**KUMCRI Post Award Administration**

**GUIDANCE**

## 1. Introduction

The modern research enterprise encompasses a vast network of organizations investing in basic, applied, and developmental research across all scientific disciplines with the goal of advancing knowledge, developing new medical treatments and devices, protecting our nation, improving the quality of life, and strengthening the economy. Each year billions of dollars flow through the research system spurring innovation, invigorating higher education, and fueling economic growth.

Society benefits from the investments in research made by governments, nonprofit organizations, and private industry. The federal government invests heavily in basic research that forms the foundation for further advancement. Small advancements in knowledge build upon one another and may lead to significant discoveries that in turn lead to cures for diseases, development of new technologies, or even entire new industries. Private industry focuses its resources on applied research and development that will lead to new products and services that can be sold to consumers. Nonprofit organizations fund programs that fit within their mission. New knowledge and initiatives across all fields augment our understanding and contribute to enhancing the world in which we live.

The National Science Foundation (NSF) Higher Education Research and Development (HERD) Survey provides a glimpse into the magnitude of the research enterprise. In 2018, universities reported a total of $79.4 billion in research and development expenditures of which $42.0 billion or 52.9% represented federal funding (National Science Foundation, 2019). Administering these grants and contracts requires compliance with the terms and conditions stipulated in agreements. In particular, the federal government requires compliance with regulations covering not only financial oversight but also a myriad of other compliance areas including but not limited to research with human subjects and animals, conflict of interest regulations, intellectual property oversight, and export controls. The research administration profession responds to the need for institutions to comply with these regulations. Whereas Principal Investigators (PIs) are responsible for implementing projects in compliance with the requirements of grant agreements, institutions are charged with ensuring that the infrastructure is in place for compliance in the form of policies, procedures, and processes, and that PIs understand the requirements to which they must adhere.

The administrative burden that accompanies sponsored programs is substantial. The most recent data suggests that PIs spend 44.3% of their research time applying for and attending to the administration of their awards (Schneider, 2019). In the context of the regulatory requirements and burden that accompany sponsored programs, research administration is critical to the research enterprise. The profession attends to all aspects of grant and contract procurement and management and broadly covers research development, pre-award, post-award, and compliance activities. Professionals working in research administration support the work of investigators who lead projects and act as liaisons with sponsors to help them achieve their goals while simultaneously protecting the institution. This multi-layered role is reflected in the strategic plans and vision of research universities that have multiple departments overseeing the various specialized areas required to comply with sponsor requirements as

well as cultivating the success of the next generation of researchers, who are the lifeblood of institutional success. The charge is a heady one, given the responsibilities and areas of expertise required. This booklet serves as a primer on post-award administration, with an emphasis on financial management of awards. It introduces key areas of that charge to individuals who are new to the field as well as those who wish to expand their knowledge of post-award operations whether their area of focus is pre- or post-award or any other area of research administration.

## 2. Overview of Post-Award Tasks

### Roles and responsibilities

The PI is the individual who is directly responsible for active implementation of the project including hiring of personnel, execution of program activities, any and all purchases that may be required, preparation of progress reports, and overseeing the work of consultants and collaborators. At most institutions, departmental administrators handle the routine tasks under the PIs direction. The institution is vested with responsibility for guaranteeing the infrastructure necessary for ensuring compliance with sponsor regulations. This includes instituting financial systems that allow for unique accounts and no commingling of funds; implementing policies and procedures that facilitate the segregation of duties; ensuring costs charged are allowable, allocable and reasonable; providing compliance infrastructure for such areas as research with human participants and animals, export control, and others; completing financial reporting and draw-down of funds; closing out awards and retaining records. Post-award administrators are the critical team members who ensure this institutional oversight.

The post-award administrator can be thought of as an individual assigned by the institution who is charged with ensuring that effective administration of the award occurs. While the primary responsibility of this individual relates to the financial aspects of the project, this individual serves as a hub for the effective implementation of the project. This individual should have a perspective on the compliance requirements for the project, ensuring that they are addressed by the various offices that are assigned these responsibilities.

Department administrators work closely with researchers at the transactional level – setting up payroll, ordering supplies, and approving travel expense reports. Additionally, they help manage grant budgets and may assist with the preparation of progress, financial, and other required reports.

Central office post-award administrators are responsible for analysis, reporting and cash management. They review expenses charged to awards for allowability, prepare the financial reports and invoices required by sponsors, draw down cash from government agency systems, collect payments from sponsors, and monitor subrecipients.

Department and central office administrators work together to ensure compliance with the terms and conditions of each award and meet sponsor deadlines. Furthermore, the division of responsibility between pre- and post-award varies by institution and department. In some cases, individuals may have responsibility in both areas, and at small predominantly undergraduate institutions (PUIs) there may be limited support at the department or college level. However, regardless of structure, all post-award administrators provide valuable support to researchers.

Although the volume and types of duties each person is responsible for depends on the number, size and complexity of the awards being managed, a busy day may include spending time on any of the following tasks:

**Award set up and modifications**

Central Office Post Award Administration is responsible for setting up new awards and modifying existing awards for changes such as additional funding or time to complete the project. This requires data entry in the financial system. At a minimum, an account must be generated for the award in order to charge expenses to the project. The period of performance in the notice of award dictates the time during which the account is active. The budget is entered in order to monitor planned expenditures to actual charges during the life of the award. Specific requirements in the agreement are noted, reporting requirements are documented, and billing is activated in the system. Finally, a notice is sent to the PI and appropriate administrators informing them that the award is active.

**Charging expenses**

Budget justification and the budget are approved by the sponsor at the time of award serves as the financial plan for the project. Department administrators initiate transactions that result in charges to sponsored projects. These activities include setting up payroll, purchasing supplies, reviewing travel expense reports, and seeking PI approval of subaward invoices for payment.

Central administrators may be required to approve certain expenses charged to sponsored projects such as cost transfers and subaward invoices, but they do not initiate transactions. Dollar thresholds may be institutionally adopted on purchases of equipment and services charges to the project budget during the life of the grant.

**Review expenses**

Department administrators review grant accounts on a monthly or quarterly basis to ensure only approved expenses are charged to the awards and to monitor spending in relation to the approved budget. Central office administrators analyze the expenses charged to grants for allowability when preparing the financial reports and final invoices required by sponsors. At a minimum, this level of review should occur quarterly.

**Initiate, review or approve cost transfers**

Although the volume of cost transfers should be minimized through good internal controls and business processes, they will never be completely eliminated. The transfer of expenses on and off accounts is a high risk area and must follow institutional policy. Departments initiate cost transfers and route them for approval. Research administrators in the central office review these transfers for compliance with institutional policy and sponsor requirements before they are processed by business services.

**Prepare and submit financial reports**

Central office administrators analyze expenses charged to awards during a reporting period and work with department administrators to determine the allowability of questionable items before preparing financial reports and submitting them to sponsors. Preparing accurate and compliant financial reports requires a close working relationship with department administrators who are closest to the research

and the transactions. Department administrators are the ones who maintain records that justify the need for an expense and how it benefitted an award and, when required, they provide it to the central office or auditors.

**Prepare and send invoices**

When required by the sponsor, payment for work performed is received by submitting invoices. Unless specified otherwise in the agreement, central office post award administrators generate and send invoices on a monthly or quarterly basis. Department administrators work closely with the central office to review expenses for allowability before final invoices are submitted in order to receive final payment. This process may vary for clinical trials which have many unique characteristics.

**Issue subaward agreements and modifications**

The nature of research in the 21PstP century often requires the close collaboration of researchers who are located at different institutions. It is not uncommon for scientists to work on a project with collaborators who are geographically scattered across the United States and the world. Addressing subrecipient monitoring policies prior to issuing a subaward is important. As a result, the volume of subawards and amendments issued between universities and other organizations has increased considerably in recent years. Because institutions are organized differently, the responsibility for issuing subaward agreements and amendments may be located in pre- or post-award or split between these areas.

**Review subaward invoices**

Award sub recipients are paid for their work on approved projects by submitting invoices to the pass-through entity (PTE). These invoices are reviewed by the department, PI, and central office for reasonableness in relation to the work performed and the terms and conditions of the agreement before being approved for payment. Due to the high volume of subaward agreements, the processing of monthly/quarterly subrecipient invoices can be a significant task, but must comply with the regulations governing federal awards based on the agreement.

**Reconcile accounts and draw down cash**

When issuing an award to a university the federal agency authorizes the grant recipient to draw down funds from a letter of credit (LOC) account to cover allowable expenses related to the project up to the amount authorized. Universities must have a process in place to reconcile by award the amount of funding authorized with the expenses charged and the amount of cash previously drawn in order to determine the amount to draw each time payment is requested by central office administrators. The schedule of draws is determined by the level of project expenditures and cash flow of the organization, however, common frequencies include weekly, twice a month, monthly, and quarterly. Furthermore, the final draw must be completed before the final financial report is submitted.

**Apply payments and monitor accounts receivable**

Payments received from sponsors come in the form of checks or electronic payment and each one must be applied to the appropriate award. Depending on the number of awards in a university's portfolio, central office administrators may deal with anywhere from a handful of payments to hundreds or even

thousands on a weekly basis. Universities develop processes and procedures to identify and apply payments to sponsored projects. Central office post-award administrators monitor the accounts receivable on awards and follow up with sponsors when payments are delayed.

**Follow up on uncollected amounts**

Central office post award administration is responsible for collecting on cost reimbursable projects. Unless a sponsor sends full payment when issuing the notice of award, accounts receivable are generated when expenses are charged to the award and either an invoice is submitted to the sponsor for payment or cash is requested in a LOC grant payment system. Ideally sponsors pay according to the terms of the invoice, such as net 30 days, or electronically transfer the cash requested in a draw within several business days. However, some sponsors may be slow to pay creating the need for administrators to monitor accounts receivable and follow up on unpaid invoices and cash draw requests.

**Prepare or approve prior approval requests**

Sponsors require award recipients to request a prior approval before certain actions can be taken by institutions to support the PI request. Department administrators notify the sponsored programs office that a prior approval is needed and prepare the letter and supporting documentation that is required by the sponsor. Awards are designated to the institution. ,therefore, institutions designate an Authorized Organization Representative (AOR) in the central office submits the request to the sponsor. No cost extensions, requests to carryover unobligated balances, and budget revisions are three of the most common prior approval requests. Universities that manage hundreds or thousands of active awards submit a substantial number of prior approval requests during the normal course of business.

**Effort Reporting or Payroll Confirmation**

The federal government requires universities to have a process in place to review the salary charged to federal grants after it has been paid to ensure it is reasonable for the work performed. Although institutions have the flexibility to determine the best methodology for meeting this compliance requirement, most universities use effort reporting or a form of payroll certification. Regardless of the process used, central office and departmental administrators work together to ensure accurate and timely results. Therefore, it is important that the institution adopt a policy that maintains a consistent time frequency to review certification records. Even though this is a federal requirement, universities may perform this review on all sponsored projects. Depending on the number of faculty and staff paid on sponsored projects and the frequency with which an institution decides to perform the review, this compliance requirement may require a significant investment of resources.

**Answer questions from PIs, administrators, sponsors**

PIs and department and central office research administrators communicate frequently. On a daily basis research administrators field questions regarding process, allowability of costs, the terms and conditions of awards, and sponsor requirements. As professionals, the goal is to provide excellent customer service to PIs as well as helping peers through sharing the knowledge and expertise gained through experience.

**Be Nimble!**

Post-award administrators must be experts in their area but they must also be nimble. They come in on Monday expecting to handle five specific tasks only to see them overtaken by immediate needs received via emails, phone calls or visits from PIs. It is not uncommon for a sponsor to request information by the close of business the same day. The chapters that follow provide details about these duties to help you navigate the field.

### 3. The Framework for Financial Management

Post award management requires an understanding of the framework that governs the administration of sponsored projects. In addition to the basic financial and compliance infrastructure that institutions are required to have in place, particularly for federal funding, the research administrator must understand what regulations apply to an award and how they interact. The terms of an agreement specify this, oftentimes by incorporating the guiding documents by reference. Thus administrators and investigators must read multiple documents to gain a full understanding of the requirements. Although this chapter focuses primarily upon the basic financial infrastructure and regulatory requirements necessary to successfully manage federal awards, it also discusses other funding types and the interactions between various aspects of the regulatory environment.

### Federal Awards

When accepting federal awards, which comprise over 50 percent of research funding to higher educationS,S it is imperative to understand the hierarchy of legislation, regulations, and specific agency and program requirements that control how an award will be managed. The starting point is the laws that are passed by Congress and implemented through regulations located in the Code of Federal Regulations (CFR) and published in the Federal Register (FR). The regulations governing federal financial assistance awards (e.g., grants and cooperative agreements) are located in 2 CFR 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). The regulations governing federal procurement of goods and services (contracts) are found in 48 CFR - Federal Acquisition Regulation (FAR). Note that some contracts reference the Uniform Guidance as the guiding document for managing specific aspects of the award, in particular the cost principles.

### Uniform Guidance

The majority of federal funding received by universities is in the form of grants and cooperative agreements, therefore, post-award administrators must develop a thorough understanding of the Uniform Guidance. Although written to federal agencies, the Uniform Guidance provides direction to grant recipients. The regulations are divided into multiple subparts, appendices and other sections as shown in Table 1 below. Briefly, the Administrative Requirements (Subparts B through D) provide the standards for managing grants and cooperative agreements, the Cost Principles (Subpart E) establishes the principles for determining the allowability of costs charged to federal awards, and the Audit Requirements (Subpart F) specifies the single audit requirements for recipients of federal awards.

| Section | Description |
| --- | --- |
| Subpart A - Acronyms and Definitions | Explanation of acronyms and terms used in the Uniform Guidance |
| Subpart B - General Provisions | Administrative Requirements |

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|---|---|
| Subpart C - Pre-Federal Award Requirements and Contents of Federal Awards | Administrative Requirements |
| Subpart D - Post-Federal Award Requirements | Administrative Requirements |
| Subpart E - Cost Principles | Principles for determining the allowable costs charged to awards |
| Subpart F – Audit Requirements | Single audit requirements |
| Appendices I-XII | Notice of funding opportunity, contract provisions, indirect costs, hospital cost principles, Data Collection Form, Compliance Supplement, etc. |
| Preamble to the Uniform Guidance | Background and explanation of the Uniform Guidance |
| Additional Resources | References to other sources of information |
| Frequently Asked Questions | Clarifying information |

*Table 1 Sections of the Uniform Guidance*

### Cost Principles

The cost principles are critical for the day-to-day management of federal awards. Although the discussion in this chapter focuses on the composition of costs and the factors affecting the allowability of costs, more detail regarding selected costs is provided in chapter 4. Codified in Subpart E of the Uniform Guidance, these regulations provide the foundation for determining allowable costs. First and foremost, it is important to understand that the total cost of an award is the sum of the allowable direct and allocable indirect costs less any applicable credits. Second, the post-award administrator must understand the factors that affect the allowability of costs. In order for an expense to be allowable, the cost must be reasonable, allocable, treated consistently in like circumstances, and permissible. Furthermore, per the regulations, certain costs are unallowable. As one might expect, there are gray areas and determining the allowability of certain costs on complex awards can be difficult. Therefore, the administrator must become adept at evaluating complex cost issues against the allowability criteria. See table 2 below for more information on the criteria affecting the allowability of costs.

| Criteria | Description | Examples |
|---|---|---|
| Reasonable | • Costs that are ordinary and necessary to perform the award.<br>• The cost must pass the prudent person test, meaning it does not exceed the amount a prudent person would pay in like circumstances at the time the decision was made. | • Chemicals purchased for experiments<br>• Fees for testing samples<br>• Travel to disseminate research results<br>• Publication costs |
| Allocable | • Costs that can be specifically identified as benefitting a particular award or those that benefit multiple activities but can be assigned in accordance with the relative benefit received by an award. | • Lab supplies purchased in bulk for experiments should be allocated among projects based on usage.<br>• Appropriate share of indirect costs. |
| Consistently treated | • Costs must be treated as either a direct or indirect cost in like circumstances. | • General office supplies that support many activities are considered an |

| | | indirect cost and therefore are not charged as a direct cost.<br>• A large number of notepads and pens are required for a conference. This creates an unlike circumstance. The supplies can be identified as benefitting a specific award and charged as a direct cost. |
|---|---|---|
| Permissible | • Costs must be permissible under the terms and conditions of the award and institutional policy. | • Salary above the National Institutes of Health (NIH) salary cap is not allowable and must be covered by the university.<br>• Entertainment costs are unallowable and must be covered by the university. |

*Table 2: Allowable cost criteria*

<u>Direct and Indirect Costs</u>: There are two types of costs charged to sponsored projects. Direct costs are those changes that can be identified with a particular award and are charged directly to a sponsored project. Examples of these costs include the salary and fringe benefits of researchers working on the project, materials and supplies required to perform the work, and travel to disseminate the research results.

Indirect costs are those that are necessary for the overall operation of the entity and cannot be specifically identified with a particular award. Therefore, they cannot be charged directly to sponsored projects, but are recovered through an allocation process. Indirect costs, also known as F&A costs, are classified into two categories: facilities and administration. The facilities component is often referred to as the "cost of keeping the lights on" because it includes the operation and maintenance expenses related to research laboratories, depreciation on buildings and equipment, interest on debt for research facilities, libraries and books.

The administration component consists of the administrative costs that are necessary to support the research enterprise. This includes the costs for business and financial administration, departmental administration expenses (academic activities in department or dean's offices), sponsored projects administration (central office), and student administration and services. Certain administrative costs such as those related to fundraising are unallowable and not included in the indirect cost allocation.

Most universities perform cost studies to develop indirect cost rate proposals that are submitted to their assigned cognizant agency for indirect costs. After review and negotiation, the government finalizes a negotiated indirect cost rate agreement that lists the approved rates and time frame for use. This includes a rate for awards where the work is primarily being done on campus and those where the work is performed off campus. Large complex universities may negotiate separate rates for each major function of the university (i.e., research, instruction, public service).

Indirect cost rates are expressed as a percentage of a direct cost base. The most common base is modified total direct costs (MTDC) which is the sum of total direct costs less equipment and other capital charges, patient care costs, rental costs, tuition remission, participant support costs, and the portion of each subaward in excess of $25,000. PUIs may negotiate indirect cost rates that utilize a salaries and wages cost allocation base. This base may or may not include fringe benefits. As an

administrator, it is important to read the negotiated indirect cost rate agreements for your institution and that of your collaborators because they clearly state the rates and allocation base applied to federal awards.

The amount of indirect costs required to support the research enterprise at a university is substantial. For example, the on-campus indirect cost rate for research is often well above 50%. This means that for every $100 of supplies charged to an award, the university has incurred at least $50 of indirect costs in support of the award. Most universities and non-profit organizations have a negotiated indirect cost rate, but those that do not may use a *de minimus* rate of 10% of MTDC to recover some of these costs without going through the process of negotiating a rate agreement.

Rates negotiated with the federal government should be applied to all federal awards unless specific limitations are written into the funding opportunity. For example, the NIH reimburses indirect costs at a fixed rate of 8% of MTDC for NIH training grants, career awards, and grants to foreign organizations.

Indirect costs are charged by applying the approved rate to the appropriate cost allocation base. The university receives reimbursement for the indirect costs allocated to an award when it draws down the funds or receives payment for invoices it has submitted. The university determines how it will allocate the recovered indirect costs across the institution in support of research.

Indirect costs are actual costs, therefore institutions seek to apply them to all sponsored projects. However, sponsors differ in what they allow. Nonprofit organizations often limit indirect costs to 10 to 15 percent of total direct costs and some may not allow the university to recover any indirect costs.

Institutions must consistently follow their cost accounting practices. While sponsors should bear their fair share of the costs of conducting research, they should not pay for the same cost twice – once as a direct expense and then again as an indirect cost. However, sometimes there are circumstances that justify treating an expense as a direct cost even though it is normally treated as an indirect cost. These are considered exceptions to the cost accounting standards. For example, an award may require printing a large number of training materials for workshop participants. Although printing costs are generally treated as indirect costs, the volume of printing required in this instance creates an unlike circumstance and the printing costs may be charged directly to the award.

*Effort Reporting/Payroll Certification*

The cost principles in the Uniform Guidance contain unique requirements for charging compensation to federal awards. In addition to providing guidance on determining reasonableness, the section titled *Standards for Documentation for Personnel Expenses* (200.430(i)) details the types of records that are required to support the salary and wages charged to federal awards for work performed. According to the regulations, the organization's compensation records must be supported by a system of internal control that provides reasonable assurance that the salaries and wages charged are accurate, allowable, and properly allocated. The grantee must perform an after-the-fact review of the individual's salary and wages paid by the institution (institutional base salary or IBS) from all funding sources (federal and non-federal) to ensure the allocation is correct based on the work performed and to make adjustments to the distribution if required.

Effort reporting and payroll certification are two methods used by universities to meet the "after-the-fact review" requirement. However, the regulations provide grantees with the authority to design their

own methodology based on their own unique business practices and systems of internal control. As a result, the methods used by institutions tend to fall on a spectrum between effort reporting and payroll certification or confirmation. For large research universities, complying with this requirement demands a significant investment of resources. Although electronic systems have been built to increase efficiency and effectiveness, they require time and effort by PIs and administrators across the organization to complete the process in a timely manner. PUIs often struggle to implement an effective system, frequently relying on paper or spreadsheet based manual systems. In fact, effort reporting has been identified by PIs, administrators, Congress, the National Science Board, and other associations as being one of the top administrative burdens related to managing federal awards.

*Administrative Requirements*

Compliance with sponsor requirements begins before an organization submits its first grant proposal and it doesn't end until awards are closed out, audits are completed, and the record retention period for each award has ended. Therefore post-award administrators must have some familiarity with the pre-award requirements in subpart C of the Uniform Guidance which governs grant applications. Two specific areas of interest to post-award administrators in this section are the Certifications and Representations (2 CFR 200.208) and Suspension and Debarment (2 CFR 200.213). Furthermore, post-award administrators must have a clear understanding of the post-award requirements in subpart D which offers the standards for financial and program management, property and procurement, subrecipient monitoring and management, record retention and access, and closeout. Organizations applying for grants must have systems in place to address these areas as recipients of federal funding. This section covers several of the critical administrative requirements.

Certifications and representations: Before an organization can apply for a grant and receive an award, the sponsor may require the applicant to provide assurance that it has the infrastructure in place to manage an award in compliance with the terms and conditions of a potential award. For example, the federal government requires an authorized representative of the organization to certify on an annual basis in the System for Award Management (SAM) that the organization will comply with all of the requirements of an award. This common set of certifications and representations covers financial and programmatic management as well as referencing audit, conflict of interest, and certain public policy requirements.

Suspension and debarment: Recipients of federal grants and contracts are subject to the suspension and debarment regulations. These regulations prohibit the government from doing business with "certain parties that are debarred, suspended, or otherwise excluded" from receiving federal funding in the form of awards, subawards, and contracts (2 CFR 200.214). Before issuing subaward agreements to collaborators or subcontract agreements to vendors, universities must ensure that the organizations and researchers they are doing business with are not debarred or suspended. This information can be checked on the SAM.gov website.

Financial and program management: Effective financial management means universities are required to track the award information, income, expenditures, property, and obligations for each award in a separate account. Grant recipients depend on an effective system of internal controls to ensure that only allowable costs are charged to sponsored projects, assets are safeguarded and protected, and individual transactions are supported by source documentation.

When accepting a grant, the university agrees to perform the proposed work and manage the financial aspects of the project in compliance with all of the terms and conditions of the award. There should be a clear connection between the expenses charged to the award and the work performed. Grantees also must oversee cost sharing and program income, the timing of payments, and the revision of budgets or program plans. Detailed information regarding federal requirements can be found in section 200.300-309 of the Uniform Guidance.

Property standards: Sponsors provide guidance on the ownership, usage, management, and disposition of equipment. Sponsors have the option to retain title to property or vest it with the grant recipient. For institutions of higher education purchasing equipment with federal grant funds, the government often considers the equipment "exempt" and vests title with the university without further obligation. Currently, the federal government has set the threshold at $5,000 and the university must use this amount when managing its federal awards unless institutional policy provides a lower threshold for capitalizing equipment in which case the more restrictive policy is used. Although equipment receives the most attention, the property standards encompass land and buildings, supplies, and intangible items acquired with federal funding.

When a university no longer has a use for equipment purchased with grant funds, the organization must comply with the sponsor's requirements for disposing of the asset. Detailed information regarding federal property standards can be found in 2 CFR 200.310-316. Title for supplies purchased with grant funds usually vests with the grant recipient. However, if the value of the supplies inventory remaining at the end of a federally funded award is more than $5,000, the regulations provide direction on the disposition of the supplies.

Procurement standards: The federal government requires grantees to have written policies and procedures that provide for full and open competition when making purchases. These standards specify the five methods of procurement that must be followed: micro-purchases, small purchases, sealed bids, competitive proposals, and sole source or noncompetitive proposals. The table below provides information on federal procurement requirements. Universities must retain documentation supporting the vendor selection and cost and price analysis.

| Method | Value | Requirements | Purpose |
|---|---|---|---|
| Micro-Purchases | < $10,000 | • No quotations required if the price is considered reasonable<br>• Equitable distribution of purchases among many vendors | • Used for the smallest purchases of supplies or services<br>• Features the least amount of administrative burden |
| Small Purchases | $10,000 - $250,000 | • Quotations from multiple vendors are required<br>• No cost or price analysis | • Relatively simple and informal purchases<br>• Competition among multiple vendors |
| Sealed Bids | > $250,000 | • Requires public solicitation of sealed bids<br>• Awarded to the responsible bidder with lowest price | • Preferred method for construction projects<br>• Price is a major factor<br>• Firm fixed price contract is issued |

| Competitive Proposals | > $250,000 | • Requires issuance of request for proposals with written evaluation methods<br>• Considering price and other factors, the contract is awarded to the responsible organization whose proposal is most advantageous to the project | • Either fixed price or cost reimbursable contract is issued<br>• Used when conditions are not appropriate for sealed bids |
|---|---|---|---|
| Sole Source | | • Solicitation of a proposal from one source | • Competitive process is not used as:<br>  ▪ There is only one source for the item<br>  ▪ There is a public emergency<br>  ▪ The purchase is authorized by the agency or PTE<br>  ▪ The competition is inadequate |

*Table 3 Federal procurement types.*

The micro-purchase and small purchase or simplified acquisition amounts are subject to change. The federal government publishes these thresholds in the FAR at 48 CFR Subpart 2.1. Detailed information regarding federal procurement standards are available at 2 CFR 200.317-.326. Additionally, universities can request an exception to the micro-purchase threshold and may be given authorization to use a higher amount. They also may have more restrictive policies for the purchase of goods and services.

Performance and financial monitoring and reporting: PI is responsible to the sponsor and is required to submit financial and technical reports to the sponsor. Sponsors use the financial and technical reports to monitor the award recipient's progress on a project. The terms and conditions in award agreements determine the frequency and format required for these reports. The programmatic reports provide updates on progress made, which may be the determining factor in whether future funding is awarded. Detailed information on government requirements for financial monitoring and reporting can be found at 2 CFR 200.327-329.

Subrecipient and financial monitoring and reporting: As prime recipients of awards for which subawards are issued, Pass Through Entities (PTEs) take on the role of sponsor to their subrecipients. The PTE must first determine whether the other organization should be considered a subrecipient or subcontractor. A subaward is issued when the collaborator is responsible for a portion of the award and has programmatic decision-making authority. In this case, an assistance relationship is formed and the terms and conditions of the award are flowed down to the subrecipient. A subcontract is issued when goods or services are being procured from a contractor that provides these services as part of its normal operations in a competitive environment. Subcontractors are considered vendors and do not have decision making responsibility for the award. Additionally, the terms and conditions of the award may not be flowed down to the subcontractor.

Before issuing a subaward, PTEs must evaluate the risk of doing business with a subrecipient to determine the appropriate level of monitoring needed to manage the risk. PTE's require subrecipients to submit progress reports and invoices to monitor the subrecipient's performance. Additionally, the PTE must verify that the subrecipient complies with audit requirements and review the subrecipient's audit reports as part of its annual risk assessment.

Although cost reimbursable subaward agreements are the most common, with prior approval from the funding agency, the federal government allows PTEs to issue fixed price subaward agreements with a maximum funding level up to the simplified acquisition threshold which is currently $250,000. Detailed information regarding federal requirements for subrecipient monitoring and management can be found in 2 CFR 200.330-332.

Record retention and access: Federal sponsors require universities to retain records for a period of three years after the date of submission of the final financial report. For awards that are renewed on an annual or quarterly basis, the retention period is three years from the date the quarterly or annual financial report is submitted (2 CFR 200.333). However, universities may have policies that require records to be kept longer, often to meet the requirements of non-federal sponsors.

Closeout: The closeout of an award occurs after the period of performance ends and the sponsor or PTE determines that the work of the project has been completed and all reports have been submitted.

Federal regulations require the submission of final financial reports, final progress reports, final invention statements and possibly other reports no later than 90 days after the end date of the award. However, agencies that have adopted the Federal Research Terms and Conditions (RTC) obtained permission from OMB to allow recipients 120 days to submit final reports. This is an important benefit to institutions managing large complex awards with many projects and collaborators. This example demonstrates how the Uniform Guidance sets overall standards but agency requirements may vary. Detailed information on federal requirements can be found at 2 CFR 200.343.

*Audit Requirements*

There are several ways in which sponsored projects may be audited. Universities may use internal auditors to conduct audits of programs or awards, external auditors may be engaged to perform an annual audit of specific projects, or sponsors may conduct desk reviews, site visits or audits of awards. Section 200.501 of the Uniform Guidance provides audit requirements for federal award recipients. These regulations require universities that expend $750,000 or more in a fiscal year on federal awards (which include student financial aid) to undergo a single audit conducted in accordance with *Subpart F – Audit Requirements* of the Uniform Guidance. Thus, most colleges and universities must engage external auditors to perform a single audit each year.

The Schedule of Expenditures of Federal Awards (SEFA) is prepared by organizations in preparation for the single audit. The SEFA is a summarized list of award expenditures for the fiscal year organized by federal program as listed in the Catalog of Domestic Federal Assistance (CFDA) located on SAM.gov.

The single audit is performed in addition to the annual financial audit of the university's records. State universities are audited as part of the audit of the state government. The single audit report must be submitted to the university's cognizant agency for audit by completing the Data Collection Form (SF-SAC) and uploading the report to the Federal Audit Clearinghouse (https://harvester.census.gov/facweb/ ). Federal agencies review these reports as part of their monitoring of grant recipients and risk assessment. Additionally, single audit reports are available to the public and are reviewed by universities when monitoring their subrecipients.

**Federal Research Terms and Conditions (RTC), Agency Specific Requirements, and Award Specific Requirements**

The Office of Management and Budget (OMB) is responsible for writing and updating the Uniform Guidance, but agencies must implement the regulations. In doing so, they may add clarifications to some areas of the regulations or institute more stringent requirements in specific areas that apply to all awards that they issue. For example, nine federal agencies(e.g., NSF, NIH, Department of Energy, Environmental Protection Agency, National Aeronautics and Space Agency) worked together to develop and implement the RTC which provide uniformity among these agencies with regard to the requirements for research awards issued to institutions of higher education and nonprofit organizations. Therefore, the RTC are incorporated as a term and condition of awards issued by these agencies. The RTC includes three companion resources: Appendix A, Prior Approval Matrix; Appendix B, Subaward Requirements Matrix; and Appendix C, National Policy Requirements Matrix. The Prior Approval Matrix is a helpful guide to navigating where prior approval is needed to make changes to an award and where agencies may have more stringent requirements. The Subaward Requirements Matrix assists the administrator in understanding how the Uniform Guidance applies to institutions of higher education, nonprofit organizations, hospitals, governments, and for profit entities. The National Policy Requirements Matrix lists policies related to nondiscrimination, live organisms, environmental standards, health and safety guidelines, national security guidelines, and other requirements applicable to federal awards.

Other agencies have implemented the Uniform Guidance on an individual basis through various methods, always publishing it in the Federal Register. Additionally, federal agencies publish their own Agency Requirements which clarify the regulations and provide further restrictions on their awards or specific programs. Agency specific requirements are incorporated as a term and condition of each award.

Finally, the grant agreement may contain terms and conditions that are specific to an award. Examples include restrictions on spending for certain budget categories until prior approval is received from the sponsor or requiring prior approval to carryover funds from one budget period to the next.

It is vital to understand how to navigate amongst the various regulations. Order of precedence provides guidance on the set of rules to be adhered to for any given federal award. These are outlined in the documentation accompanying any award and typically are found in the Agency Specific Requirements. Briefly, the order of precedence proceeds as follows:
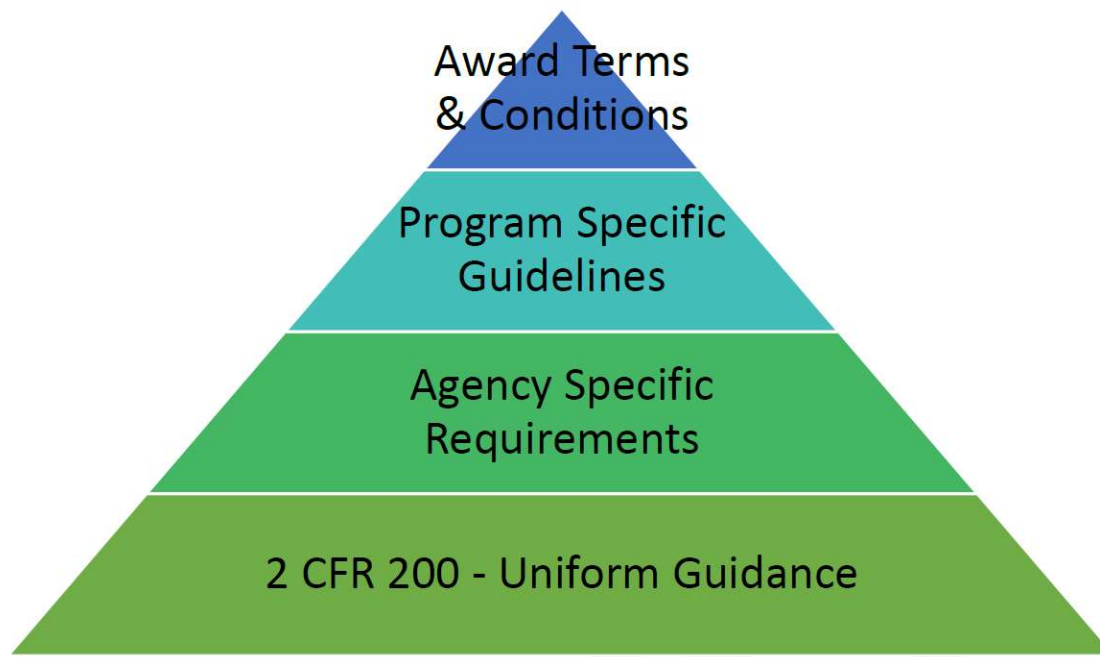
The post-award administrator must also keep current on the changing landscape of regulations and requirements. For example, in 2014, OMB overhauled the regulations applicable to grants by replacing eight circulars with one comprehensive document, today's Uniform Guidance. Regulations and requirements also evolve in the context of societal concerns at any given point in time. More recently, in 2018 the NSF added new reporting requirements through the term and condition "Sexual Harassment, Other Forms of Harassment, or Sexual Assault" The Council on Governmental Relations (COGR) publishes documents on its website that can be helpful to keeping track of the changing landscape.

**FAR**

Maintained by the Department of Defense (DOD) and National Aeronautics and Space Administration (NASA), the FAR is a large complex set of requirements that post-award administrators gain familiarity with when managing federal contracts. Because the volume of contracts is small at most universities, administrators experience a steep learning curve when introduced to this regulation. The FAR was implemented to provide a uniform procurement system for the purchase of goods and services by executive agencies of the federal government. Codified in Parts 1 through 53 of Title 48 of the CFR, the regulation contains general information, administrative requirements, cost principles, and audit requirements for procurement transactions utilizing contracts. Specifically, Part 52 stipulates the requirements for soliciting proposals and presents the contract clauses. Additionally, Part 53 contains standardized forms specific to the procurement process. Furthermore, most federal agencies have developed additions to the FAR that are applicable to contracts that they issue. These additions are implemented in agency FAR supplements such as the Defense Federal Acquisition Regulation Supplement (DFARS).

**Other Awards and Institutional Policy**

It is critical to know if state or local regulations restrict award management too. For example, a state university may be subject to conflict of interest or purchasing requirements that are more stringent than

the federal regulations. In such cases, the institution would be required to uphold the stricter regulations. Institutional policy plays a similar role. For example, if a university adopts a policy that approval must be obtained prior to reallocating funding between any and all budgeted categories, then the institution is required to adhere to that policy as part of its internal procedure even if the federal award would allow a specific budget adjustment to be made. Failing to adhere to the institutions more stringent requirement would be cited in an audit of the award. With that in mind, it is important that institutions not only be cognizant of the full range of policies that impact an award, but also be mindful that they not bind the institution unnecessarily when developing policies and procedures.

**Additional Areas of Compliance**

Sponsored projects are subject to an extensive set of compliance requirements that impact every aspect of an award during its life. In addition to meeting the administrative requirements discussed previously, universities invest significant resources to build the infrastructure required to promote the ethical conduct of research and comply with all applicable laws, regulations and policies, many of which are applicable to the operations of the institution, not just sponsored projects. Examples include compliance with the Americans with Disabilities Act (ADA), Health Insurance Portability and Accountability Act (HIPAA Privacy), and Title IX of the Education Amendments.

Research compliance generally encompasses the non-financial areas of sponsored project management such as conflict of interest (COI), Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), export control, responsible conduct of research (RCR), prevention of sexual harassment and violence, misconduct in science, and stem cell research. Other non-financial areas of compliance to be aware of include healthcare (informed consent, patient privacy), information security (storage, access), audit services, human resources (benefits, protecting minors, affirmative action, visas for foreign visitors), environmental affairs (OSHA, radiation, biosafety, select agents, hazardous waste, chemical safety), and IRS tax laws.

When thinking about post-award grant management it is easy to focus on the financial management and programmatic reporting requirements of awards. However, ensuring compliance with all regulatory requirements forces universities to look at the big picture and delegate responsibility for each area of compliance to specific offices and positions within the organization. This takes coordination by upper management across divisions within the institution and includes sponsored programs as a vested partner in the discussions.

**4. Post Award Financial Management**

Good news! A program officer has contacted your PI to seek additional information. It is likely that an award will be made. The administrators who negotiate agreements and accept awards will be called upon to perform their duties and the wheels likely will be in motion soon to set up a new award. In many sponsored programs operations, the work of the post-award team will not begin until it is time to establish an account in order to implement the project. However, organizational structure determines where pre-award ends and post-award begins. With that in mind, we begin this chapter with a discussion of those steps that lead up to award set-up. We then turn to incurring costs and project implementation; managing partners and program changes; monitoring and reporting; and managing funds and closing awards.

**Negotiation and Set-Up**

*Just-In-Time Information*

Federal agencies may gather information prior to issuing a formal award. In some cases, program officers request clarifying information that arose during the review process prior to finalizing a recommendation on an award and forwarding it for processing to agency grant management specialists. This process is common with the NSF, for example. In other cases, Just-In-Time (JIT) information is requested. This generally includes updated current and pending support information, and documentation that compliance approvals are in place, particularly IRB and IACUC approvals. This requires coordination between compliance offices and central office research administration teams as certain agencies will not release funds until such documentation is received.

*Award Negotiation & Acceptance*

The award negotiation and acceptance process is one of the most critical phases of the life of an award. While these activities often occur before the award reaches the post-award team, it is critical to understand the implications of the clauses contained in the signed agreement. A first consideration is to review the award against the proposal that was submitted. Was the full amount awarded and is the time period what was anticipated? In cases where the amount offered is less than requested, the implication for the conduct of the project can be profound. Staff will need to work with the PI to determine whether a reduced scope is warranted, and if so negotiate with the funding agency to reduce the expectation of what work will be performed. If there will be a reduction in committed effort by the PI and other key personnel, it is important to seek sponsor approval for these changes. In addition, the prime recipient will need to work with any subawardees to reduce their budgets. In some cases, the sponsor may determine the revised budget for each subawardee but in others the PTE may need to work with its collaborators to develop reduced budgets and provide that information to the sponsor as part of the negotiation of the award.

The agreement, including all terms and conditions, must be fully reviewed to ensure that the institution can comply. While some awards may be accepted pro forma, oftentimes it is necessary to negotiate specific points. Because the federal government is the largest single funder for most universities, institutions typically organize their sponsored programs operations to reflect the need for a high level of expertise related to federal assistance awards. Nonetheless, it is critical that the research administrator and the PI understand the agreement and the full range of documents referenced in the award in as much as links to web-based documents typically include agency specific grant management requirements that supplement the Uniform Guidance. It is important to note that acceptance of a grant or cooperative agreement should be communicated to a federal agency by an institutional approved signature on an award notice.

Federal contracts are more complex and require careful review of relevant FAR clauses. The administrator who is new to federal contracts should allocate sufficient time to fully understand these documents. An initial question may be, is the full amount being awarded or is an initial allocation authorized? While easy to determine on a grant award document, this information can be difficult to navigate for someone who is unfamiliar with federal contracts. Because they are procurement actions, the administrator needs to determine what regulations apply. For example, certain requirements are imposed depending upon the overall amount of funding that an institution receives through federal

contracts in a given year. Some institutions may not want to assume some of the reporting requirements that come with federal contracts, therefore it is essential to review each of the FAR clauses to understand the obligations that are being assumed. Finally, if contracting agents include clauses that are irrelevant to an activity or not applicable to a university setting, steps should be taken to eliminate such clauses during the negotiation phase. Contract approval acceptance is executed through signature by an authorized institutional official.

In addition to federal grants and contracts, the research administrator will likely be required to review various types of contracts from many different types of organizations and government agencies. In all instances, the research administrator should work to modify or remove clauses that are problematic, minimizing risk to the institution. This may involve coordinating with legal counsel, who can provide guidance that is crucial to successfully negotiate an agreement. The paragraphs below outline clauses that are of particular importance or common in award agreements.

*Intellectual Property and Compliance Requirements*

Intellectual property ownership: The currency of the university is knowledge and knowledge creation so it is no surprise that intellectual property rights are among the most important contractual terms and conditions of any sponsored program agreement. The Bayh-Dole Act, passed in 1980, which codified university ownership of intellectual property developed through federal funding has led to university investment in the development of technology transfer offices as a key activity overseen by its research leadership. The basic contract language stipulates university ownership of university-developed intellectual property and joint ownership of property developed along with other partners. While these basic precepts are standard in most sponsored program contracts, some sponsors, particularly private sponsors, may seek ownership. It is up to the negotiator to determine whether there are specific instances where this is acceptable to the institution.

Data Ownership: Universities will want to secure ownership of data produced by the project. Public sponsors generally want to ensure data is accessible while private sponsors may wish to secure and even own it. It is important to understand the institution's policies on data ownership as well as any data management plans that were included in the proposal submission.

Confidentiality: is critical to securing the intellectual property of both parties. Confidential information should be clearly identified in writing, and confidentiality clauses should be time limited. Because the university will be obligated to ensure confidentiality of any information it receives, it may be necessary to require students and other parties to sign non-disclosure agreements to ensure that the confidentiality clauses flow down to those working on the project.

Publication Rights: Generally, universities should reject any limitations on publication rights. Some industry-sponsored research agreements may include publication restrictions, however, they should be limited to a waiting period for review (but not for approval). Review periods typically vary from 30 to 60 days.

Export Controls and Participation by Foreign Nations: In recent years, both of these areas have been subject to greater scrutiny by the U.S. government. Export controls limit access to certain technologies and information by foreign countries and foreign citizens, both within and outside of the U.S. Although the regulations are complex, briefly export control requirements are most apt to be pertinent in cases

where technology has the potential for military use or dual commercial/military use; where there are restrictions on the dissemination of the information developed; and/or where there is the potential for access to information by individuals from countries subject to economic or political sanctions. Oversight of the export control regulations is shared by the Department of Commerce (Export Administration Regulations (EAR)), Department of State (International Traffic in Arms Regulations (ITAR)), and Department of the Treasury (embargoes and sanctions). More recently, the U.S. government is requiring grant applicants to disclose all activities that involve a foreign entity.

Contract Terms That Require Review: Contracts contain a wide array of clauses, many of which are standard. However, certain clauses require special attention to reduce risk for the institution such as governing law, indemnification and liability, and insurance and licensing requirements. Other aspects of the contract should be scrutinized for consistency with expectations based upon the proposal and the institution's business practices. Are reporting expectations – both technical and financial - reasonable given the nature of the work to be performed? Does the contract provide contact information stating where reports should be submitted and invoices sent? If amendments are needed, who should be contacted? Is there a deadline for extension requests?

What are the payment terms? Is the contract fixed price – wherein a set price is paid for the performance of a task - with payments tied to completion of deliverables? If so, are there milestones with values attached to them so that partial compensation is received for incremental progress on the project? This can be especially important for large-scale fixed price projects. If the project goes off track for any reason, the institution risks receiving no compensation for the work performed if the contract does not break payment down among a series of deliverables. Is it cost reimbursable, wherein reimbursement is based upon a budget that estimates the cost of performing the work and reimbursement is tied to the actual charges to the account up to the amount stipulated in the contract? Is payment received up front (typical with foundations and some state agencies), at the conclusion of the work, or based upon reimbursement requests submitted on a monthly or quarterly basis or upon completion of deliverables? Finally, if the work is being performed for a foreign sponsor, what currency is being used? Will the institution accept a foreign currency, and if so, is the currency relatively stable or does it fluctuate widely. If the latter, the actual amount reimbursed may differ dramatically from the actual cost of performing the project.

*Agreement Types*

The post-award administrator will receive a variety of signed agreements from federal, state, and local entities and private organizations, both for-profit and not-for profit. The award instrument is used to enter into a formal arrangement for the conduct of a project by the receiving institution. The institution is expected to undertake the project fulfilling the terms and conditions of the award.

Before administering any sponsored project, it is critical to understand the type of award that has been received. For federal awards, Public Law 95-224, adopted in 1978, distinguished between Federal assistance (grants and cooperative agreements) and procurement (contracts) relationships with the former emphasizing the transfer of funds for a public benefit and the latter the payment of funds for the purchase of a good or service. For most sponsored program operations, the majority of funds are received in the form of grant agreements, which provide wide latitude to the recipient in the conduct of the project subject to the terms and conditions of the award. In some instances, the federal agency is

involved in the implementation of the project, helping to shape the direction it takes. Such projects are governed by cooperative agreements. Finally, contracts are procurement actions, subject to the FAR rather than the Uniform Guidance. The chart below summarizes the distinction between these mechanisms and the regulations that govern them.

| Feature | Grant | Cooperative Agreement | Contract |
|---------|-------|-----------------------|----------|
| Intent | Financial assistance | Financial assistance | Procurement of goods or services |
| Purpose | Public benefit | Public benefit | Sponsor benefit |
| Sponsor Involvement | Little to none | Substantial sponsor involvement | Sponsor monitors activity and progress |
| Scope | Recipient defines the project activities, timeline and budget | Recipient defines project activities, timeline and budget | Sponsor defines the scope of work |
| Deliverables | Programmatic and financial reporting | Programmatic and financial reporting | Specific deliverables, reports or milestones |
| Flexibility | PI has more freedom to modify the project and budget, and has less responsibility to produce results | Sponsor is actively involved in the project, modifications and results | PI has minimal flexibility to modify the project and budget, and has a high level of responsibility to produce results |

*Table 4: Comparison of funding mechanisms*

However, administrators may receive many other types of agreements. Through the Intergovernmental Personnel Act (IPA) Mobility Program, the government contracts with non-governmental institutions for the use of their personnel. These actions cover personnel costs to release an individual for a defined period of time to provide services to a government agency. IPAs are neither Federal assistance nor procurement actions, therefore, they are not reported on the Schedule of Expenditures of Federal Awards (SEFA).

Universities also enter into Fee for Service agreements. While these agreements are not formally sponsored projects, some universities manage certain types through the sponsored programs office. For example, an education department may deliver a series of classes for a cohort of teachers from a public school system at a reduced rate. Or, private industry may contract with the university to obtain the research expertise of a faculty member to work on a defined problem. The intent of the business likely will be ownership of the results for this fee for service type work, therefore, some institutions will shy away from entering into such contracts. The critical point is that the post-award officer must understand the terms of any agreement within their assigned portfolio and the obligations that are being assumed. .

Finally, research administrators should have a basic understanding of the distinction between gifts and grants, particularly as it relates to grant agreements from foundations. Many institutions provide guidance to their staff on the delineation between gifts and grants because the line blurs in the area of institutional giving from private sponsors/donors. Gifts, or charitable contributions from individual donors and from most small and/or family foundations are given irrevocably and require no reporting

other than stewardship of the donor. Increasingly, foundations utilize grant agreements and include terms and conditions such as required approvals for rebudgeting, the right to audit expenditures, defined timelines and deliverables, compliance requirements and/or the right to rescind funds for non-performance. These terms may be coupled with a clear statement that the funds are charitable and with a request for documentation of the charitable contribution for IRS reporting purposes. The most effective way to manage these projects is for the advancement office and the sponsored programs office to develop clear channels of communication and jointly come to an agreement as to how such projects should be classified and managed. The chart below distinguishes gifts from grants:

| Factor | Gift | Grant |
|---|---|---|
| Source | Individuals, foundations, nonprofit organization, private industry | Foundations, nonprofit organizations, private industry, government agencies |
| Purpose | Philanthropic contribution, no benefit to donor, donor may specify an area of interest to be funded with the gift | Exchange transaction; some benefit to sponsor, sponsor specifies how the funds should be used |
| Terms | Minimal terms other than use of funds in alignment with donor intent; no specific time period for use of funds | Agreement specifies terms and conditions; specific time period for use of funds |
| Indirect Costs | None | Negotiated indirect cost rates or program specific rates used to recover these costs |
| Reporting | Stewardship reports to donor; no detailed financial reporting required | Sponsor typically requires detailed reporting: progress, financial and other |
| Excess Funds | Retained by university for use consistent with donor intent | Return unspent funds to the sponsor unless paid through a fixed price contract |

*Table 5 Gift versus grant*

*Award Set-Up*

Once the contract is fully executed, the award is ready for set up. The notice of award or contract serve as the starting point because it contains the terms and conditions of the award, statement of work, and the budget and budget justification. These documents drive post-award management. This is a critical moment for effective communication channels and processes to ensure that project implementation will run smoothly. The PI will be eager to start right away, but institutional processes may not be able to respond with the desired immediacy.

The award needs to be set up in the institution's electronic research administration system and the new account code created in the financial system; any remaining compliance issues need to be coordinated and resolved; and subawards need to be issued. Many institutions rely upon checklists to cover the

myriad considerations that may need to be dealt with for each individual award. The following list itemizes some of the information that is entered in the university's systems:

*General Award Information*

• Project Title
• Project Start and End Dates
• Project Location
• PI/Co-PI's and potentially a secondary contact (departmental administrator) who will have access to the account
• Project Classification, e.g. Research, Public Service, Student Support. These categories are based upon the expense function categories published by the National Association of College and University Business Officers.
• Funding Source or Type, e.g.: Federal, Federal Pass-Through, State, Private Non-Profit, Private For-Profit, etc. These categories are needed for reporting purposes.
• Catalogue of Federal Domestic Assistance (CFDA) Number. This number, which is critical for purposes of the Statement of Expenditures on Federal Awards (SEFA), is required to comply with the institution's single audit obligations under the Uniform Guidance. It is essential to obtain the CFDA# prior to project set-up so that the award can be established properly in the financial system.
• Specific terms of the award such as rebudgeting authority
• Report due dates
• Sponsor and department contact information
• Billing information
• Copies of award documents

Budget Information: Institutions differ in their approach to entering the budget in the financial system. Some enter only the total budget or enter the budget in two parts: total direct costs and total indirect costs. Others enter detailed budgets in their financial system. Assuming that a detailed budget was provided to the sponsor and the entire request was awarded, the budget may be translated directly from the proposal to the appropriate account codes. However, the financial system often requires additional categorization. For example, many institutions have multiple categories for compensation. In addition, some budgets must be adapted to the financial system. For example, some sponsors require budgets based upon activities rather than type of expenditure. Others may not require a detailed budget at the proposal stage, therefore, it will be necessary to develop an internal budget when the award is set up. Finally, if the award amount varies from the funding request or changes have occurred, the budget must be reconsidered. In such cases it will be necessary to work with the PI and/or departmental administrator to appropriately allocate the funds in accordance with sponsor requirements and the project needs.

It is important that the appropriate people on campus are given access in the institution's financial system to view and/or edit the award. This may also include systems to manage deadlines for reports and the like. Institutions should assign permissions based on defined roles in their systems. Furthermore, institutions must determine who can initiate transactions and what approvals are required for each type of transaction. This is part of the system of internal controls that safeguards the assets and prevents fraud, waste, and abuse.

The institution should have a standard process in place to notify critical individuals once an award has been established. Who needs to know this information? Clearly the PI, the department administrator, and the sponsored programs staff member assigned to the award. Depending upon the size of the institution and its culture, the chair, dean or even provost may be informed. Some institutions may wish to be sure that their communications office is aware as well as leadership in the research office to facilitate publicity where appropriate. At a minimum, institutions will want to disseminate the account number, the name assigned to the project, time period, and amount.

**Incurring Costs and Project Implementation**

*Project oversight*

Although the Principal Investigator is responsible for the implementation of the project, it is equally true that the institution and post-award administrator share in responsibility for the management of an award. As should be clear by now, the institution must have the infrastructure, including the policies, procedures, and processes to support the award. The importance of this infrastructure is highlighted in the Uniform Guidance and is a centerpiece of today's audit and oversight environment. The sponsored programs operation is charged with being the institutional locus for grants management and the post award administrator should have a broad command of the requirements of any award he or she oversees. While experienced PIs may be quite familiar with the requirements of their sponsors, new PIs will not have this background. They may never have used the institution's financial systems, navigated hiring processes, or monitored a budget. Support with post-award tasks, whether provided by a departmental administrator, central office staff or both is critical. The post-award administrator is critically important to ensuring effective administration of the award, not only providing oversight of financial expenditures but also ensuring that the necessary communication is occurring to enable its smooth function. Such communication begins with a strong working relationship between the pre- and post-award office, but it must extend to the myriad offices that are necessary to implement the project. Post-award administrators will be called on to navigate countless questions during project implementation from procurement requirements to understanding the institution's financial reporting system to how to process paperwork required to carry out the project. While such functions may be handled by departmental administrators, in institutions with smaller funding portfolios, all questions that involve a grant are likely to come to the sponsored programs office.

The post-award administrator receives guidance from multiple sources. First and foremost for federal awards it is necessary to have a good understanding of the Uniform Guidance. However, the Uniform Guidance is only the base. It is necessary to read the entire award document to become familiar with its specific terms and conditions. Even the pro forma one or two page award letter from the NIH or NSF may have specific conditions in them. For example, a recent award received by one author's institution specified that carry over from the previous five-year award was granted, that evaluation costs were capped at a particular dollar amount and that the actual award amount had been reduced based upon the carry over that was anticipated from the old award. In the case of most federal awards, the primary award document contains links to broader agency guidelines and references to the Uniform Guidance. While agencies follow the Uniform Guidance in many areas, agency specific differences exist. For example, some agencies require prior approval if a budget reallocation exceeds 10% of the projected amount in any budget category. Finally, and often overlooked, the post-award administrator benefits

from understanding the project so as to address questions that arise. The proposal contains critical information to understand what is supposed to occur during the course of an award, who is doing what and other details. For example, if prior approval is required to add a subawardee to a project, it is critical to know whether that party was mentioned in the proposal. Even the funding opportunity announcement may include guidance on how funds may be used for certain categories of expenses that are out of the ordinary such as food. Armed with this knowledge the post-award administrator can approach the situation with confidence. This helps build rapport with the PI and also alleviates the need for multiple emails back and forth as an issue is explored and justified.

It is also critical to have a command of institutional policies and state laws and regulations. These also have an impact and may lead to contradictory conclusions. While the federal government offers an order of precedence that provides guidance regarding the various federal documents that govern any award, it does not extend beyond. When conflicting guidelines do exist and there is no guidance about order of precedence, one approach would be to implement the most stringent policy.

Finally, it is critical to point out that relevant terms and conditions need to be relayed to appropriate personnel. For example, an award might state that approval is needed to reallocate between budget categories. The requirement may be buried on page 18 of the contract. The post-award administrator needs to be certain that the PI is aware. Some universities may distribute a check-off sheet that summarizes compliance requirements and out of the ordinary specifications. It can be helpful to develop distinct templates for each agency, tailoring them on an as needed basis.

It may also be helpful to organize a set-up meeting. In many cases, these may target new PIs or large complex projects. Such meetings provide an opportunity to start the project on the right foot and to develop a relationship with the PI. Meetings provide an important vehicle for acquainting the PI with the financial systems that they may need to navigate, providing information critical to the management of the award, and establishing a working relationship that can carry through to successful implementation of the award.

*Allowable Costs*

Post-award research administrators spend much of their time trying to determine if a cost is allowable (necessary, reasonable, allocable, treated consistently, and permissible) on a project. As discussed in Chapter 3, administrators are required to apply the federal cost principles to each transaction to determine whether or not a particular expense is allowable on an award. A discussion of selected items of cost follows with references to the Uniform Guidance:

Alcoholic Beverages: The Uniform Guidance is very clear, alcoholic beverages are unallowable. The only exception is when it is required to conduct the research or programmatic objectives of an award. (2 CFR 200.423)

Books: Library operations and the cost of books are part of the indirect cost rate calculation. Therefore, books are considered an indirect cost and should not be directly charged to an award. (2 CFR 200.453)

Computing Devices: The cost principles in the Uniform Guidance contain updated guidance which reflects the significant changes in technology that have occurred in the 21st century. Acknowledging the role that computers and related devices play in conducting sponsored projects, the guidance clarifies

that these costs may be allowable as a direct cost when they are essential and allocable to the conduct of an award. (2 CFR 200.452)

Conferences: The cost of hosting a meeting, retreat, symposium, workshop, or conference may be allowable if the purpose is to disseminate technical information beyond the recipient organization and the event is necessary for the performance of an award. Agencies are consistent in allowing costs such as speaker fees and facilities rental on their awards, however, the cost of food and refreshments may not be allowable. In these situations, registration fees charged to participants may be used to cover expenses not paid for by the grant. (2 CFR 200.432)

Entertainment: Costs related to entertainment or social activities are unallowable. The only exception to this is cases where these costs have a programmatic purpose and are authorized by the sponsor. (2 CFR 200.438)

Equipment: The cost to purchase a piece of special purpose equipment, such as a spectrometer, that is required for the performance of an award may be allowable as a direct cost. However, it is important to note that prior approval by the sponsor may be required. (2 CFR 200.439)

Exchange Rates: Fluctuations in exchange rates related to foreign currency may increase the cost of performing the work of an award. Generally, these added costs are allowable as a direct cost, but prior approval from the sponsor may be required if the grantee requires additional funds to complete the work or when the additional costs force a reduction in the scope of work. (2 CFR 200.440)

Fringe Benefits: Fringe benefits are costs incurred by employers to support employees by offering assistance in the form of leave (vacation or sick), insurance (health or life), retirement plans (pensions), and unemployment compensation plans, to name a few items. These costs are considered part of an employee's compensation package and are allowable as a direct cost in proportion to the amount of time or effort an employee works on an award. (2 CFR 200.431).

The amount of fringe benefits charged to an award for each employee supported by the project is governed by university policy. Similar to indirect cost rate proposals, most universities perform cost studies to develop fringe benefit rates by employee class in order to obtain a negotiated fringe benefit rate agreement from the federal government. Institutions with a rate agreement apply these rates to the salary and wages charged to an award to arrive at the amount of fringe benefits to be charged. Institutions without a rate agreement charge the award with the actual cost of fringe benefits by employee.

Rate agreements allow grantees to use average rates when preparing proposal budgets and charging awards. As long as the rates do not vary much from year to year, this allows universities to appropriately budget for this cost and minimize the variance between budget and actual costs. When charging actual costs, institutions use average rates when developing proposal budgets, but the actual cost charged to an award depends on the benefits selected by the individual employee. This can cause fairly significant variations in budget versus actual costs for this budget category, thus making it more difficult to manage the award.

General Purpose Equipment: General purpose equipment comprises items such as office furniture, printers, and computers that support multiple activities and cannot be identified with a specific award.

Therefore, these costs are not allowable as direct costs but are part of the indirect costs. (2 CFR 200.430)

Meals: Food for staff meetings or hosting a conference is unallowable. However, there may be special circumstances for which food may be allowable. For example, providing snacks or a meal to research subjects participating in a study may be allowable. Including these items in a proposal budget and explaining the need in the justification informs the agency of the PIs intention and offers the sponsor an opportunity to approve the cost when issuing an award. Otherwise, the grantee may need to request approval from the agency to charge these costs to an award.

Memberships: The cost of an institutional membership in business, technical or professional organizations is allowable as an indirect cost. However, there may be exceptions. For example, if a PI attends a conference to present research results and the cost of the membership is included with the registration fee, it may be allowable so long as it is less than the cost for a non-member to attend and the institution's policy allows the charge. (2 CFR 200.454)

Participant Support: Participant support is a unique budget category most commonly used by the NSF for awards that contain a training, workshop or conference component. This budget category usually includes stipends and travel for participants. It is important to note that agencies require prior approval to rebudget funds out of this budget category. (2 CFR 200.456 Participant support costs)

Pre-Award costs: Generally, an institution may at its own risk, incur costs related to a project in anticipation of an award up to 90 days prior to the effective date of a new grant. However, if an award is not received, the institution will be required to cover those costs with non-sponsored funding. (2 CFR 200.458)

Salaries and Wages: Compensation for work performed on an award is allowable as a direct cost in proportion to the time and effort devoted to the aims and objectives of the project. The salary charges for faculty who perform work on their awards during the summer is calculated at a rate not exceeding the base salary divided by the period to which the base salary relates. For example, many faculty have nine month appointments covering the academic year for which they are paid a base salary. Work that is done during the summer is compensated using the same rate of pay. As discussed in chapter 3, the institution is required to perform an after-the-fact review of salary and wages charged to federal awards. It is important to note that time spent on preparing proposals cannot be charged to a federal award. (2 CFR 200.430)

Students may be compensated for work performed via hourly wages, tuition remission and other forms of payment that may be in lieu of wages.

The NIH salary cap is a statutory requirement that limits the amount of salary that can be charged to NIH awards to the Executive Level II on the federal pay scale. When a researcher's institutional base salary is higher than this rate, the university is required to cost share the amount of salary that is above the limit. Although known as the NIH salary cap, the salary limit extends to all Department of Health and Human Services agencies.

Stipends: Stipends should not be confused with salary or wages, although the terms are often used interchangeably. Stipends are predetermined amounts typically paid to students, interns or trainees as a cost of living allowance. For example, pre-established stipend amounts are paid to appointees on NIH

Ruth L. Kirschstein National Research Service Award (NRSA) training and fellowship grants. Additionally, some institutions pay faculty a set amount for participating in an activity that is over and above their required duties. Although this may be called a stipend by the university, it is considered compensation.

Supplies: The cost of materials and supplies, including the cost of computing devices, required to perform the work of an award is allowable as a direct cost. These are items that cost less than the capitalization threshold for equipment which is currently $5,000. (2 CFR 200.453)

Travel: Travel comprises the cost of transportation, lodging, food and other related items for employees of the grant recipient to perform the work of the project and disseminate the research results. The Uniform Guidance allows reimbursement of actual costs, use of per diems, or a combination of the two methods, however, institutional policy must be followed. (2 CFR 200.474)

Grant recipients are required to comply with the Fly America Act (49 U.S.C. 40118) which requires travelers to use U.S. flag carriers to the maximum extent possible when traveling between the U.S. and foreign countries and between foreign countries. There is a complex set of federal travel regulations that institutions must understand in order to be compliant with foreign travel requirements.

*Cost sharing*

Cost sharing occurs when a sponsor does not cover the full cost of a project and the award recipient pays for part of the cost. When sponsors require grantees to share in the cost of a project, the cost share is considered mandatory and the award recipient is required to meet the commitment by tracking and reporting on these expenses. If a sponsor encourages cost sharing but does not require it, an institution that offers it in a proposal has entered into a voluntary committed cost sharing situation if an award is received. Similar to mandatory cost sharing, the commitment must be met and tracked even if the sponsor does not include it in the award agreement or require the institution to report on it.

Universities may use their own resources, third party contributions, or, in certain circumstances, waive indirect costs to meet their cost sharing commitments. However, they may not use federal funds as cost share for another federal award unless approved by the sponsor. Expenses used to meet cost sharing commitments are subject to audit in the same way as expenses charged to grants. More information is available in 200.306 of the Uniform Guidance.

*Cost transfers*

Expenses should be charged to the appropriate sponsored project when first incurred. However, there are times when it may be necessary to transfer costs either to another sponsored project or off of one. These transactions require additional monitoring to ensure compliance with the cost principles in the federal regulations. The justification for each cost transfer should answer these three questions:

1. Why was the expense charged to the original project?

2. How does the receiving project benefit from the expense?

3. Is the expense allowable and allocable based on the terms and conditions of the receiving project?

Timeliness is critical when it comes to cost transfers because those that are initiated more than 90 days after the expense is incurred require further scrutiny to ensure compliance with federal regulations and institutional policy. Moreover, cost transfers cannot be used to spend down an award that is ending.

**Managing Partners and Program Changes**

Changes to the original research plan, key personnel, budget, period of performance, or other aspects of the project may require approval from the sponsor.

*Expanded Authorities*

The Uniform Guidance addresses prior approval requirements for federal awards in 200.308 Revision of budget and program plans. These regulations allow agencies the option of waiving prior approval requirements for:

• Pre-award spending up to 90 days before the award is issued
• Initiating a one-time no cost extension up to 12 months
• Carrying forward unobligated balances to the next budget period

Prior approval requirements are waived automatically on research awards unless the agency indicates otherwise in the notice of award or agency regulations. Although the Uniform Guidance does not use these words, these so-called expanded authorities have significantly reduced the administrative burden surrounding several of the most frequent changes to awards.

*Prior Approvals Requests*

While sponsors vary widely in their prior approval requirements, changes affecting the scope of work, the involvement of the PI, and certain budgetary changes always require prior approval. Fortunately, sponsors provide guidance on what they consider to be a change in scope. Organizations must have policies and procedures in place whereby PIs and department administrators prepare the required documents and initiate the request within university systems. Colleges and divisions may be required to review and approve the request before forwarding it to the sponsored programs office for review and submission to the sponsor by an AOR.

Prior approval requests are submitted to the administrative contact or grant management specialist named on the award documents. Program officers are kept informed of these requests and may be required to weigh in on the decisions, however, they are not authorized to approve changes to awards. Grant management specialists (GMS) are the only people authorized to approve prior approval requests. The sponsor may issue a revised notice of award or amendment to reflect the approved change to the project. All official communications should be between the AOR and GMS. The university should communicate sponsor decisions to the PI and administrators through defined processes and procedures. The following paragraphs list some of the most common prior approval requests.

*No-Cost Extensions*

Research projects often require additional time to complete. Consequently, grantees submit many no-cost extension requests, which typically ask for an additional 12 months to perform the work. Under expanded authorities, grant recipients are authorized to approve the first no-cost extension for a maximum period of 12 months and submit a notification to the sponsor so that its records can be

updated. All other extension requests to federal agencies and all requests to non-federal sponsors are considered sponsor approved because a formal request must be submitted to the sponsor and the sponsor must approve it. The sponsor dictates the format and method of submission for extension requests, but they usually require a description of the project activities that will occur during the extension period, the estimated budget available, and a detailed budget and justification or statement of how the funds will be used. A project cannot be extended simply to use remaining funds.

When the carryover of unobligated balances from one budget period to subsequent periods requires sponsor approval, an AOR of the university should submit a formal request that includes the scientific justification for the use of the funds, a detailed budget and budget justification, and the reason for the unobligated balance.

*PI Changes*

There are three types of changes involving PI's that require sponsor approval. First is a change in PI. Sponsors issue awards based on the merits of a proposal and this includes factoring in the knowledge, expertise and experience of the PI. If a PI must step down, the university is required to submit a prior approval request to name a replacement. If there are multiple PIs on a project, the university will likely request that one of the Co-PIs be named as the new PI. This is a straight forward request when the sponsor believes the new PI has the qualifications and expertise to complete the project.

Second, sometimes the PI disengages from the project for a defined period of time. If the period will be at least three months or if the PI reduces time devoted to the project by 25% or more, the prior approval request should include an explanation of why and how the research will be accomplished.

Finally, when the PI leaves the university, the university has two options: keep the award and request approval to name a new PI or relinquish the award to the PI's new institution. In either case, a detailed request should be submitted to the sponsor and it may include a subaward to the institution that does not have the award once the PI moves. This is because the work may be performed at both the original and new institutions.

**Monitoring & Reporting**

Universities must build monitoring into their business practices. The roles and responsibilities of PIs, department administrators, college and division level staff, and sponsored programs staff should be clearly defined. In the department, purchases are made and payroll authorized which creates transactions that are posted to grant accounts that are monitored for spending in relation to the budget. Monitoring is also used to ensure prior approval requests for revisions to the budget are completed when required by the sponsor, thus avoiding the need to submit late requests.

Meanwhile, accountants in the central office monitor the spending on awards in their portfolios. They may use tickler systems to raise a red flag when a project becomes overspent or when the spend rate of an award is outside an expected range. They also review expenses charged to awards when preparing financial reports. Moreover, they may ask departments to provide justification for questionable expense items to determine allowability, especially in high risk areas such as food, office supplies, end of period expenses, and post period expenses. At small PUIs, non-financial personnel may monitor spending on a quarterly basis and confer with financial staff to discuss questionable expenses.

Departments and central office work together to ensure that only allowable costs are charged as direct costs and that the proper amount of indirect costs is charged to awards. This partnership is necessary for the completion of accurate financial reports and invoices that comply with the terms and conditions of each award.

*Subrecipient Monitoring*

Many projects require collaborations that involve researchers from multiple institutions. One institution takes the lead and receives the award and then passes on a portion of the work to collaborating researchers by issuing subaward agreements to their institutions. As the lead institution, the PTE takes on the role of sponsor to the collaborating institutions. Consequently, PTEs must have the processes, procedures and internal controls to manage the issuance of subaward agreements and amendments; review, approval and payment of subrecipient invoices; and the communications necessary to monitor the progress of work performed by subrecipients.

Once the PTE determines that a subaward is the appropriate method for working with the collaborating organization, the PTE verifies the subrecipient's information in System for Award Management, Registration and Renewal (SAM), conducts other compliance checks to ensure the entity is not restricted from doing business with the federal government, performs a risk assessment, and requests the information required to prepare the agreement and complete Federal Funding Accountability and Transparency Act (FFATA) reporting from the subrecipient.

The risk assessment is used to determine the monitoring that the PTE will incorporate in the agreement and perform for that subrecipient. Factors that are used to assess a subrecipient's risk include prior experience with the organization, results of audits including single audits in compliance with the Uniform Guidance, the type of entity and whether it is foreign or domestic, and the sophistication of its financial management systems. As the level of assessed risk increases so does the level of monitoring that is required.

Monitoring activities are designed to ensure the subrecipient is complying with the terms and conditions of the award and performing the scope of work. At a minimum, subrecipients are required to submit financial and performance reports to the PTE and the PTE is required to verify the audits of subrecipients. If additional monitoring is deemed necessary, the PTE has a spectrum of options available from something as simple as requiring the attachment of supporting documentation for every invoice to conducting a comprehensive site visit.

Subaward agreements flow down the terms and conditions of the prime award and stipulate the reporting and invoicing requirements, scope of work, budget and budget justification. The Federal Demonstration Partnership (FDP) maintains a set of standard templates that many universities use. Agreements are issued at the beginning of an award and modified as required during the period of performance through amendments. Two of the most common reasons for amending subaward agreements are to issue additional funding and to extend the period of performance.

Subaward agreements set the frequency and timing of financial reports or invoices that are required. The PTE must ensure the final invoice is received from the subrecipient in time to process it before the final financial report is due to the sponsor. For instance, when the prime award requires submission of the final financial report within 90 days of the end of the award, the PTE should require subrecipients to

submit final invoices within 60 days of the award end date so that the PTE has 30 days to prepare and submit the financial report to the sponsor. Tighter deadlines would make it difficult for either organization to comply with the requirements.

When a subrecipient submits an invoice for payment, the PTE reviews the invoice to ensure it complies with the terms and conditions of the award and the work being performed. PIs should review invoices and certify that the costs are reasonable for the work performed by the subrecipient. Departmental administrators support the PI by reviewing the details of the invoice including the invoice period, current and cumulative costs, and types of costs charged to ensure costs are appropriate and allowable. Invoices should not be submitted to the finance office for payment until the review is complete and approval has been received.

*Reporting or Deliverables*

Sponsors require reports or deliverables in return for funding projects. Noncompliance is taken very seriously and may impact future funding. For example, new funding increments may not be released until reports are up-to-date and accepted. In addition, sponsors such as the NSF will not award a new grant if a PI has an overdue report on an award.

Sponsors establish the frequency and due dates for required reports in their guidelines and award documents. The most common frequency for financial and progress reports is annual. Other reports may be required throughout the life of an award or at the end of it. Generally reports are due 45, 60, 90 or 120 days after the end of the award or budget period. Sponsors usually require a group of final reports at the end of an award – final invoice, financial, progress, and invention statements.

The university should clearly define the roles and responsibilities for meeting these requirements. Generally, the sponsored programs office is responsible for preparing and submitting financial reports and invoices, cash management, and assisting with the submission of progress reports. PIs, with the support of department administrators, are responsible for preparing technical or progress reports and other scientific deliverables, reviewing the financial reports, and documenting cost share. The sponsored programs office may involve the dean's office when technical reports are not submitted or deliverables are not accepted by the sponsor. PIs and the sponsored programs office collaborate on the preparation and submission of other reports that may be required.

Financial Reporting: The financial report for federal grants is Standard Form (SF) 425 - Federal Financial Report (FFR). The financial information reported is cumulative through the period covered by the report and amounts are shown in aggregate - no detail is provided. The SF 425 is divided into four sections: federal cash, federal expenditures and unobligated balance, recipient share, and program income.

Federal agencies may require grantees to complete the cash section of the FFR on a quarterly basis. This is separate from reporting on expenditures, cost share and program income which are often done annually. When awards are funded incrementally, the federal agency may not issue the next year of funding until the annual FFR has been submitted and approved. Therefore, it is critical to submit these reports on time.

Other sponsors may require more detailed financial reports such as a comparison of budget to actual expenses by budget category for the current period and cumulatively. It is important for the grantee to understand and comply with the sponsor's requirements.

Technical or Progress Reports: Technical or progress reports provide the sponsor with information regarding scientific progress toward the aims, objectives and tasks specified in the award documents. For federal awards, in addition to supplying technical information, the Research Performance Progress Report (RPPR) requires grantees to report on the estimated unobligated balance. If the estimate is greater than 25% of the approved budget for the reporting period, the grantee is required to provide an explanation and a plan for the use of the funds in the next budget period. The sponsored projects office should work with the PI and department administrator to ensure the estimate is accurate.

Invention Statements: Federal awards require grantees to submit an invention statement when an invention is conceived or reduced to practice. At the end of an award, a final statement is required, confirming whether or not any inventions were produced. Other sponsors may have reporting requirements for inventions. The sponsored projects office works with the PI, department and technology transfer office to ensure accurate reports are submitted.

Other Reports: Sponsors may require other reports. For example, FFATA reporting is applicable to prime grant recipients who issue subawards valued at more than $25,000 under a federal award. Once the level of funding awarded to a subrecipient crosses the $25,000 threshold, the prime recipient is required to enter information about the subrecipient and the award in the FFATA Subaward Reporting System (FSRS). This subaward information is made available to the public on USAspending.gov. The sponsored projects office is responsible for submitting these reports.

Some federal contracts require Small Business Contracting Plan reporting or Service Contract Reporting. The former must be submitted using the Electronic Subcontract Reporting System (eSRS) for all periods of the project, whether or not there is an active subcontract during the reporting period. The latter is reported in SAM.gov. Post-award administrators should familiarize themselves with the administrative requirements of the award to see if these or any other types of specialized reports are required. Finally, the federal government may require an equipment report which would entail listing all of the equipment costing $5,000 or more that was purchased with the grant funds. The sponsored projects office is responsible for preparing and submitting these reports.

**Managing Money Matters and Closing Awards**

*Cash or Revenue Management*

Sponsors have several options for dispersing cash to grant recipients. First, they may send the money with the award. This is often the case for grants from private foundations. Second, sponsors may send the money in installments based on a predetermined schedule that is identified in the award documents. Common for fixed price awards, the payment schedule may be based on tasks completed or the budget period of an award. Third, sponsors may require grant recipients to seek reimbursement for costs incurred by drawing down funds from a sponsor system. This is the most common way that federal agencies send grant funds to awardees. Fourth, sponsors may require award recipients to send invoices to seek reimbursement for costs incurred. This payment method is most often used by state agencies and other non-federal sponsors. Subrecipients also use this method to bill PTEs.

Award documents provide the payment information that grant recipients need to determine how they will collect the cash. Effective financial management systems require universities to monitor their accounts receivable and follow up with sponsors when payment for submitted invoices is not received,

cash draws requested in sponsor systems are not approved, and scheduled payments are not received as planned. Universities should have procedures in place to minimize the time between the expenditure of grant funds and the collection of cash as well as to minimize the amount of accounts receivable that is uncollected and therefore must be written off as a bad debt.

The frequency with which organizations draw cash from sponsor systems is determined by the organization's needs. The timing can range from quarterly for small organizations with few awards and sufficient working capital to multiple times a month for large research universities that expend millions of dollars each year on research.

*Program Income*

The Uniform Guidance (200.80) defines program income as the gross income earned by an award recipient as a result of the activities of a federal award during the period of performance. For example, the fees charged for the use of equipment are considered program income. Sponsors provide guidance on what is considered program income, how it can be used, and how it should be reported. Universities usually treat program income as an addition to the award and use it for the purposes of the award. Some sponsors treat program income as a reduction to the award or allow it to be used to meet cost sharing commitments. Program income earned after the award ends is not subject to sponsor rules or regulations. Detailed information can be found in 200.307 of the Uniform Guidance.

*Closeout and Retention*

While closing out an award occurs once an award ends, post-award administrators should work with PIs well before the end-date of a project to ensure that the process will run smoothly. Through monitoring and communicating with faculty throughout the term of an award, the post-award administrator minimizes the potential for surprises such as unanticipated last minute expenses or requests that may be deemed questionable such as requests to use up the remaining funds.

The process of closing out an award begins soon after it ends. Although sponsors and award recipients go through their own processes for closing out awards, both verify that:

• All reports have been submitted and accepted (e.g., final financial, progress, invention statement, etc.)

• Cash has been drawn or final payment received

According to the Uniform Guidance (200.343), all reports must be submitted no later than 90 days after the end date of an award. However, agencies that implemented the RTC have extended the due to 120 days after the award ends. Other sponsors may have different reporting requirements as documented in the award terms and conditions. Additionally, final reports for subawards have earlier deadlines in order for the PTE to meet its reporting deadlines.

Universities go through a checklist of items when closing out an award. PI's, department administrators, and the sponsored programs office work together to ensure only appropriate expenses are charged to the grant account, all required reports are submitted to the sponsor, any residual balance is transferred (if applicable), encumbrances for salaries or other items are removed from the account, all documents are filed, the grant account is closed in the electronic system, and the grant records are retained

according to institutional or sponsor policy. It is critical to maintain complete and accurate grant files because auditors may request information related to an award long after it has closed.

**Final Considerations**

The post-award administrator is critical to the research administration enterprise. By introducing critical areas of post-award financial administration, this booklet is designed to help new and experienced administrators navigate its complexities. Knowledge of these areas coupled with effective communication between PIs, colleagues, and others across the institution, leads to the successful management of sponsored programs activities. The booklet concludes by focusing on post-award administration for primarily undergraduate institutions (PUIs) and tools for addressing the questions that arise for all post-award administrators.

**Special consideration for PUI's**

Post award management of sponsored projects encompasses project implementation as well as financial and regulatory compliance. It is inherently complex. Large research-intensive institutions staff multiple offices to deal with the myriad regulatory areas that accompany federal grants. The institution that receives $500,000 per year in funding must comply with the same regulatory requirements as the university that receives $1 billion, but without the personnel and other resources. Commonly referred to as Predominately Undergraduate Universities (PUIs), these colleges and universities vary widely. Some may receive tens of millions of dollars in sponsored programs funding a year while others receive less than one million. Many do not have departmental administrators. Some may only have a one- or two-person sponsored projects office, charged primarily with assisting faculty members in securing external funding, along with limited support for financial management located in the finance office. Larger institutions with more funding may have a larger sponsored projects office with post-award financial support situated in that office or the finance area.

It is not surprising then that post-award provides special challenges for the PUI. Often, the institutional emphasis around creating a sponsored programs office is on pre-award, that is, on getting the grant. For the smallest institutions, financial management of awards is folded into the work of the finance office where grant duties may comprise only a quarter or a third of an accountant's workload, and the work of grants management may not be understood or fully appreciated by others in the office. Since these accountants are not really immersed in the world of sponsored projects, they may not see themselves as research administrators and neither do their supervisors. Consequently, professional development opportunities specific to research administration are essential for the success of the accountant straddling research administration and more traditional accounting duties.

At these institutions, the sponsored programs office is responsible for developing much of the infrastructure to support research administration and duties may extend to oversight of post-award non-financial compliance areas such as research with human subjects, animal subjects and the like. Furthermore, irrespective of the amount of funding and size of the PUI, the finance office has a critical role in building the financial infrastructure required to successfully manage awards and comply with federal administrative and audit requirements. Post-award financial administrators provide valuable support to PIs by helping them understand the regulations, terms and conditions of their awards, and institutional systems and processes.

Additionally, seeking out partners across campus that may have a shared interest in particular areas of post-award management and project implementation will help shape the infrastructure and improve the customer service provided to PI's. Implementation of sponsored projects involves multiple offices from human resources to accounts payable to housing and others, therefore, working with these offices to help facilitate the work of individual projects is critical.

Working at a PUI has tremendous opportunities for the research administrator. Part of this is the opportunity to influence the overall sponsored research agenda in ways that are not possible for many post-award administrators in complex research universities. At PUIs the sponsored programs officer often has a strong voice on campus and it is important that the research administrator become an advocate for the entire spectrum of activities needed to manage sponsored programs. This includes ensuring that other offices and leadership understand the potential risks of insufficient infrastructure for post-award management. This could help build institutional support that will not only enhance compliance but also will support the campus climate for the conduct of sponsored programs which in turn can help to build the institution's portfolio of funded projects. The research administrator at a PUI should evaluate risk across compliance areas to determine where efforts are best placed. NCURA's *Regulation and Compliance* is a helpful guide that provides information on myriad regulations that apply to sponsored projects. In addition, some institutions have developed risk matrices that are used to assess and prioritize potential risk areas.

Most importantly, it is essential to build a strong partnership between pre- and post-award administrators and to take advantage of professional networks. Information sharing can go a long way toward building strong collaborative relationships while enhancing institutional compliance. Research administrators with differing perspectives who work synergistically are able to provide a seamless experience for the PI from proposal submission to award management.

Research administrators are by nature a collegial group that are willing to share with their colleagues. Networking with others in research administration opens the door to a wealth of information that can be a critical lifeline to accountants and sponsored programs personnel at small PUIs. Although effective communication is critical for all grant recipients, it is especially critical for research administrators at PUIs.

**Help! Where Do I Start When Searching for the Answer to a Question?**

How many times a day or week is a research administrator asked a question for which he/she doesn't know the answer? For people who are new to research administration this happens all the time and it can be overwhelming. However, it can be just as challenging for experienced administrators because there is not always a clear answer. "It depends" is the beginning of many responses because the regulatory environment is complex and includes gray areas. The key is to know where to look for information, how to analyze the data, and to become comfortable making judgement calls. Below we offer resources to help people problem solve their way through these questions and gain confidence in their abilities.

*Notice of Award or Agreement*

The first place to look is the notice of award, contract, or agreement. These documents are filled with critical information including references to laws, regulations, and policies that may not be included in their entirety. Administrators must become adept at following the trail of references to the source documents, understanding the content, and applying the information to specific awards. Agreements also contain terms and conditions that are specific to the award such as requiring prior approval for carryover. Even if these terms are easy to find in the document, they may be complex and difficult to understand. Therefore, it may be helpful to consult with the person who negotiated the agreement in order to understand the intent of certain clauses.

*Sponsor Guidance*

Federal agencies and other sponsors publish policy guidance to help grant recipients understand how they operate. For example, NIH publishes the Grants Policy Statement (GPS), NSF issues the Proposal and Award Policies and Procedures Guide (PAPPG), and the Department of Education publishes the Education Department General Administrative Regulations (EDGAR). Sponsor handbooks provide detailed information on how to interpret policy and apply it to awards they issue. Post-award administrators rely heavily on this guidance.

*Federal RTCs*

The Federal RTCs are posted on the NSF Research Terms and Conditions website. They implement the Uniform Guidance, provide clarification, and include several resources that can be used to answer questions such as the Prior Approval Matrix, Subawards Requirements Matrix, and National Policy Requirements Matrix. The RTCs have been adopted by nine federal agencies including NIH, NSF, NASA, and EPA. Other agencies such as the Department of Defense have adopted their own agency specific terms and conditions.

*Funding Opportunity Announcement (FOA)*

FOAs are a good place to find program specific guidelines including information about what is expected, required, allowable, and unallowable. Although proposals must comply with the requirements in the FOA, compliance doesn't end there because the FOA is incorporated by reference in the award agreement. Consequently, the FOA is a valuable resource for post-award administrators. These announcements may be referred to by other names such as: Notice of Funding Opportunity (NOFO), Request for Proposals (RFP), Broad Agency Announcement (BAO), Program Announcement (PA), and Request for Applications (RFA).

*Federal Regulations*

Federal grants and cooperative agreements are governed by the Uniform Guidance while federal contracts are governed by the FAR. Both sets of regulations are published in the CFR. Although universities deal with the Uniform Guidance more frequently, when questions arise, it is essential to check the terms and conditions of the award to determine which regulations are applicable.

*Websites*

The vast majority of sponsors publish information regarding award management on their websites. The frequently asked questions (FAQs) often found on these websites can be extremely helpful when looking

for answers to questions that might not be clearly addressed in policy guidance. Universities also publish comprehensive information related to the management of sponsored projects on their public websites and internal portals. These resources elaborate an institution's processes and procedures as well as assigned roles and responsibilities. Since research administration is a very collaborative profession, searching the public websites of other universities can be a good way to learn what other institutions are doing.

*Training*

Research administration is a profession that offers a variety of opportunities for people to advance their knowledge and grow as professionals. Universities develop their own training programs and support employee attendance at conferences, workshops, and courses offered by professional organizations and sponsors. This includes the numerous professional organizations that support the research administration profession such as:

• Council on Governmental Relations (COGR)

• Federal Demonstration Partnership (FDP)

• National Council of University Research Administrators (NCURA)

• Society of Research Administrators International (SRA)