing the benefits of one additional award against the negative impact the award will have on the university's ability to recover the F&A costs of all sponsored programs for years into the future.

It is the policy of UMass Boston that voluntary cost sharing will not be approved, as there is no benefit to the university and significant financial detriment. Mandatory cost sharing will be considered on a case-by-case basis and with the understanding that the university will cost share only to the extent necessary to meet the minimum specific requirements of the proposal. The university, during times when resources are limited, may choose not to submit an otherwise worthy proposal because of a sponsor's requirement for mandatory cost sharing.

Richard F. Antonak
Vice Provost for Research

Michelle Auerbach
Assistant Vice Provost for Research and
Executive Director Office of Research and Sponsored Programs

July 24, 2008