SPONSORED RESEARCH HANDBOOK

An overview of policies and procedures governing sponsored research at the UMD

Prepared by: The Office of Research Administration, Division of Research

Revised: September 2000

Additional Revisions:
January 2002
November 2003
April 2006
August 2014
October 2014
January 2019

Table of Contents

Chapter 1: Introduction

This handbook sets forth policies and procedures applicable to the development and administration of proposal preparation, proposal submission, award acceptance, and award administration for all externally sponsored projects on behalf of the University of Maryland, College Park (UMD) for research or other purposes. Having this central source of guidance internally ensures that funds provided from external sources to support research and other projects are administered in accordance with UMD policies, State of Maryland law, and those of external sponsors. External funding includes both governmental and private organizations.

Faculty and staff members who conduct sponsored projects under UMD auspices have an important public, as well as personal, responsibility to manage those projects carefully. This Handbook will assist research investigators to fulfill that responsibility. Investigators and administrators should be mindful that portions of this Handbook may be superseded by policy memoranda, or changes in sponsors' policies and regulations. While every attempt is made to keep the materials inclusive and current, ultimately the most current information will be found in specific sponsor documentation and award documents. As updates occur, these policies and procedures will be updated. This handbook has been designed so that occasional revisions to particular sections may be issued and inserted as occasion demands.

This handbook provides a comprehensive end -to -end policy and procedural guidance in line with UMD's research vision beyond the beginning and end of an award lifecycle, but rather on the continuum of research, and research results as they impact within and beyond the research enterprise. The purpose is to further the concept of a comprehensive process inclusive of proposal preparation, award administration and the broader impact of the research. http://www.ora.umd.edu/resources/um-policies.

The vision of a research continuum for strategic impact focuses on five key areas: research development, research support, innovation cultivation and licensing, economic and social impact, and storytelling and reporting. https://go.umd.edu/researchcontinuum

The purpose of this Handbook is to guide the user through the necessary steps and to provide the rules and regulations that apply when submitting a proposal or administering an award, and is intended primarily for the faculty and administrators of the UMD campus.

UMD's Sponsored Projects Responsibilities:

As stated in the following excerpts from UMD's mission and goals statement, the sponsored projects office's responsibilities are to:
- "Ensure that the administrative operation of all campus units… ***provide responsive, customer-oriented service to all of the UMD's constituencies***."

- "Continue to reallocate resources each year to support strategic initiatives that advance progress toward the **UMD's overall goals for excellence**.

The goal of UMD **sponsored projects responsibilities** is to maintain a culture of excellence. In order for UMD to meet its responsibilities the following items must be effectively met:

- Financial and administrative compliance
- Safeguarding all assets
- Spending funds in accordance with the authorized purpose
- Developing and implementing systems to ensure proper stewardship of funds, i.e., Internal Controls
    - Financial management systems
    - Procurement systems
    - Time & effort reporting systems
    - Monitoring activities
    - Adherence to terms & conditions of award

In addition, UMD as a recipient institution must have an adequate grants management capacity for sponsored research projects. The principal investigators must not have overdue annual or final reports, or no other outstanding issues with UMD or principal investigators. These concerns are reviewed by grants officers prior to awarding a sponsored research project.

Financial & Administrative Compliance:

Foremost among Division of Research sponsored projects responsibilities is ensuring financial and administrative compliance. The policy detail is addressed in the later section of the Handbook identified as: **Charges to the Project** and **Ethics and Research Compliance**. They include the following:

- Compliance with certifications and assurances
- Expenditure of funds according to laws, regulations, policies, procedures, and award terms and conditions
- The effective management of public funds to maximize research outcomes
- The avoidance of fraud, institutional mismanagement, and poor management of sponsored funds

Uniform Guidance:

2 CFR 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (known as the **Uniform Guidance**) dated December 26, 2014, outlines the principles for determining the costs applicable to research and development, training, and other

types of sponsored projects performed by colleges and universities under grants, contracts, and other agreements with the Federal Government. The **Uniform Guidance** combines, updates, and replaces guidance that was previously contained in eight different Office of Management and Budget (OMB) circulars such as the A-110 (administrative requirements), A-21 (cost principles), and A-133 (audit requirements).

Terms and Definitions:

Sponsored Project vs. Gift:

The term "sponsored project" (or "sponsored program"), is used to distinguish this funding from a "gift" or "grant" provided by a donor. The term "sponsored project" relates only to a research, service, or instruction project that is conducted with support provided by some entity external to the campus (the sponsor, governmental or private organizations). A sponsored project grant or contract is based on a commitment from UMD to carry out one of those programs in keeping with terms agreed upon by both parties. The sponsored project will always require some use of UMD resources and the sponsor will receive some benefit (which could range from a single technical and financial report through substantial material benefits).

Sponsored project funding is issued through various types of award instruments. Awards are generally defined as either Grants or Cooperative Agreements (financial assistance instruments) or Contracts (procurement instruments). These are distinguished by restrictions on use, engagement of the sponsor, and by primary beneficiary:
- Grants support specific projects in relation to instruction, research, and/or public service. Project proposals are generally initiated by UMD's principal investigators/researchers. The funding must be used according to the project proposal and any sponsor-specified award terms.
- Cooperative Agreements represent a particular type of grant that requires a written agreement and anticipates substantial involvement between the sponsor and UMD during the performance of the project. Cooperative Agreement proposals are generally initiated by the sponsor.
- Contracts represent formal, mutually beneficial agreements between UMD and sponsor, generally involving projects initiated by the sponsor. Contracts are written, negotiated, and enforceable by law, creating a quid pro quo relationship between UMD and the sponsor.

A gift or grant from a donor may carry a stipulation as to its use, but there can be no expectation of benefit back to the donor including the technical and financial reports common to sponsored project grants and contracts; it is donative in its purpose.

The differences are based on the purpose of the funds provided and are completely independent of the source of funding. The distinction is important because project directors, departments, and

the campus are required to administer the agreements and account for the funds in different ways.

In addition, there are a number of terms and definitions applicable to the sponsored project business process, assisting the researcher and the UMD business staff to better understand the policy content within this Handbook.

The Office of Research Administration and the Sponsored Projects Accounting and Compliance Office sponsor the Certificate Program, which provides training to UMD staff and faculty on many of the sponsored research topics presented in this handbook.

Regulations:

Regulations are the rules issued by agencies and are designed to guide the activities of the agency's employees and those regulated by the agency. Regulations function to ensure uniform application of law, and are issued by various federal departments and agencies to carry out the intent of legislation enacted by Congress. Sponsored projects are governed by the Uniform Guidance.

Government agencies, and organizations that participate in the activities governed by respective regulations, for instance institutions receiving federal financial assistance, issue policies, procedures, standards, and guidelines, to further clarify expectations for compliance with regulations. Policy is a high-level expectation of principle that is uniform across a program or an organization. A procedure provides the step-by-step actions to implement a given activity while the standard is the lowest level of control, e.g., frequency that must be adhered. Guidelines provide an overview of how to perform an activity.

Policies, Procedures, Standards, Guidelines:

Policies and procedures are designed to ensure that all major decisions and actions that take place within a prescribed scope of a program activity, are consistent with the intent of a governing regulation.

Policies, broadly, are principles, rules, and guidelines formulated or adopted by an organization in service of a regulation and its articulated long-term goals. To ensure compliance, policies (and associated procedures) are communicated in a transparent, accessible manner.

Procedures are the specific methods employed to express policies as the actions of the day-to-day operations of an organization. Together, policies and procedures ensure that governing regulations are translated into steps consistent with legislative and regulatory intent.

Standards describe quantifiable measures for a specific policy, for instance setting an expectation of frequency of an activity, like reporting.

Guidelines provide additional, broad advice in following a procedure or process, as opposed to providing a set of mandatory and precise requirements or standards.

Derivations of Regulations, Policies, Procedures, Standards, and Guidelines:

Action	Responsible Party
Legislation	Congress
Regulation	Executive Branch Agency
Policy	Generally, Executive Branch Agency/Implementing Organization or Institution, e.g., UMD.
Procedure	Executive Branch Agency/UMD
Standard	Executive Branch Agency/UMD
Guideline	Executive Branch Agency/UMD

Types of Awards:

The classification of an agreement as either a gift or sponsored agreement has important accounting and tax related implications. Revenue recognition and net asset classifications are substantially different depending upon its classification in the UMD accounting system. The classification affects the UMD research base, which impacts the allocation of facilities and administrative (F&A) costs to government and non-government agreements and the distribution of F&A (DRIF) recoveries. The effort and resources consumed in the solicitation of private gifts must be recorded and reported as fundraising expenses.

Sponsored agreements are contracts, grants and cooperative agreements that represent an exchange transaction, where the sponsor receives some form of consideration in return for the funding. In contracts, the UMD is required to provide goods or services in exchange for payment. Grants or cooperative agreements require the UMD to provide technical and/or financial reporting to the sponsor on the results of research or other sponsored activity.

Contracts

In **contracts**, one party is buying a service or product from the other in exchange for payment. Contracts assume the production and delivery of a specific product that can be an instrument, device, or technical report. Consequently, contract requirements are more specific and less flexible than grants and agency personnel tend to maintain stricter oversight. Federal contracts are governed by the Federal Acquisition Regulations, as well as specific terms and conditions in each contract document.

Cooperative Agreements

A **cooperative agreement** is an arrangement where both parties are involved in carrying out a portion of the research. Cooperative agreements generally stipulate the responsibilities of both parties. Federal cooperative agreements are governed by the same statute and regulations as Federal grants.

Grants

Grants are financial assistance instruments that provide the researcher with significant flexibility to determine spending categories and research direction. Grants are usually made in support of basic research, training, or workshop support, requiring technical and financial reports rather than specifying definite services or product deliverables. They typically come from the Federal or State government, a corporation, foundation or other organization, not an individual, and are awarded in response to a proposal submitted by the UMD. Unlike cooperative agreements, grants do not require substantial programmatic involvement between the parties. Federal grants are governed by the Office of Management and Budget (OMB), the Uniform Guidance, and by each individual agency's grants policy document.

Types of Grant Funding Instruments

The Uniform Guidance defines the types of funding instruments that federal sponsors and non-federal recipients may use to support federally funded activities. Grants can be defined as the following funding instruments; standard grant projects, continuing grant projects, and fixed price awards.

Standard Grants: are funding instruments in which a federal sponsor agrees to provide a specific level of support for a specified period of time. There is no statement of intent to provide additional future support without submission of another proposal.

Continuing Grants: are funding instruments in which a federal sponsor agrees to provide a specific level of support for an initial specified period of time, usually a year, with a statement of intent to provide additional support of the project for additional periods, provided funds are available and the results achieved warrant further support. Subsequent funding is dependent upon funds availability and progress to date (the submission and acceptance of the annual report). The increment funding action will be issued as an amendment to the original award.

Renewal Grants: Renewed support is defined as additional funding for a support period subsequent to that provided by the original grant. Renewals to grants, if any, will be in the form of a new award with a new award number. Costs incurred under the old award in force cannot be transferred to the new award. Residual funds remaining in the old award may be transferred to

the new award with the approval of the sponsor. Given that renewals are seen as new awards, the transfer of residuals is not automatic. A "traditional" renewal proposal is developed as fully as though the proposer were applying for the first time. It covers all the information required in a proposal for a new project.

Supplemental Support: In unusual circumstances, small amounts of supplemental funding may be requested to assure adequate completion of the original scope of work. Such requests for supplemental funding support must follow the federal sponsors' policies and procedures for submission. Small supplement amounts will not require merit review, however requests for larger supplements may require external merit review. Please access individual federal sponsors' policy and procedural requirements for further guidance.

Fixed Price Awards: The Uniform Guidance at 2 CFR 200.45... defines a fixed amount award (fixed price award) as a "...type of grant agreement under which the Federal awarding agency or pass-through entity provides a specific level of support without regard to actual costs incurred under the Federal award. This type of Federal award reduces some of the administrative burden and record-keeping requirements for both the non-Federal entity and Federal awarding agency or pass-through entity. Accountability is based primarily on performance and results."   Awards may be identified as Fixed Price Awards or Fixed Amount Awards.

A fixed amount award cannot be used in programs that require mandatory cost sharing or match.

Gifts

Gifts represent non-reciprocal, unconditional and irrevocable transfers of property or money and have no donor-imposed restrictions, conditions or control. Gifts are not considered sponsored agreements and are not administered by ORA.

In general, a sponsored agreement can be distinguished from a private gift by any one of the following criteria. The sponsor has:
•   Control or approval of work scope;
•   A requirement for a defined deliverable in terms of a report on results of research, or financial accounting for the expenditure of funds;
•   Pre publishing review rights; or
•   Licensing rights of products resulting from the research

Agreements classified as sponsored must be reviewed, negotiated, and accepted by ORA.

Most gifts to UMD go through the University of Maryland College Park Foundation: http://www.umcpf.org/board/homepage.php; or the University System Maryland Foundation: http://www.usmf.org/about-the-foundation/foundation-policies/

Chapter 2: The Proposal

Before a researcher prepares a proposal for submission to **FUND YOUR RESEARCH** the researcher needs to gather institutional information, application guidelines, and subcontractor information. Proposal submission commences with approaching potential external sponsors for support of research or other projects. Writing proposals in a manner which clearly defines the ideas, concepts and solutions, as well as the problem, and states the advantages or benefits to be gained as a result of the efforts proposed, is an important task. The burden of proposal writing rests with the faculty member who will be designated as the principal investigator or project director and who will be responsible for the project upon award. Prior to preparation of a formal proposal there is a considerable amount of preliminary work which should be accomplished to avoid unnecessary effort.

Find Funding Opportunity:

Register for SPIN Plus to receive funding alerts. SPIN Plus is the funding search database available to UMD faculty, staff and students. This search system provides a modern full-text search that is run against the entire funding record. Results are returned to the user in relevancy ranked format, and can be further sorted, grouped, or filtered by the results grid column headers. An individual funding profile can be setup to receive regular funding alerts.

Links to SPIN Plus and other resources are provided in the proposal development section of the Division of Research's website.

Categories of Funding Opportunities:

Federal sponsors utilize various mechanisms to communicate opportunities for funding sponsored project research. They may be identified, for example, as Funding Opportunity Announcements, Program Announcement, Program Solicitation, Requests for Application, Dear Colleague Letters or Program Descriptions. Researchers are advised to access the individual agencies' websites for the agency specific mechanisms.

Limited Submission:

Limited Submissions are grant programs which accept only a fixed number of applications or nominations from a given institution. Many funding agencies have programs that place limits on the number of applications they will accept. Please review UMD's's established guidelines for coordinating limited submissions which can be found on the Division of Research's website.

Types of Submission:

There are different types of proposal submissions. Among these are Letter of Intent, Preliminary Proposals and Full Proposals.

Letter of Intent:

Some federal sponsors' solicitations require or request submission of a Letter of Intent (LOI) in advance of submission of a full proposal. An LOI is not a binding document. NSF for example uses the LOI to help an NSF program staff gauge the size and range of the competition, enabling earlier selection and better management of reviewers and panelists. In addition, the information contained in an LOI is used to help avoid potential conflicts of interest in the review process.

Preliminary Proposals:

Preliminary proposals, sometimes referred to as "white papers" or "pre-proposals," are concise, preliminary descriptions of projects that are submitted to funding agencies.

Funding agencies use preliminary proposals (1) to determine whether potential projects address their funding priorities, and/or (2) to gather information on specific topics. Funding agency guidelines regarding Preliminary Proposals vary. Other information may be requested, in addition to project descriptions, such as strategies, partnerships and cost estimates. Some agencies require Preliminary Proposals to be submitted by ORA, with an Authorized Institutional Official signature and others require them to be submitted by the researcher directly. Pre-proposals requiring cost share information must be submitted by ORA.

Submission is not considered a preliminary proposal if it meets any of the following:
- the submission has a specific budget that would serve as the basis for an award;
- the submission is going to industry;
- the submission requires institutional approval of a reduced or waived F&A rate;
- or If there are any restrictions on intellectual property ownership or publication rights

Reasons for Preliminary Proposals:
- reduce the proposers' unnecessary effort in proposal preparation when the chance of success is very small. This is particularly true of exploratory initiatives when the community senses that a major new direction is being identified, or competitions that will result in a small number of awards;
- increase the overall quality of the full submission; and.
- assist sponsor program staff in managing the review process and in the selection of reviewers.

Full Proposals:

Full proposals can either be unsolicited proposals or solicited proposals. Unsolicited are submitted to a potential sponsor in accordance with general guidelines and statements of interest rather than as the result of a specific solicitation. For example, most National Institutes of Health (NIH) grant support is the result of unsolicited proposals. Solicited proposals are submitted in response to specific solicitation.

The full proposal typically presents the (1) objectives and scientific, engineering, or educational significance of the proposed work; (2) suitability of the methods to be employed; (3) qualifications of the investigator and the grantee organization; (4) effect of the activity on the infrastructure of science, engineering and education, if applicable; and (5) amount of funding required. It should present the intellectual merit and broader impacts of the proposed project clearly and should be prepared with the care and thoroughness of a paper submitted for publication. For federal sponsored research projects, the researcher should access the individual federal agencies for the requisite proposal preparation instructions and requirements.

Proposal Submission Requirements:

Sponsors requiring electronic submission of proposals often require specific software or access and/or registration in electronic systems. Before beginning the proposal process, ensure that you have the necessary software to complete electronic application forms, including PDF generators or viewers. If necessary, create or update profiles in electronic systems such as NSF FastLane or Research.gov, NIH eRA Commons, NASA NSPIRES, etc.

ORA provides training to faculty and staff in Kuali Research for electronic proposal routing including system to system submissions. More information about training provided by ORA may be found in the training section of ORA's website.

Proposal Development:

Informal Inquiry:

Principal Investigators are urged to communicate with agency technical representatives at the very earliest stages of proposal preparation. The information that may be gained via an early dialogue with potential sponsors may prove useful in structuring the final proposal. ORA can provide contact information of agency representatives in most cases.

A well prepared short prospectus can present the important points of a proposed project. Submitting an informal proposal to an agency can serve as a starting point for expressions of interest or further comment. A personal visit preceded by a telephone call can be even more useful, since it may result in some guidance by agency personnel in structuring the final proposal so that the project meets agency priorities without significant deviation of the Principal Investigator's original ideas.

Informal proposals should have overall cost estimates rather than detailed budgets. An informal proposal does not require campus endorsement; therefore, it does not have to proceed through the formal review and approval procedure. It is suggested however, that budgetary matters be discussed with department or division administrators or with ORA in order to avoid confusion or misunderstanding at a later date. A lack of correlation between the technical proposal and the budget may lead to rejection of the proposal. A copy of the informal proposal will be helpful. Departmental concurrence even at this early stage is important.

Informal proposals are not accepted by Federal agencies when the submission is in response to a "Request for Proposals" since that is a competitive ~~contract~~ award process with strict guidelines and deadlines.

Pre-Proposal Process:

Numerous funding agencies are increasingly asking for pre-proposals and/or letters of intent to screen potential grant applicants. In some instances, these types of proposals require electronic submission or signature by an Authorized Institutional Official, and therefore require the involvement of ORA. Pre-Proposals requiring Institutional endorsement or submission through a sponsor's system need to be routed in Kuali Research, in the same manner as formal proposals.

When the sponsor requires cost sharing commitments, or when voluntary cost sharing commitments are made as part of a pre-proposal, the Pre-Proposals must be routed as well, and include the supporting documentation from whomever has committed resources towards the project.

The Formal Proposal

General Considerations:

The format and content of any proposal or application will necessarily vary with the requirements of the potential sponsor. An unsolicited grant proposal will differ somewhat from a proposal submitted in response to a competitive contract bidding situation, while new, renewal, or continuation proposals will differ from each other. ORA is available for assistance in these matters.

Most sponsoring agencies provide instructions for proposals, others require the use of specific electronic submission systems and some have few prescribed rules. Applications or proposals submitted to some sponsors must meet certain deadlines, other sponsors will accept proposals at any time. Unsolicited grant proposals may be submitted concurrently to several agencies; a statement of concurrent submission should be included in such cases citing the other agencies to which the proposal was submitted.

Collaborative Proposals:

A collaborative proposal is one in which investigators from two or more institutions plan to collaborate on a unified research project. The method of collaborative proposal submission depends on the federal sponsor funding the project. UMD researchers are reminded to become familiar with the cognizant federal sponsors' policies and procedures on collaborative proposal submissions.

For example, for collaborative proposals some federal sponsors allow either a single proposal submission from one institution or simultaneous proposal submissions from multiple institutions. The single proposal method allows investigators from two or more organizations who have developed an integrated research project to submit a single, focused proposal. A single investigator bears primary responsibility for the administration of the grant and discussions with NSF, and, at the discretion of the institutions involved, investigators from any of the participating institutions may be designated as co-PIs. Note, however, that if awarded, a single award would be made to the submitting organization, with any collaborators listed as subawards. In the simultaneous proposal submission method, each institution would receive their own award directly from the sponsor.

Basic Proposal Content:

A proposal requesting support from any sponsor will most often consist of the following:

Title Page – For those sponsors that do not provide application forms or have other specific requirements, the Principal Investigator must construct some form of title page. Generally the title page will contain:
- the title of the proposed project,
- the College and Department or Institute,
- name, title and contact information of the Principal Investigator(s),
- start and end dates of the proposed project period,
- total support amount requested, name and address of the sponsoring agency, and
- a signature line for the UMD Authorized Institutional Official's signature (will be signed by a representative in ORA).

Table of Contents–with page numbers.

Abstract–A brief description covering the purpose, important features, and significance of the project.

Institutional Animal Care and Use Committee (IACUC) - If vertebrate animals will be used in the research then it should be noted if the IACUC approval is pending or approved, with the Approval Date and Animal Welfare Assurance Number included in the proposal application. Additional guidance is at: https://www.umresearch.umd.edu/IACUC/.

Institutional Review Board (IRB) for Human Subjects- If human subjects are involved in the research then it should be noted if the IRB is pending or approved, with the IRB Approval Date, Exemption Number, and Human Subjects Assurance Number included in the proposal application. UMD policy issuance is set forth in Policy IV-2.10 – Policy on Human Subjects of Research: available at:
https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/IV-210.pdf

Additional policy guidance for IACUC and IRB is available under the **UMD Research Compliance** section of this Handbook.

Description of the Project–The detailed description of the project may contain many or all of the following:
 Project Rationale
- Introduction
- A Statement of the Needs and Problems
- Goals and Objectives of the Project
- Relation of the Project to the State of Knowledge in the Field
- Significance of the Project   Procedures
- Statement of Approach
- The Means by Which Objectives Will be Met
- Problems that are Anticipated

Budget-detailed statement outlining estimated project costs to support the sponsored project, should include all the Direct Costs and Facilities and appropriate Administrative (F&A) costs

Budget Justification-a categorical description of the proposed costs

Evaluation

Management

Organization of the Project

Project Staff and Their Roles - including CVs

Project Schedule

Additional Proposal Content:

Broader Impacts (BI):

Broader Impacts (BI) is defined "as an effect on, changes to, or benefit to the economy, society, culture, public policy or services, health, the environment, or quality of life, beyond academia." BI takes into account more than just the advancement of knowledge when considering impacts of research to include the social, economic, and individual impacts. BI refers to activities that go beyond the traditional responsibilities. Sponsored research projects are to contribute more broadly to achieving societal goals. An increasing number of federal sponsors are encouraging the inclusion of anticipated BI's in proposals submitted and even requiring that broader impacts be addressed as one of its merit review criteria.

BI may be accomplished through the research itself, through activities that are directly related to specific sponsored research projects, or through activities that are directly supported by, but are complementary to the project. Agencies such as NSF, require proposals include statements addressing an intellectual criterion, which encompasses the advancement of knowledge and a broader impact criteria with the potential to benefit society and contribute to the achievement of specific, desired societal outcomes. When reviewing a proposals, the reviewers will be asked to evaluate all proposals against these two criteria.

When required, the proposal's BI statement should address the appropriate merit review criteria. It is important to address these criteria in the proposal. Federal agencies are adopting the broader impact lens in the review of proposals. It is imperative for researchers to understand and address the federal expectations for describing broader impacts, this will assist to secure funding of research endeavors. Such outcomes include, but are not limited to:

- Full participation of women, persons with disabilities, and underrepresented minorities in STEM
- Improved STEM education and educator development at any level
- Increased public scientific literary and public engagement with science and technology
- Improved well-being of individuals in society
- Development of a diverse, globally competitive STEM workforce
- Increased partnerships between academic, industry, and others
- Improved national security
- Increased economic competitiveness of the United States
- Enhanced infrastructure for research and education

The above list is not exhaustive, nor intended to be, but should serve as a guide, and it is not necessary to address more than one goal in a proposal, as long as the broader impact goal is likely to have a desired societal outcome and is well planned. When required broader impacts is an important factor to be considered in the development of a formal proposal.

Congress is not solely interested in financing the progress of basic science; it wants to invest in activities that will enhance the nation's position in the global economy. Understanding this perspective will help you as you try to incorporate broader impacts into your project.

Broader Impacts and the Merit Review Criteria

An example of one agency that requires the inclusion of broader impacts is the National Science Foundation (NSF). The NSF Proposal and Award Policies and Procedures Guide (PAPPG) provides detailed guidance on NSF's merit review criteria. Proposals submitted to NSF, per the PAPPG project description requirement must contain, as a separate section within the narrative, a section labeled "**Broader Impacts**."

All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge. NSF projects, in the aggregate, should contribute more broadly to achieving societal goals and meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects.

Reviewers are asked to evaluate all proposals submitted to NSF against two criteria:

- Intellectual Merit: The Intellectual Merit criterion encompasses the potential to advance knowledge; and

- Broader Impacts: The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

NSF and other federal research sponsors are increasingly emphasizing the need to justify not only the "intellectual merit" of proposed research, but also its "broader impacts." Though NSF is currently the only US agency with a Broader Impacts requirement, other US sponsors are considering it. Globally, international partners are increasingly focused on broader impacts as a policy to justify investments in sponsored research.

In addition, the concept of Broader Impacts aligns with UMD's *Research Continuum for Strategic Impact*:
- Research Development/Research Support
- Economic Impact
- Innovation, Cultivation Licensing
- Storytelling/Reporting

The concept of Broader Impacts supports the goals of the Strategic Partnership Act and the *MPowering the State* initiative:
- Research
- Economic Development

- Educational Benefits
- Service to Maryland Citizens
- Integration

UMD is developing a comprehensive, institutional approach to Broader Impacts. The UMD guiding principles are:
- Understanding, promoting, and communicating the broader impacts of federally-sponsored research as part of the University's research continuum
- Describing research results as they impact within and beyond the research enterprise.

The articulation of Broader Impacts demonstrates the return on the investment of research funding to:
- The Public
- Policy makers
- Federal, state, and local legislators
- Sponsors

UMD is currently developing future tools to assist researchers in promoting an institutional culture of broader impacts, UMD will develop resources to:
- Assist PI's to understand BI, generally and the specific NSF requirement that BI be addressed affirmatively in proposals
- Assist PI's as they describe prospective BI in their proposals
- Identify evaluation and assessment resources to assist in validating BI of research
- Develop an institutional approach to curating BI across the UMD award portfolio to illustrate alignment with the MPowering the State Initiative and the Research Continuum for Strategic Impact

Future Activities:
- Develop an institutional website to host information, policies, and tools in support of BI activities
- Broad communication strategy for the university community to provide education on BI
- Include BI outcomes as part of the MPowering the State Annual Report
- Develop Tools for PIs
- Review and prioritize UMD awards to determine those with the greatest promise of BI outcomes
- Expand training for Department Business Managers and PIs in support of an institutional infrastructure
- Identify and target external audiences beyond the research community for BI outcomes – the public, state legislatures
- Actively engage federal partners to monitor BI policy changes and requirements
- Conduct outreach to individual international universities and research institutes to determine whether and how BI is incorporated into their research infrastructure

- Assess Horizon 2020 and monitor its successor Framework Programme 9 to mine the European Union's research agenda for lessons learned

Resources and references for Broader Impacts are available under the section **Federal Policies and Guidance**.

Data Management Plan:

A data management plan is a formal document that outlines what a grant project will do with its data during and after the project. The plan describes the data that will be created, the standards used to describe the data (metadata), who owns the data, who can access the data, how long the data will be preserved (and/or made accessible), and what facilities and equipment will be necessary to disseminate, share, and/or preserve the data.

Many (but not all) federal funding agencies require data management plans as part of a grant proposal application. Researchers need to review agency specific policy requirements/program solicitations. Persons seeking to make a grant application to a federal funding source should ascertain what the data management plan requirements are and ensure that the grant proposal provides the required data management plan details.

Management Plan:

A management plan provides researchers the opportunity to explain the objectives, goals, and planned procedures of their proposed projects in detail. Not all grant proposals require the submission of a management plan. Typically, a larger, more involved proposal will require one. If the researcher is unaware, ORA can assist in both determining if a plan is necessary and the content of the plan. Even if a proposal does not require a management plan, it may be beneficial to consider the points below, as they are relevant to any well-developed and organized proposal.

Elements typically included in a management plan
- An outline of the project's objectives and goals
- A list of actions to achieve the goals and objectives
- Descriptions of the roles and time commitments of personnel and participants involved in the project, as well as how these roles might change throughout the project
- Procedures to recruit and train participants, if applicable
- Procedures to acquire and maintain equipment
- A timeline for the various stages of the project
- A process to handle possible project modifications
- Consideration of the project's broader impacts

Depending on the project, the researcher may wish to address other issues. Additional content may include the following:

Roles and Responsibilities of Personnel

Descriptions of the roles of personnel and participants are crucial to understanding how a project will proceed. This component of the management plan could include the time commitments required, such as on a daily or weekly basis, once a month, or only for occasional meetings. It could also include the potential evolution of each role throughout the project's proposed time frame. Where possible, name specific personnel.

An organizational chart may be an effective tool to display this information. Use of an organizational chart can streamline otherwise complex descriptions of personnel interaction and individual responsibilities in the structure of overall management. For example, a larger project that includes external and internal management committees, advisory boards, and program liaisons may provide an organizational chart to visually represent systems of governance and decision-making.

Student Participation

If a project requires student participants, it may be beneficial to detail the procedures for participant selection, retention, and evaluation.The management plan could outline a process to choose students and the personnel involved in this process, as well as aims to recruit from underrepresented groups. Ensuring retention after selection remains an important consideration in projects that rely on student participation. Methods of participant retention include mentoring, peer counseling, and ongoing assessment. In addition to any student assessment conducted throughout the project, proposals with a training component could include an end evaluation of student performance, the outcome of which may be used to improve future student training.

Collaborations

The management plan should describe any planned collaborations with other departments, institutions, or businesses. If collaboration involves an existing relationship, the plan should include an explanation of the relationship and how it might be expanded. Maintaining communication is a critical part of any collaboration. The primary means of communication (e.g. weekly meetings, via phone) and the responsible personnel are important considerations to this end.

Acquisition and Maintenance of Equipment

Thorough procedures to acquire and maintain the necessary equipment and instrumentation should seek to answer the following questions:
- How will equipment and other instruments be acquired?
- Who will oversee their acquisition and maintenance?

- If lab equipment can only be used by qualified personnel, what mechanisms will be in place to train those people?
- Who else has access to the equipment?
- What steps will be taken to advertise the availability of equipment?
- Where will equipment be housed?

Project Timeline

A timeline can provide a sense of the proposed length of the stages of a project. At each stage, the researcher may further delineate intermediate objectives, how often committees will meet, when evaluations will be conducted, and when outcomes are anticipated.

How do funding sources assess a management plan?

Funding sources and agencies look very carefully at how well a management plan addresses the following issues:

Do proposed actions meet the stated goals of the project effectively?
Do the results have the potential to serve as a model for further research?
Do the results benefit a large number of people or organizations?

Facilities:

Available facilities and special equipment that will be important to the project should be described. Any additional facilities and equipment to be acquired or fabricated under the sponsored project, funded either by the UMD or the sponsor, should be described in detail. The importance of these facilities or equipment in relation to the success of the project should be made clear.

Biographical Sketches:

Generally, biographical sketches including pertinent publications of the Principal Investigator(s) and senior faculty and professional collaborators should be included.

The Proposal Budget:

The budget serves as the cost allocation plan submitted as part of the proposal. When an award is made, the budget becomes part of the awards' terms and conditions. Costs allocation must conform to the Uniform Guidance as well as special cost requirements outlined in any program announcement/solicitation. The budget serves to identify the cost of the project to the sponsor. The budget also serves as a further measure of the Principal Investigator's capabilities since there must be a reasonable correlation between the project as described and the Principal Investigator's assessment of the various cost elements. Sponsors usually require a budget and a budget

justification. A sample budget summary and budget justification can be found here: https://ora.umd.edu/resources/budget-guidance.

The budget will always contain a listing of the Direct Costs and the Facilities and Administrative (F&A) Costs (also known as indirect cost). Direct costs are those that can be distinctly identified as benefiting the project such as salaries and fringe benefits, equipment, supplies, travel and the costs of consultants/vendors/subawards among others. Federal agencies require that all direct costs adhere to the regulations set forth by the relevant guidelines. F&A Costs are those expenses that are incurred by the Campus through the cost of facilities and services for common or joint objectives such as general administration, physical plant maintenance and operation, and research administration expenses.

Budget Justification:

Each proposal must contain a budget for each year of support requested. A budget justification must also be provided for each year funding is requested per proposal. A categorical description of the proposed costs and amounts for each budget line item requested must be documented and justified in the budget justification. For proposals that contain a subaward(s), each subaward must include a separate budget and budget justification. Please reference the individual sponsor's policy guidance for more detail.

Direct costs:

The Uniform Guidance, effective December 26, 2014 identifies "direct costs are those costs that can be identified specifically with a particular final cost objective, such as a Federal award, or other internally or externally funded activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy. Costs incurred for the same purpose in like circumstances must be treated consistently as either direct or indirect (F&A) costs."   Typically costs charged directly to a sponsored project include, but are not limited to, the list provided below. Additional guidance and assistance on the definition of costs and costs' allowability are outlined in the **Award Administration** section and **Charges to the Project** subsection. The following cost items, though not meant to be all inclusive, are included as direct costs of the proposal budget. The following are direct costs associated with a sponsored research project:

Administrative Personnel

Administrative Personnel and clerical staff should normally be treated as F&A costs; however, direct charging may be appropriate in under special circumstances. In order to charge administrative costs one of two administrative costs designations must be as approved per the Organized Research Unit or Significant Project Designation, as explained here http://ora.umd.edu/proposal-development/administrative-cost-designations

Consultants

Consultant fees may be paid only to experts outside UMD who provide a unique expertise or contribution to the project. UMD faculty and State of Maryland employees are not eligible to receive compensation for internal consulting services on sponsored projects. Federal agencies specifically prohibit the payment of consultant fees from Federally-supported projects to persons employed by the Federal government and often set a limit on the daily rate that can be paid to non-Federal government employees. Please reference the Policy on Professional Commitment of Faculty for further information https://www.president.umd.edu/administration/policies/section-ii-faculty/ii-310a.

Permanent Equipment

Equipment - Permanent needs must be itemized and justified. Permanent equipment is defined as an article of nonexpendable tangible personal property used only for research, medical, scientific, or technical activities, which has a useful life of more than one year and an acquisition cost of $5,000 or more per unit. In addition, the Principal Investigator must determine that the equipment requested is not already available within UMD. The cost of equipment generally includes needed accessories, installation, and delivery costs. In some cases the sponsor may provide the equipment directly rather than provide acquisition funds, or short-term rental may be preferred.

Faculty

Faculty are on a 9.5- or 10- month academic year, or 12 month calendar year service period. An appropriate percentage of the academic year or calendar year salary is specified in the budget. A faculty member on a 9.5- or 10-month appointment may elect to devote additional time during the summer to a sponsored project beyond the academic year and may request and receive additional compensation beyond the base academic year salary for this effort. A maximum of 2.5 months of summer effort and salary (calculated at 2.5/9.5 x base salary for the new fiscal year) is possible in those cases in which this is acceptable to the sponsor. For 10-month faculty a maximum of 2 months of summer effort and salary at 2/10 of the base salary for the new fiscal year is possible. A faculty member on a 12-month appointment may not receive additional salary for summer research effort.

Fringe Benefits

Fringe Benefits include the UMD's contributions to Social Security, retirement programs, health insurance, and unemployment compensation. Where applicable, tuition allowance should be added for permanent full-time employees, their dependents, and graduate assistants. Graduate Research Assistants are entitled to health insurance benefits and tuition remission; other benefits do not apply. For undergraduate assistants (hourly workers), no employee benefits apply except during the summer if they are not attending classes. If the assistants are not attending Summer Session classes, then Social Security and unemployment compensation are applicable. Permanent part-time employees are entitled to state retirement, health insurance, social security, and unemployment if employed one-half time or more. Part-time employees who work less than one-half time, temporary personnel, and hourly employees are entitled only to Social Security and unemployment compensation. A table of applicable benefit rates is updated annually and posted on ORA's website.

Graduate Research Assistants

Graduate Research Assistants may be assigned to research duties with the student's time divided between formal study and research. Tuition remission for graduate research assistants on sponsored projects is to be included as a fringe benefit calculation and requested from the sponsor. The Graduate School annually publishes a schedule of stipends for guidance.

In no case can funds be requested or used to augment salaries of any faculty or staff beyond UMD-approved rates.

Other Personnel

Other professional research staff and technicians may be compensated for periods during which their services will benefit the project.

Participant Support Costs

Participant Support Costs (as defined in the Uniform Guidance, 2 CFR 200.75) means direct **costs** for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of **participants** or trainees (but not employees) in connection with conferences or training projects. Participant Support is used to reimburse program participants for subsistence allowances, travel allowances, and registration fees associated with attendance at a workshop conference, seminar, symposium or other short-term training or information-sharing activity.

The Uniform Uniform Guidance, 2 CFR 200, includes three separate references to "Participant Support Costs" that articulate specific requirements for this cost category:

- 2 CFR §200.75 defines participant support costs as direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) relating to conferences, or training projects.
- 2 CFR §200.456 states that participant support costs are allowable with the prior approval of the Federal awarding agency; and,
- Participant support costs are specifically identified on some sponsor awards, such as the National Science Foundation. They are awarded by other sponsors, but may not be referred to as "participant support costs" and tend to be program specific, making it imperative that all personnel engaged in research administration be familiar with the definition of this cost category and it special requirements.

To ensure UMD compliance with the requirements of the Participant Support cost category UMD has instituted the following:

- The PI must ensure that participant support costs are listed as a separate budget category in any proposal that includes such costs. Commingling of participant support costs and other cost categories is prohibited. Participant support costs are often included as part of the budget for conference grants; the prohibition against commingling still applies.

- The requirement to include participant support costs as a separate budget category extends to proposals for conference awards. Care must be taken to distinguish conference "participants" and associated costs, from costs supporting conference speakers and trainers.

- Participant support costs are excluded from the Facilities and Administrative Costs.

- Upon approval and acceptance of a federally funded sponsored award that includes participant support costs, ORA will establish a separate account code in the Kuali Financial System (KFS).

- The PI and Departmental Business Manager are responsible for ensuring that any expenses incurred against the participant support account in KFS comply with the approved award budget, and are consistent with the limitations of this cost category.

- These expenses do not fall under a budget variance allowance and are not included in the delegated authorities of the Federal Demonstration Partnership. If there is need to modify the amount of funding approved in this budget category, the PI and Departmental Business Manager must ensure that a timely, justified budget modification request be submitted to ORA for review and approval. ORA will in turn submit the request to the federal sponsor for review and approval.

- Participant support costs restrictions flow down to subawards. Should a subaward be issued that includes participant support costs, the PI and Departmental Business Manager must monitor subawardee invoices to ensure that the costs are being accounted for separately, and that these costs are allowable and allocable, and that they are not subjected to F&A costs.

- Invoices for awards that include participant support may be subject to increased scrutiny by SPA as part of its risk-based payment review.

- Any unexpended participant support costs are returned at award close-out – they cannot be used to offset over expenditures in other categories.

- Any modifications to Participant Support Costs required prior approval of the Federal Sponsors.

- The PI/department is also required to retain records detailing:

  - Criteria by which participants in the program are selected

  - Copies of applications of selected participants, with documentation as to how they meet the selection criteria

  - List of program participants and documentation of their participation in the program

UMD policy guidance at: http://www.ora.umd.edu/resources/participant-cost-guidance

Publication Costs

Publication costs including manuscript illustration, costs of reprints, page charges, and technical reports to be incurred in publishing articles resulting from the projects should be included in direct costs. The publication costs of a book or monograph are not generally allowed; special permission should be obtained from the sponsor.

Salaries

Salaries include all personnel, titles, the percentage of time each will devote to the project, the rate of pay, and amount requested from the sponsor to support each person per year (or for the budget period). Time should be expressed as percent of effort or the number of person months intended to be spent on the project. Do not express time as the number of hours. It is expected that in most cases the Principal Investigator will propose some level of activity (1% or more) or the minimum that may be required on proposals where they are listed as the PI.

Subawards

Subawards as identified in the Uniform Guidance §200.92 means an award provided by a pass-through entity to a subrecipient to carry out part of a Federal research project's effort. A subaward is a financial assistance award where a transfer of a portion of the research effort or substantive effort of the prime award to another institution or organizations (subrecipient). Whereas, a **subcontract** is used to provide necessary services or goods to accomplish the scope of work of the sponsored research project.

Subaward/Subcontracts with other entities which provide a substantial programmatic contribution to the project or services/goods require specific approval of the sponsor. Thus, the proposal must include documentation (i.e., statement of work, budget and budget justification, and endorsement by the Subrecipient's Authorized Official) of the effort or services/goods to be performed. Subawards and subcontracts must adhere to applicable federal program compliance regulations. More information on subcontracting during the pre-award phase may be found in the Subcontract Manual http://ora.umd.edu/resources/subcontract-manual.

Supplies and Expendable Equipment

Supplies and Expendable Equipment items should be identified and justified. Supplies may be charged if they are above and beyond what is incurred during normal operation. Examples of these items include chemicals, glassware, small electronic components, animals and animal rations, unusually large quantities of paper supplies as in the preparation and distribution of questionnaires or other brochures and forms. Equipment items should be identified and justified.

Travel

Travel is an expected practice and an accepted cost in most projects if there is a need for the Principal Investigators to consult with colleagues and disseminate new knowledge through scholarly discourse (i.e. meetings, conferences, symposia, etc.). There must be a correlation between the project and the purpose of the meeting. Such costs may include transportation and room and board. For travel abroad, federal agencies require the use of U.S. flag carriers. For more information, review the U.S. Fly America Act. https://www.gsa.gov/policy-regulations/regulations/federal-travel-regulation-ftr?asset=101306#wp1088896

If the project requires travel to various locations in order to perform the work, these costs should also be identified. An itinerary may be required if travel is a significant portion of the total cost. Some examples would be travel to various localities to collect samples, to interview respondents,

or to make special measurements. Proper identification and justification of planned travel costs is essential to having these costs funded by the sponsor. Refer to the UMD Travel Policies. http://www.ora.umd.edu/resources/foreign-travel

Other Direct Costs:

- Copying and Duplication costs
- Purchase of goods or services from a vendor related to and required by the project in order to conduct the research. UMD determines the difference between a subcontract and a vendor by following Federal guidelines on the topic. Some examples of direct costs incurred in special circumstances include:
  - renovation of space that is necessary in order to carry out the project,
  - rental of space in those special cases where this is necessary,
  - maintenance of specialized equipment which is necessary to the project,
  - communication costs such as long distance telephone costs and stage charges where large volumes of mailing are required,
  - special costs such as the purchase or lease of airplanes, boats, or other vehicles, and
  - stipends for participants in special training programs are allowable when specified by the sponsor.

Facilities and Administrative (F&A) Costs:

Facilities and Administrative Costs (F&A), also identified as indirect costs is the federally negotiated, approved percentage applied to sponsored projects in order to recover the allowable overhead costs associated with conducting organized research. F&A costs are "costs that are incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity."

Section §200.56 of the Uniform Guidance defines F&A, as "those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefited, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a variety of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived."   The Uniform Guidance provides information on determining whether a cost can be directly charged to a sponsored project or if it should instead be included as F&A.

F&A Costs applies to all externally – sponsored projects, and is relevant to all UMD staff involved in the development and submission of proposals for external support. This includes Principal Investigators (PIs); Department Business Managers; Office of Research Administration (ORA) and, Sponsored Program Accounting and Compliance (SPAC) staff.

As a recipient of federal awards, UMD is obligated to comply with costing rules and regulations promulgated by various federal offices, including sponsoring agencies such as the National Aeronautics and Space Administration (NASA) or US Department of Agriculture (USDA), and regulatory agencies such as the Office of Management and Budget (OMB). The UMD's adherence to these cost principles and practices is necessary to prevent cost disallowances by the Federal Government.

F&A Rate Calculation:

UMD's F&A costs are calculated based on the project's Modified Total Direct Cost (MTDC). MTDC is the total direct costs minus: permanent equipment over $5,000; the portion of subaward costs over $25,000; tuition, scholarships and fellowships; capital expenditures (alterations and renovations); and rental of off-campus facilities. The Campus calculates its F&A cost rates and negotiates these with the U.S. Department of Health and Human Services, acting as the cognizant audit agency on behalf of all federal agencies.

There are F&A cost rates for instruction, other service type activities, Intergovernmental Personnel Act (IPA), on-campus research and off-campus research. Projects partially performed off-campus for a period of at least three consecutive months or more may be apportioned between the two applicable off-campus rates. It is the position of the Campus that all proposals requesting support from any sponsor, either government or non-government, must include a request for full F&A cost recovery. However, some sponsors, particularly some foundations, have specific written policies that preclude the use of the Campus' full indirect cost rates. The rate or administrative fee allowed by the sponsor may be used in these cases. Exceptions to this rule may be necessary in a few instances; consult ORA for further information. Reference the F&A rate information for further guidance: https://ora.umd.edu/resources/fa.

Application of F&A Rates:

Unless restricted by federal or solicitation-specific guidelines, UMD's policy is to collect full F&A costs, as described in the latest federally – approved rate recovery plan. Such cost recovery provides offset to the full costs of conducting research and other sponsored programs. The appropriate F&A rate will vary, depending on the type of activity being supported and where, i.e., on-campus vs. off-campus, the sponsored activity is conducted. The latest F&A rates can be found at http://www.ora.umd.edu/resources/fa. The F&A matrix, also found on that page, is a useful tool to determine which rate to apply.

Proposals to commercial sponsors or for federal funds (including pass-through) should normally include full F&A recovery. Non-federal organizations whose guidelines will not permit F&A

costs should be reviewed to determine if some of the F&A items might be included in the proposal budget as direct costs.

Consistent with UMD's policy, the PI and Department Business Manager must ensure the proposal budget(s) includes the correct F&A rate, prior to submitting the full proposal to ORA for submission to the respective sponsor. The only exceptions to this policy are where a waiver is granted by the Vice President for Research, or where sponsor guidelines or written policies limit the F&A rate to less than the university's negotiated rate.   For step-by-step guidance on how to determine the appropriate F&A rate, see "Application of Facilities & Administrative Costs (F&A) Rates to Sponsored Projects found at http://www.ora.umd.edu/sites/default/files/documents/um-resources/fa/application-of-fa.pdf. This document also provides UMD's working definitions and examples for Types of Awards; Organized Research; Instruction and Training; Other Sponsored Activities; and, Intergovernmental Personnel Act Agreements.

Requests to Waive Full Recovery of F&A costs:

The only UMD globally-approved waiver of the policy for full recovery of F&A costs is specific to "Equipment Fabrication" and applies to equipment fabricated both in campus shops and labs. That waiver approval and discussion can be found at http://www.ora.umd.edu/resources/fa/equipment-fabrication.

To seek any additional waivers to the policy for full F&A recovery the following information is required:
- The Principal Investigator must prepare a written request justifying the reasons for a waiver and bearing the endorsement of the department chairperson. The faculty member will then submit the endorsed request to the Dean of the appropriate college for his/her endorsement.
- The Department will send approved requests, to the Office of Research Administration (ORA) for a recommendation of the request before forwarding to the Office of the Vice President for Research for final decision.
- The request, approved or disapproved by the Vice President for Research, will then be returned to ORA for implementation, i.e., faculty proposal budget preparation, consistent with the final decision.

Failure to adhere to the principles and processes in this procedure and incorporated references may result in the adjustment of budgets and expenditures or the use of departmental funds to ensure that appropriate F&A costs are collected.

Authorization of Pre-Award Costs:

Federal sponsors permit recipients to authorize pre-award costs. This authorization though permitted does place the risk on the recipient organization. Uniform Guidance § 200.458 defines pre-award costs are those incurred prior to the effective date of the Federal award directly prior to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award and only with the written approval of the Federal sponsor.

Researchers are reminded to follow individual federal sponsors' policies and procedures related to pre-award costs, which are often posted on-line on each sponsor's website.

Cost Sharing:

Cost sharing or matching refers to that portion of a project or program costs not paid by the sponsor and/or is explicitly required by the program or solicitation, without which an application would be ineligible. These costs represent an implied or explicit agreement on the part of the institution to assure that non-sponsor resources are contributed to a project, either from sources within or external to the institution. The cost share amount enter on the proposal budget is not typically included in the calculation of the proposal budget line items. The cost share amount in the proposal budget becomes part of the award's terms and condition and may be referenced as well in the award document itself.

The federal definitions of cost share and matching are set forth in the Uniform Guidance, defining *cost sharing* **or** *matching funds* as a portion of the project or program costs not borne by the federal government, and therefore covered by some other source. Although the two terms are often used interchangeably, the term matching is actually a specific type of cost sharing, typically used when a sponsor requires the grantee to "match" the sponsor funding according to a specified ratio. Some sponsors require universities to reflect their commitment to a project by sharing in its costs. Most sponsors, however, do not require cost sharing, and some don't even allow it. It is not necessary or desirable to engage in cost-sharing, except when:

- Mandated by the sponsor by explicit statements in the funding announcement and if federal funds, mandated by the federal awarding agency; or
- Where UMD has determined that such a contribution id deemed appropriate under unique circumstances

The inclusion of voluntary committed cost sharing is prohibited. It should be noted that foregoing full indirect cost rate (F&A) recovery is considered voluntary committed cost sharing. The commitment of funds becomes legally binding and is subject to audit. The failure to provide the level of cost sharing required by the program solicitation and reflected in an agency award budget may result in termination of the award, disallowance of award costs and/or refund of award funds to the agency by UMD.

When it is required that the Campus make a contribution towards the total costs of a project, the amount of such contribution required may vary from less than 5% to greater than 50% of the total project cost. It is highly recommended that only the percentage of cost share that is required be provided. The Campus' share of such costs must be able to be documented in accordance with UMD's systems or processes and may come from several sources:

- a portion of the faculty member's project time and related fringes, and appropriate F&A, for which no support funds are being requested;
- a portion of the Facilities and Administrative (F&A) costs may have to be contributed (special Campus approval is required);
- and/or contributed resources from the Department or College
- other support for the same project, i.e. from non-Federal sources if the project is to be Federally-funded;

The Uniform Guidance Section §200.306 prescribes criteria and procedures for the allowability of cash and in-kind contributions. Mandatory cost sharing commitments are subject to audit. Audit findings involving cost sharing have pertained to: a) failure to keep adequate source documentation for claimed cost sharing; b) unclear valuation of in-kind donated contributions; c) lack of support for cost sharing contributions by subawardees; and d) failure to complete annual certifications for awards with mandatory cost sharing requirements.

Cost-sharing imposes a substantial burden on the Principal Investigator and their department to provide supporting documentation to the Sponsored Programs Accounting and Compliance office. It is important to emphasize that the individual UMD departments have oversight responsibilities for making sure that the agreed to cost share has been met. For further guidance on cost sharing, consult either ORA's website http://www.ora.umd.edu/resources/cost-share or view the official policy at:
https://www.president.umd.edu/administration/policies/section-iv-research/iv-400a in its entirety.

Policy on IV-4.00(A)) *states: 'Throughout the project's life, the PI and the administering unit must maintain sufficient documentation to substantiate all expenditures including cost sharing contributions and make those records available to the funding agency and/or auditors as required.'* The UMD's policies are set forth in the following links:

- Policy issuance VI-4.00(A) UMD Policy and Procedures for Cost Sharing: https://www.president.umd.edu/administration/policies/section-iv-research/iv-400a.

- ORA's Budget Guidance: http://www.ora.umd.edu/resources/budget-guidance

- ORA's Cost Share website: http://www.ora.umd.edu/resources/cost-share

SPAC shall maintain records of all project costs that are claimed by the grantee to meet mandatory cost sharing requirements as specified in a particular program solicitation. Records

for cost share contributed to awards must be compliant with the requirements of the Uniform Guidance § 200.306, and are subject to audit.

Budget Summary Checklist

- ❏ Does it ADD up?
- ❏ Does the budget identify cost elements?
  - ❏ Were price quotes obtained for large dollar items?
- ❏ Did you include an escalation factor for future years?
  - *ANTICIPATE! Budget adjustments for salary increases in all budgets that are longer than one year or that span UMD fiscal years must be included.*
- ❏ Are Fringe Benefits included?
- ❏ Is the F&A rate correct?
- ❏ Are administrative costs included?
  - ❏ Do the costs comply with UMD policy and federal guidelines?
- ❏ Are all anticipated travel costs included?
  - ❏ Do the costs comply with UMD policy and federal guidelines?
- ❏ Are subcontractor costs reasonable?
- ❏ Does the budget justification match the budget?

The following is a listing of possible costs chargeable to a sponsored project. It may be useful in avoiding costly omissions when preparing proposal budgets.

Salaries	- Faculty: - academic year - calendar year - summer months	- Other Professional Research Staff - Technicians - Graduate Research Assistants - Hourly Personnel
Fringe Benefits		
Equipment	- Non-expendable equipment - Accessories	- Freight - Installation
Consultants	Fees	Travel
Supplies and Expendable Equipment	- Questionnaire forms - Animals and animal maintenance supplies - Chemicals - Glassware	- Electronic components - Brochures and announcements - Audio & video tapes - Film and film processing supplies
Travel	- Domestic and foreign - Field work - Conferences	- Subsistence costs - Transportation
Publications		
Subcontracts		
Other Direct Costs	- Space rental - Equipment rental - Alterations & renovations - Human subjects participant fees - Service contracts (e.g. equipment maintenance, photographic services)	- Communications - Animal care - Stipends for participants - Vehicle lease or purchase
Facilities and Administrative Costs	Ex. Research On-campus, Research Off-campus adjacent or Off-campus remote, instruction, other sponsored activities, IPA (See F&A Rate Agreement for appropriate rate)	
Cost Sharing	(only where required)	

Proposal Submission

Types of Submission:

Sponsors have various types of proposal submissions, including letters of intent, preliminary proposals to full proposals. Agency specific policy guidance/solicitations provide assistance as needed on the appropriate submission mechanism.

Many sponsors, including all Federal agencies, are requiring proposals to be electronically prepared and submitted. All Federal agencies use the find and apply system Grants.gov https://www.grants.gov/ as well as other submission systems. ORA's proposal and award system, Kuali Research (KR), allows for system to system submission of Grants.gov

applications. Many other submission systems must have the proposal information added to the system directly and signoff by ORA within the system as well. Principal Investigators should refer to the individual sponsor's guidelines for information about the required method of submission. The sponsor's guidelines will also include information about the necessary file format for documents submitted with the proposal. For example, many Federal agencies require the completion of the R&R 424 set of forms as part of the proposal. Samples of these forms and other commonly used systems can be viewed here. See additional guidance under section **Federal Policies and Guidance**.

PI should notify their Contract Administrator as soon as he or she is aware that the proposal is to be submitted and provide the links to applicable proposal guidelines. Proposals are routed on Campus using the KR system and PIs are required to certify their proposals within the KR system as well.

Sponsor Forms and Guidelines:

Sponsors may require specific forms be completed and submitted with the proposal. The Principal Investigator should complete all of these forms prior to routing the proposal.

Sponsors may also provide specific information on the format of the proposal, including page limitations, font types and sizes, number of paper copies, electronic file names, page numbers, budget limitations, project length limitations and required components of the scope of work. Neglecting to follow these guidelines may result in the proposal being declined by the sponsor before it ever reaches the review committee.

Submission Deadlines:

Sponsoring agencies have specific deadline dates and times, target dates or submission windows for proposal submission. Some sponsors will accept proposals at any time. This information is available directly from the sponsor. Alternatively, departmental administrators or ORA can provide assistance. Information is always in the RFP application package obtainable from the issuing agency.

Types of Dates:

Sponsoring agencies may use and define different types of proposal submission deadlines. Researchers should allow adequate time for processing.   Dates may be defined as follows:

- **Target dates:** dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.
- **Deadline dates:** dates after which proposals will not be accepted or will be returned without review by a sponsor.   The deadline date may be waived only in extenuating

circumstances. Such a deviation only may be authorized in accordance with sponsor policy guidance.

- **Submission windows:** designated periods of time during which proposals will be accepted for review.

These target dates, deadline dates, and submission windows are published in a sponsor's specific program descriptions, program announcements or solicitations.

Classified Research and Restrictions Of Publication:

UMD does not generally enter into agreements to carry out research if the grant, contract, or other funding instrument restrains the freedom of UMD and its faculty to disclose the existence of the grant or contract, the general nature of the work to be conducted, or the identity of the sponsor. UMD follows the University System of Maryland's policy, which is available at: UMCP Policy on Classified and Proprietary Work . http://www.usmh.usmd.edu/regents/bylaws/SectionIV/IV220.html

The UMD reserves, for its faculty, the right to publish the results of the research without the prior approval of the sponsor, unless a policy waiver has been granted by the University President in unusual circumstances.

This policy is resident with UMD's Office of Research Administration. This policy provides guidance regarding sponsored activities involving the dissemination of unclassified information, classified or proprietary work, defines the elements to be considered by institutional presidents before approving exceptions in specific circumstances and outlines reporting requirements for exceptions. The policy states that it does not generally conduct research involving classified information. When such research is conducted, then it is done off site. Institutions of higher learning do not routinely accept federally funded projects which involve classified work/information.

Frequently Asked Questions about Grant Applications

Many funding applications ask for relevant information regarding UMD as an institution. The Quick Reference Guide found here is a valuable resource: http://ora.umd.edu/proposal-development/quick-reference-guide

Proposal Processing:

A formal proposal to conduct a research, training, or service project with support from an external agency represents an offer by the UMD acting as an agency of the State of Maryland. It is necessary, therefore, that any such proposal have the endorsement of those responsible for carrying out the project, as well as those authorized to commit the UMD to a legal offer. For

proposals, the President has delegated the authority to officially commit the campus to ORA. An electronic review and routing procedure has been established using Kuali Research in order to ensure that each proposal or application for sponsored programs has been reviewed and endorsed by the various responsible persons and that compliance exists between sponsor, UMD, and State policies. All proposals for external support of training, research, or service projects must be submitted to ORA.

To Route or Not to Route in Kuali Research to ORA?

YES

- Proposals for grants, cooperative agreements, and contracts (including new proposals, supplements, continuations, transfers of projects to UMD, etc.)
- Invited Proposals or anything similar that will be submitted by UMD to an external sponsor
- Contracts/Funded Agreements received directly by a department or PI for sponsored projects
- LOIs and Pre-proposals that require a signature of an authorized representative or submission through an electronic system that ORA accesses and/or includes cost-sharing or a detailed budget
- Non Funded Agreements such as: Intergovernmental Personnel Assignments (IGPAs), Non-Disclosure Agreements (NDAs), Material Transfer Agreements (MTAs), Data Use Agreements (DUAs), Equipment Loan Agreements

IT DEPENDS

- Revised Budgets (check with your Contract Administrator)
- Change in Scope of Work (check with your Contract Administrator)

NO

- Reductions in Proposal Budgets (ORA should review and sign/submit the reduced budget, but full routing is not necessary)
- Internal UMD Seed Grant Programs
- Internal UMD Limited Submission Programs
- Internal UMD Incentive Funds

Contact your Contract Administrator with any questions on routing procedures or for any items not included on this chart (https://ora.umd.edu/staff)

Internal Routing and Review:

The people or offices involved in the internal review and processing are as follows:

- **Principal Investigator** is responsible for the budget, technical content, quality, and preparation of the proposal in accordance with sponsor guidelines.
- **Department Chair** is responsible for certifying to the academic soundness of the project, the compatibility of the project with the Principal Investigator's other commitments, the availability of space and facilities, any cost-sharing commitments, while assuring that the project is in keeping with department and UMD objectives, and concurring that the proposal should be submitted to the agency named.
- **Dean of the College** is responsible for determining the appropriateness of the project within College and UMD programs, that resources will be available, and cost share commitments are covered.
- **ORA** is responsible for ensuring compliance with applicable laws and regulations and with UMD administrative rules. Concurrently, problems of institutional financing, cost sharing, acceptance of contractual terms, and budget matters will be resolved. The authority to negotiate and execute awards for research on behalf of UMD is delegated to the Office of Research Administration by the UMD President. ORA is solely delegated the authority to commit UMD for external federally funded sponsored project requests.

ORA works with the Compliance Office in the Division of Research to review matters involving human subjects, DNA research, hazardous substances, export control issues and the experimental use of animals.

The Review Cycle:

Each proposal must be created and routed in Kuali Research, UMD's proposal and award system of record. Proposals are created at the department level and PI(s) must electronically certify their proposals by completing a brief series of questions. Proposals then proceed from the Principal Investigator to the Department Chair, then to the Dean of the College, and then to ORA. If applicable, in accordance with the required compliance requirements referenced in the KR system, such compliance issues as conflict of interest, human subject research and vertebrate animal research must be noted or addressed within the KR system. ORA asks for six (6) business days to review and approve every proposal. In addition, the final version of a proposal being submitted via an electronic system is needed by a minimum of 24 hours prior to the deadline to ensure the submission can be made. Electronically submitted proposals often have issues that require extra time to resolve.

In regard to submitting the proposal to the sponsor, a distinction exists between those proposals submitted in paper ("hard copy" or email) format and those submitted via electronic systems.

Hard Copy/Email proposal submissions: Once the KR proposal routing is completed, the PI/Department representative must work with their ORA Contract Administrator to provide the final version of the proposal. ORA will sign the proposal on behalf of UMD and if appropriate attach a transmittal letter. This standard letter refers the sponsor to the PI for technical matters and to ORA for administrative or contractual matters and may address other issues as well. ORA will then mail to the appropriate contact. or notify the department for pickup. The department is responsible for making any additional copies that are required and mailing or delivering the proposal to the sponsor.

Electronic proposal submissions: Department prepares and completes proposal information in the Proposal Development module of KR, including completing all required sections and uploading all appropriate documents. Proposal is then electronically routed through the PI, Department Chair and Dean's office to ORA. Complete and final KR proposals, including S2S (system to system) proposals should be routed completely to ORA no later than 48 hours before the deadline. If the proposal is being prepared in another online system (ex. Research.gov or NSPIRES), provide submit access to proposal at least 24 hours before the deadline. Upon review and approval an ORA Contract Administrator will electronically submit the proposal to the sponsor. The Principal Investigator will receive electronic confirmation of submission. More information on KR proposal development and routing may be found at

. More information about Grants.gov and about particular agencies and their electronic submission systems, can be found here.

Be sure to allow enough time for review. Principal Investigators should bear in mind that the ease of submitting electronic proposals is directly related to the amount of time prior to the deadline date that ORA has to submit the proposal, as system failures due to overload and other issues may result on the actual deadline date.

Non-Award Decisions

A non-award decision occurs when the PI/UMD decides not to have the proposal reviewed or the federal sponsor, after reviewing the proposal, decides for whatever reason(s) to **not** recommend the proposal for an award. Non-award decisions are identified as withdrawals, declinations or return without review.

Withdrawals:

A withdrawn proposal is when the PI/UMD decides for whatever reason to withdraw the proposal from for review and from award consideration by the sponsor. A proposal may be withdrawn at any time before a funding recommendation is made via sponsor's policies and procedures. The proposal status will be updated once the submitting organization takes appropriate action. The change of proposal status helps UMD to more effectively manage their proposal portfolio.

Note: If the withdrawn proposal was submitted to NSF as part of a collaborative effort, regardless of whether UMD is the lead or non-lead, the electronic proposal withdrawal system will withdraw that proposal along with the other remaining proposals that are identified as part of the collaborative effort. If the remaining organizations in the collaborative determine that the project can still proceed, a new collaborative proposal must be submitted.

Declinations:

A researcher whose proposal has been declined for funding by the sponsor, will likely receive a decline notice as well as information and an explanation of the reason(s) for declination.

Return without Review:

A sponsor may return a proposal without review. If the sponsor is federal, the reasons for return without review are often available on line from the federal sponsors. Researchers will need to access the cognizant policies and procedure for additional guidance, available under section on **Federal Policies & Guidance.**

Reconsideration Process:

A researcher whose proposal has been declined may ask the sponsor's program official for information over and above the explanatory materials received with the declination notice. A declined proposal may be resubmitted after it has undergone substantial revision. **Researchers are reminder to refer to individual sponsors' policies regarding the reconsideration, insofar as criteria and time frames.**

Chapter 3: Manage an Award

Award Notification and Acceptance:

An award to UMD from a sponsoring agency is a document which legally obligates UMD. An award may be simply in the form of an award notice (letter) issued by an authorized agent of the sponsor or it may consist of a lengthy contractual document. In some cases acceptance by UMD (and then by the sponsor) is required before the award is in force, while in other cases no formal acceptance is required and spending of the funds signifies acceptance of the award.. ORA is the receiving office authorized to accept and execute awards on behalf of UMD. ORA is solely responsible for reviewing, negotiating, and accepting any award that is received from an external sponsor. UMD's policy on solicitation and acceptance of a sponsored project is memorialized in **Policy IV-2.00 Policy on Solicitation and Acceptance of Sponsored Projects**, http://www.usmh.usmd.edu/regents/bylaws/SectionIV/IV200.html   ORA will consult with the Principal Investigator if the award differs from the submitted proposal, so that the award may be accepted, modified, or rejected. No charges may be incurred against a sponsored project until such time as ORA has received and processed an original award notification from the sponsor, and an account number has been issued to the Principal Investigator/Department.

If the PI receives an award notice directly, s/he must contact ORA immediately to ensure that ORA has also received the notice. ORA cannot administratively initiate the project without formal sponsor notification. Many award instruments are received which require both sponsor and University signatures (bilateral agreement) before they become effective. Review of awards that contain non-standard terms and conditions is required, prior to final University acceptance. **Principal Investigators are not authorized to sign award documents on behalf of the University**.

When an award document requires University signature to be effective, it is the responsibility of ORA to return signed copies to the sponsor. Upon receipt of the fully executed documents, ORA will process the award. On occasion, a sponsor may award support for an investigator without a formal proposal being submitted through the University. In such cases, formal routing of the project must be completed prior to ORA's acceptance of the award.

On some occasions, receipt of the actual award documents authorizing expenditures for a project may be delayed. If a delay will seriously impede the course of the project, it is possible to obtain permission to initiate expenditures for a short time in advance of actual receipt by the Campus of an award document. For this purpose, an Advance Account Number Authorization (AANA) form should be submitted to ORA. This form requests the issuance of an account number and commits the Principal Investigator's department to reimburse campus accounts in the event that the expected sponsor authorization is not forthcoming. ORA will approve such a commitment only after the proper authority at the granting agency has assured us of their intent to provide such funding, and the start date is as certain as possible.

In some cases an award may be issued by the agency after a series of negotiations which may involve revisions to the scope of the project and/or to the proposed budget. ORA is the authorized agent for conducting and approving such revisions, but no changes to a project or a budget are authorized without the express consent of the Principal Investigator(s). Faculty researchers are reminded that the acceptance of a revised scope of work or budget is a judgment that only they can make; it is not a judgment or condition that may be unilaterally imposed by the granting agency. If the agency requires the submission of a revised work plan or budget, this must be prepared by the Principal Investigator and submitted to ORA for institutional endorsement and for forwarding to the agency.

Upon receipt and approval of an official award by ORA, the Principal Investigator, Departmental Business Person, Chair of the Department and Dean of the College (or their designated representative) will receive a KR Award Notice generated by ORA informing them of pertinent award information and the account number established for this project. Once the account number is available, the PI and Department have access to a copy of the award or any modifications to the award for review and reference.

Award Notice Composition:

- the award information including amount awarded, period of performance, any special conditions applicable to the award and any numbered amendments thereto;
- general Federal award information as required by 2 CFR § 200.210;
- the budget, which indicates the amounts by categories based an agency's support, may be included;
- the applicable general conditions reference;
- the proposal may be referenced;
- any program announcement, program solicitation or other documents or special requirements incorporated by reference.

Each award notice specifically identifies applicable grant general conditions that are applicable to, and become part of, that award. The award conditions are available electronically available on the federal sponsors' website.

Grant Award Periods:

The award notice includes the grant award period, the start date (effective date) and the end date (expiration date). The start date is the date recipient institutions may begin to incur expenditures against the grant, the exception being, fixed amount awards. For example, with the exception of PI transfers, the start date used by NSF is either the 1st or the 15th day of the month. If no start date is specified, then the date of the award notice is the start date.

The end date (expiration date) is the date specified in the award notice after which expenditures may not be charged against the grant except to satisfy obligations to pay allowable project costs committed on or before that date. The end date is usually the last day of a month.

The award date is the date when the federal sponsor's grants officer obligated the award funds.

The grant period is significant, except for fixed amount awards in permitting the recipient institution the authority to commit and expend funds for allowable costs in support of the project up to the grant amount specified in the award notice at any time during the grant period. Except as provided by the federal sponsor's policy, charges prior to the grant period may not be charged prior to the start date or subsequent to the end date.

The start date of an award typically cannot be changed; however, recipient institutions have the authority to incur pre-award costs per individual federal sponsors' policy

The end date may be changed as a result of approval of a request for continued support of a continuing grant, for a no-cost grant extension, or by approval of a request for supplemental support.

Award Administration:

The University-Sponsor Relationship: Awards for sponsored projects are made to UMD, which is identified as the grantee or contractor in the document.

Principal Investigators' Responsibilities:

The Principal Investigator, upon acceptance of the award by UMD, assumes direct responsibility of an award for support of research or training projects for performing the project within any administrative constraints imposed by the sponsor and UMD. The Principal Investigator must assure that all award conditions are met and the PI directs the technical aspects of the project effort within the scope authorized by the sponsor and authorizes expenditures of project funds subject to approval, where necessary, by the Department Chair(s), Dean(s) of Colleges, other administrative personnel, or the sponsor. The principal criterion for assuring that costs charged to a sponsored project are appropriate is that they benefit the project. The Principal Investigator should meet with his/her Departmental or School Business Administrator (BA) at the initiation of a project, and monthly during its course, to assure proper fiscal management.

The Principal Investigator is responsible for the timely submission of all required technical or programmatic reports. Further, the Principal Investigator is responsible for ensuring prompt charging of obligations and expenditures against the account number for his/her project(s) in KFS.

ORA, in cooperation with the principal investigator and the business administrator, is responsible for ensuring compliance with sponsor regulations and guidelines.

It is the primary responsibility of the principal investigator to ensure that any needed negotiated changes in the project budget, modifications (reallocations, increase or decrease of funds), date extensions, and other items of an administrative nature are coordinated with the appropriate UMD administrative personnel.

The Principal Investigator, the Department Chair, and the College Dean are all expected to exercise responsible judgment in the administration of the project, particularly with regard to the terms of the agreement and UMD policies. In particular, financial liabilities which result from failure to comply with, or to provide adequate oversight for the grant or contract become the responsibility of the Principal Investigator's department and college.

Records:

A separate account(s) is established for each project. Each account will bear a unique Kuali Financial System (KFS) number assigned by ORA. This information is sent to the Principal Investigator, Department Chair, Dean of the College, and other administrative personnel through the KR system as an Award Notice.

The issuance of the account number(s) for the project is a form of credit line against which the Principal Investigator may charge obligations and expenditures without concern for sponsor payments and cash flow considerations. In reality, sponsoring agencies most often do not pay the UMD until expenditures are incurred and invoices are submitted to the agency by Sponsored Programs Accounting and Compliance.

Once the account has been established the Principal Investigator will receive monthly financial statements showing the status of the account. The Principal Investigator is expected to keep sufficient internal records to control expenditures, particularly those budgetary lines which may not be exceeded without sponsor approval. For more information on maintaining financial records and generating reports, go to UMCP's Kuali Financial System.

Post-Award Modifications:

During the course of a sponsored project, it may be necessary to make changes to the project as originally proposed to the sponsor. These changes may relate to project finances, personnel, or location; reflect the project timing and completion; and/or involve other project components. Generally, a sponsor will impose restrictions on certain types of changes, requiring the Principal Investigator and the UMD to obtain approval in advance of the change. In every case, it is necessary for the Principal Investigator, departmental administrator, ORA, and Sponsored

Programs Accounting and Compliance to carefully review, retain, and refer to the requirements particular to any given award, should the project require a post-award change.

Modification to existing awards, require approval of sponsor's Grants Officer. These include such modifications as scope of work changes, PI transfer to new awardee organization, and change of PI, PI withdrawal, or Leave of Absence. See section '**Transfer of Contract or Grant**.'

In addition to non-funded post award changes, there are funded amendment actions, either supplemental funding or additional incremental funding as identified in the original award instrument. There are project transfers to another awardee organization, which involve the transfer of the project effort and any remaining funds.

The agencies applicable award terms and conditions (included as part of an award document) set forth post award requirements. In addition, agencies' policies and procedures guidance outline post award requirements and responsibilities. For more details on processing modifications, see individual subsections below.

Budget Revisions:

Re-budgeting may or may not require sponsor prior approval. You will need to review the award terms carefully to determine whether or not prior approval needs to be sought. Grants awarded under the Federal Demonstration Partnership or those with Research Terms & Conditions incorporated have more flexible re-budgeting terms. Consult the award document to identify agency-specific rules regarding re-budgeting.

Some awards have restrictions on the percentage of the budget that may be re-budgeted without sponsor approval. This percentage must be monitored closely since it is a cumulative percentage (e.g. 10%) over which sponsor approval must be sought.

In those instances where re-budgeting requests can be submitted through a Sponsor's post-award management system (e.g. Research.gov), no additional paperwork is necessary. In all other instances, a letter will need to be drafted by the department that explains the re-budget request and the effect it will have on the project. A revised budget will need to accompany the letter. This letter should be signed by the principal investigator and counter-signed by an authorized UMD signature (ORA), who will forward the request to the sponsor for action.

If you are unsure whether or not re-budgeting is allowed under a sponsored project, please contact your Contract Administrator for guidance.

Charges to the Project:

The award budget serves as the cost allocation plan for an award issued by federal sponsors. The Principal Investigator is responsible for making sure that all approved expenses are in support of the project and properly charged. Charging departmental budgets for sponsored project expenses is normally not appropriate. The prompt and accurate charging of project expenses will preclude costly department labor and additional paperwork involved in cost transfers. As already noted, excessive cost transfers will result in unnecessary audit findings.

UMD and Uniform Guidance:

Uniform Guidance - UMD Implementation is available at:
http://www.ora.umd.edu/resources/federal/uniform-guidance
ORA Uniform Guidance Implementation Cost Principles Reference Guide at:
http://www.ora.umd.edu/sites/default/files/documents/federal/uniform-guidance/uniform-guidance-cost-principles.pdf

Federal sponsors must develop their own agency-specific policies that conform to the **Uniform Guidance**. The UMD has adapted its internal policies in order to conform to both the **Uniform Guidance** and any sponsor-specific guidance.

The **Uniform Guidance** includes the federal guidelines for identifying and assigning facilities and administrative (F&A) costs and for determining and applying F&A rates. UMD has the responsibility to ensure proper treatment of select items of costs incurred on sponsored projects and those used as the bases for the UMD's F&A Rate Proposal. Proper execution of this responsibility is imperative to maintain compliance with the **Uniform Guidance**, sponsor policy, award terms and conditions, and UMD policy.

Awards made before December 26, 2014 are not subject to the Uniform Guidance.

For proper management of sponsored funds it is imperative that budget statements are reconciled on a regular basis to ensure that expenditures are charged correctly and within appropriate guidelines. Using these tools, regular monitoring of your sponsored projects helps to:

- Ensure that costs are consistent with the project schedule and incurred between the start and stop dates of the project.
- Discover any errors in your budget, encumbrances, or expenditures. Errors can be caused by a service department, an end user, or a system-generated issue. (The longer an error remains uncorrected, the harder it is to show that allowability and allocability are in compliance with the UMD's Cost Transfer Policy).
- Confirm the availability of project funds as needed.
- Avoid overspending, which may cause a deficit and limit further spending.
- Verify that corrections and cost transfers have been made or are made in a timely manner.
- Maintain good documentation for an audit if one should occur in the future.

The terms below define the classification and treatment of costs for proposal and award budgets. Specific identification with a sponsored project should be the determining factor in distinguishing direct from indirect costs, rather than the nature of the goods or services. Costs

incurred for the same purpose in like circumstances must be treated consistently, as either direct or indirect costs.

Sponsored Research Project Costs - Direct and Facilities & Administrative

Direct Costs:

In addition to the information regarding Direct Costs in the Proposal Section of the Handbook, the following roles and responsibilities related to direct costs at the UMD are as follows:

Principal Investigators are responsible for, and must authorize, all expenditures charged to sponsored projects. They must review and approve all direct costs; ensure all expenditures are allowable, allocable, and reasonable. They must ensure sponsor approvals are sought and documentation of approvals are maintained

Departmental Business Managers assist the principal investigators in determining the allowability, allocability, and reasonableness of direct costs on sponsored projects. They ensure proper documentation to support expenditures is maintained and that the terms and conditions of the sponsoring agency are being met.

The Division of Research, Office of Research Administration (ORA) and Sponsored Programs Accounting and Compliance (SPAC) Office provide guidance on allowability of costs issues. SPAC performs risk-based desk reviews of costs for allowability during invoicing, prior to drawdowns, and during interim and final reporting. SPAC prepares financial status reports according to direct costs recorded in the General Ledger.

For a direct cost to be allowable cost on a sponsored project, the cost must be:

- **Reasonable** – the cost must be necessary for the performance of the award and reflect the action that a prudent person would have taken.
- **Allocable** – The cost can easily be identified with the project and assigned to the project in accordance with benefits received.
- **Consistently Applied** – The cost must be accounted for consistently as either a direct cost or as an F&A cost.

The fact that a proposed cost is awarded as requested by an applicant (principal investigator and the UMD) does not in itself indicated a determination of allowability. This can be due to many factors such as:

- Sponsored limitation on specific items of direct cost expenditures are included in the award document.
- The principal investigator or the departmental business manager must maintain adequate supporting documentation to relate expenditures to the purpose of the award.
- Certain costs may not be charge to sponsored projects either as direct or a part of the F&A (indirect) rate.

- The salaries of administrative and clerical staff should normally be treated as indirect (F&A) costs. Direct charging of these costs to federally sponsored project awards may be appropriate only if ALL the following conditions are met (2 CFR § 200.413):
  - Administrative or clerical services are integral to a project or activity;
  - Individuals involved can be specifically identified with the project (Individuals performing administrative or clerical activities can accomplish this through certified reports);
  - Such costs are explicitly included in the budget or have prior written approval of the federal awarding agency; and,
  - The costs are not also recovered as indirect costs.
- Other costs not normally charged directly include those used for general office purposes, as opposed to those justified as specific to a research purpose as set forth in 2 CFR§ 200.439. These normally excluded costs include postage, telephone line and equipment costs, membership costs, office equipment and electronic devices including copiers, laptops, desktop computers, personal handheld computers, fax machines, scanners, flash drives. For such costs to be allowable direct costs to a federal award, they must be clearly identified in the UMD approved proposal budget, with a detailed justification of necessity. Under 2 CFR§ 200.439, computing devices are treated as Materials and Supplies and may be charged directly if their cost is essential and allocable to the performance of the award.

Indirect Costs (Facilities and Administrative (F&A) costs):

Costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to a specific sponsored project. Indirect (F&A) cost components include depreciation, interest, operations and maintenance, and library costs, as well as departmental, sponsored project, general, and student services administration costs, and other similar costs, that benefit many activities. For more information, see Uniform Guidance §200.414. More policy and procedural guidance regarding F&A costs is outlined in the previous section on **The Formal Proposal**, subsection **The Proposal Budget.**

Restricted Costs:

Federal regulations restrict charging certain types of costs directly to federal sponsored projects, though in some instances they are permitted as direct charges if there is explicit justification. These costs are allowable charges to indirect cost pools. Examples include administrative salaries, memberships, postage, office supplies, and telephone monthly line charges.

Unallowable Costs:

These are costs that are not allowable as either direct charges to federal sponsored agreements, indirect cost pools, or recharge/service centers. Examples include expenses associated with:

- Advertising for general promotion of the UMD, including printed materials, promotional items, memorabilia, gifts, and souvenirs
- Advertising for recruitment purposes that includes color or is excessive in size
- Alcoholic beverages
- Alumni or fund raising activities
- Antiques
- Bad debt write-offs
- Donations or Contributions
- Commencement expenses
- Cost Overruns
- Costs on Industry, Foreign Government or Other Non-Government Grants/Contracts
- Decorative objects for private offices
- Entertainment
- Fine/original art
- Fines and penalties
- First-class/business-class air travel differentials
- Flowers
- Gifts, prizes, and awards
- Goods or services for personal use
- Lobbying
- Memberships in airline travel clubs
- Memberships in civic, social, community organizations or country clubs
- Faculty and exempt staff salary in excess of base rates paid by the institution
- Selling or marketing products or services of the UMD
- Social Events
- Trustees Travel

UMD has issued guidelines that provide an institutional standard for determining when administrative and/or clerical costs are charged to federally sponsored agreements. These guidelines can be found at Guidelines for Establishment of Organized Research Unit (ORU) or Significant Project (SP) Designation Responsibility for Compliance with Cost Principles. See subsequent section below: **Establishment of Organized Research Unit (ORU) and Significant Project Designation**.

The Uniform Guidance 2 CFR Part 200 Subpart E - Cost Principles specifies that the recipient institution is responsible for ensuring that costs charged to a sponsored project are allowable, allocable, and reasonable under these cost principles. UMD policies describe a collaborative oversight responsibility among Academic Departments and the Department of Research organizations, specifically ORA and SPAC, for ensuring sponsored costs are allowable, and consistent with federal and sponsor directives. This collaborative oversight occurs throughout the proposal and award management life cycle, beginning with proposal development.

Principal Investigators (PIs) and their departments, including Department Business Managers, are responsible for ensuring compliance with the applicable sponsor requirements for sponsored projects and for the prudent management of all expenditures and actions affecting the award.

Documentation for each expenditure or action affecting an award must reflect appropriate organizational reviews or approvals which should be made in advance of the action. Organizational reviews are intended to help assure that expenditures are allowable, necessary and reasonable for the conduct of the project, and that the proposed action:

- is consistent with award terms and conditions;
- is consistent with sponsor and UMD policies;
- represents effective utilization of resources; and
- does not constitute a significant project change.

Restricted cost categories and other inappropriate charges detected in audits, and resulting disallowances must be reimbursed to the Federal Government. In most cases, this will be the financial responsibility of the department. Final technical reports, where required, are the responsibility of the PI.

Payments withheld because of delinquent technical reports become the responsibility of the department. The PI has the additional obligation to adhere to all terms and conditions of the award, and to ensure that costs charged to the project are allowable and directly benefit the project charged. Should the PI have questions related to award or sponsor-specific requirements, s/he should seek advice from their ORA Contract Administrator or the SPAC financial administrator.

This policy applies to all federal financial assistance awards and is relevant to all UMD Principal Investigators (PIs); Department Business Managers; Office of Research Administration (ORA) and, Sponsored Program Accounting and Compliance (SPAC) staff.

Cost Transfer:

A cost transfer is defined as a transaction that moves an expense of a sponsored project (including but not limited to clinical trials, training grants, research grants/contracts/cooperative agreements) when the expense was initially charged to another project or non-sponsored account in order to correct the account. Cost transfers include transfers that occur during the life of the award and after the award has ended. A pattern of cost transfers from or to a sponsored project may indicate poor awards management. Unallowable cost transfers may result in unanticipated charges to the respective Department's discretionary account, and/or audit findings and subsequent cost disallowances.

Administrative Costs - Establishment of Organized Research Unit (ORU) and Significant Project Designation:

Significant Projects are awards which require an extensive amount of administrative or clerical support that is considerably greater than the routine level of such services provided by a department, institute, or center. Determination of what constitutes a Significant Project will be conducted on an award‑by‑award basis. The determination of extensive administrative or

clerical support may be done during the preparation of the proposal application, if possible. However, determination may be done later by obtaining post award approval from the sponsoring agency.

Significant Project Examples:

- Involve extensive data accumulation, analysis and entry, surveying, tabulation, cataloging, searching literature, and reporting (such as epidemiological studies, clinical trials, and retrospective clinical records studies)
- Require making travel and meeting arrangements for large numbers of participants, such as conferences and seminars
- Have a principal focus as the preparation and production of manuals, large reports, books and monographs (excluding routine progress and technical reports).
- Are geographically inaccessible to normal departmental administrative services, such as research vessels, radio astronomy projects, and other research field sites that are remote from campus; and/or
- Are individual projects requiring project‑specific database management; individualized graphics or manuscript preparation, management of multiple human or animal protocols across several researchers, and/or multiple project‑related investigator coordination and communications

This list is not intended to be exhaustive , but is intended to assist researchers and administrators in determining a significant project.

Organized Research Units (ORA) are large, complex programs, such as engineering research centers, clinical research centers or other programs that manages large teams of investigators and/or service providers and require an extensive amount of administrative or clerical support. These centers or programs can be designated as an ORU to bypass the award-by-award approval process for charging administrative expenses. There are characteristics of an ORU that help determine when it may be appropriate to apply for the designation.

Additional detailed policy guidelines are available at: http://www.ora.umd.edu/proposal-development/administrative-cost-designations

Specialized Service Facilities:

A specialized service facility is broadly defined as any major recharge activity that provides specific measurable services to users with total annual revenues in excess of $1,000,000 or that generates significant charges to federally sponsored agreements either as a direct or indirect cost. Examples of specialized service facilities may include: computer centers, animal facilities, wind tunnels, major reproduction facilities, motor pools, and telecommunication systems.

The specialized service facilities costs, consist of both its direct and its allocable share of F&A (indirect costs). The total cost of each specialized service facility, regardless of funding source,

must be recovered through a schedule of rates that applies to all users of the facility on an equitable and non-discriminatory basis, only to the extent of each user's use of the facility.

The UMD's policy is set forth in:
https://www.president.umd.edu/sites/president.umd.edu/files/files/documents/policies/VIII-1050A.pdf

The Uniform Guidance § 200.468 Specialized Service Facilities outlines cost requirements as well as provides examples of a Specialized Service Facility.
https://fawiki.fws.gov/pages/viewpage.action?pageId=24707601

"(a) The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) of this section, and, in addition, take into account any items of income or Federal financing that qualify as applicable credits under § 200.406 Applicable credits.
(b) The costs of such services, when material, must be charged directly to applicable awards based on actual usage of the services on the basis of a schedule of rates or established methodology that:
(1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes, and
(2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all indirect (F&A) costs. Rates must be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).
(c) Where the costs incurred for a service are not material, they may be allocated as indirect (F&A) costs.
(d) Under some extraordinary circumstances, where it is in the best interest of the Federal government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for indirect costs."

Personnel Requirements:

Personnel assigned to sponsored projects, like all other personnel, must be appointed and compensated in keeping with State and UMD personnel rules. Exempt and Non-Exempt staff, Faculty and all other types of personnel are governed by the policies and procedures found at: www.president.umd.edu/policies/.

In July 1994, the Federal Government implemented budgeting and costing principles embodied in the U.S. Office of Management and Budget (OMB) Circular A-21, "Cost Principles for Educational Institutions". Effective December 26, 2014, the OMB Circular A 21 were subsumed by the OMB Uniform Guidance: Cost Principles, Audit, and Administrative Requirements for Federal Awards. According to these principles, federally sponsored projects (either awarded directly by a Federal agency or by virtue of a subcontract through another prime contractor) may

not normally be charged for secretarial and administrative salaries, office supplies, postage or telephone costs unless a particular project requires an unusual and extensive degree of administrative support. Please browse OMB Circulars Relevant to Research Administration for examples of the kinds of unusual circumstances under which direct charging might be appropriate and allowable.

OMB also requires that UMD maintain records that will substantiate the effort of each individual charged to a sponsored project in accordance with the commitment of effort included in the proposal (unless the sponsor's policies permit otherwise). Therefore, time records must be carefully maintained. For faculty, staff, and graduate assistants paid on a sponsored project, effort is recorded on the Effort Report form distributed to each faculty investigator by the Cost Accounting office twice per year. Since the great majority of costs associated with sponsored projects are attributable to labor charges, it is incumbent upon UMD to assure that these records are properly maintained.

Travel Regulations:

UMD travel regulations (available at http://www.dbs.umd.edu/travel/policy/index.php) govern travel performed with sponsored funds. In some instances a particular contract or grant may specify travel limitations different from the UMD policy and these take precedence. When domestic or international travel is charged to a sponsored project, it is only allowable in accordance with that sponsor's terms and conditions. Note that federal agencies have restrictive regulations concerning international travel. Even though the awarded proposal may have included a line item for international travel, agency prior approval may still be required.

PLEASE NOTE: Under the U.S. Fly America Act, federally funded travel must use a United States flag carrier even if it is more expensive. Contact your ORA Contract Administrator if there is no U.S. flag carrier service or if other special circumstances exist.

Reimbursement of travel expenses on sponsored projects will be in accordance with UMD travel reimbursement rates.

Equipment Guidance:

Equipment is defined as an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost equal or greater than $5,000. Uniform Guidance Equipment requirements for Federal Awards are referenced in § 200.313 Equipment and §200.439 Equipment and Capital Expenditures.

The sponsoring agency's award may include provision for the acquisition of special-purpose equipment. The equipment in some cases may be supplied directly by the sponsoring agency, in which case title to the equipment generally remains with the agency, and it must be returned at the completion of the project. In the majority of cases, the approved equipment is purchased through UMD and often UMD retains title to the equipment. The Principal Investigator has the responsibility for:

- assuring first that the equipment is not already available within the Campus;
- determining the proper specifications and issuing the requisition for the equipment; and
- assuring proper receipt, inventory identification, and functioning of the equipment prior to authorizing vendor payments by the UMD.

It should be noted that any equipment that is to be purchased which has not been specifically approved in the award notification may require authorized written approval prior to purchase , by an agency official. Such requests by Principal Investigators, stating the need for the equipment and the source of funds (additional funds or budget reallocation), must be submitted to ORA for institutional endorsement and submission to the sponsor. Because there may be restrictions placed on equipment received or purchased on a sponsored project, disposition must be coordinated through ORA. Contact your [Contract Administrator](#) for assistance in acquiring authorization for special-purpose equipment.

Delegated Solicitation and Acceptance of Sponsored Projects and Delegated Purchasing Authority

The **authority to solicit and accept sponsored projects** (endorse and submit proposals and negotiate and execute awards for research) on behalf of UMD is delegated to the Office of Research Administration per IV-2.00 Policy on Solicitation and Acceptance of Sponsored Projects https://www.usmd.edu/regents/bylaws/SectionIV/IV200.html. See section **Proposal Processing, Internal Routing & Review** for additional guidance.
http://www.ora.umd.edu/resources/model-agreement#authority

The **authority to purchase** policy is applicable insofar as it's related to the effective conduct of a federal sponsored research project.. Policy issuance VIII-3.10(B) sets forth procedures applicable to the delegated purchasing authority at UMD:
https://www.president.umd.edu/administration/policies/section-viii-fiscal-and-business-affairs/viii-310b . This policy permits small purchases within a given UMD department up to $5,000. These small purchases are based upon the delegated authority granted by the Director of Procurement and Supply.

Change of Principal Investigator

Circumstances may, on occasion, warrant the designation of a new temporary or permanent Principal Investigator. A sponsor must be advised and prior written approval obtained before a new Principal Investigator may be designated. If the Principal Investigator finds it necessary to nominate someone, such requests must bear the signed endorsement of the Department Chair and the Dean of the College. If the request is made by the Department Chair, it must be endorsed by the Dean of the College. (If the Principal Investigator is also the Dean, then the request should bear the endorsement of the next higher authority).

In those instances where the request can be submitted through a Sponsor's post-award management system (e.g. Research.gov), no additional paperwork is necessary. In all other instances, a letter will need to be drafted by the department that explains why the key personnel is no longer able to continue on the project, the name of the individual who is replacing the key personnel and evidence of the qualifications of replacement personnel, including a c.v. This letter should be signed by all affected key personnel (when practical) and countersigned by an authorized UMD signature (ORA), who will forward the request to the sponsor for action.

Transfer of Contract or Grant:

To Another Institution:

A Principal Investigator who is transferring to another institution may wish to continue his or her sponsored research projects there. Steps are initiated to transfer the grant or contract only upon concurrence of the Department Chair and the Dean of the College.

Permission must be obtained from the sponsoring agency for such transfers (transfers are by no means automatically granted by all sponsors); arrangements must proceed through ORA. Transfers are generally at the discretion of the UMD. Since sponsored awards are made to the UMD (not to individual Principal Investigators), there may be instances in which the Campus may elect to retain a project and nominate an alternate Principal Investigator; this also requires agency approval.

From Another Institution:

A faculty member coming from another institution who will be appointed to UMD may have a sponsored project he or she wishes to transfer here. Such transfer requires the home institutions Authorized Official's approval in addition to the approval of the sponsoring agency. A new proposal (or the revised original) with new budgetary information must then be processed at UMD through the normal routing and approval cycle, prior to submission to the sponsoring agency.

Refer to [Award Transfer](#) more information on transferring a sponsored project to or from another institution.

Program Income:

Income derived from services or goods that form part of a project supported in whole or in part by a sponsoring agency, must be reported to the agency, with few exceptions. Often program income has to be approved by the sponsor prior to its being generated. Such income should be deposited to the appropriate sponsored account.

Any Principal Investigator expecting to recover income through a sponsored project should discuss this with SPAC.

Computer Equipment and Computer Time:

The acquisition of computer equipment and peripherals typically requires prior approval of all federal agencies; this is true of virtually all other sponsoring agencies whether government or non-government. Please refer to the approval process in the Equipment section above. See subsequent section on **Prior Approval**.

Intellectual Property

Intellectual property is information resulting from research and creative activities which tend to be measured as a financial commodity, i.e. patents, trademarks or copyrights. Intellectual Property is inclusive of patents, inventions, software development, trademarks, copyrightable works, or forms of intellectual property. The primary mission of UMD is to advance, preserve, and disseminate knowledge. UMD has established this policy on intellectual property to: (1) assure that the benefits of UMD research and scholarship, which include intellectual property, are fairly and fully disseminated to benefit the public, (2) create an environment that encourages and recognizes the creative efforts of faculty, students and personnel, and (3) generate resources to support UMD's primary mission

UMD most recently updated policy on intellectual property, effective January 10, 2018 can be found here:
https://president.umd.edu/sites/president.umd.edu/files/documents/policies/IV-320A.pdf
The policy is intended to safeguard the interests of the creators, the UMD, and the public. Previous applicable intellectual property, patent and copyright policies can be found here: https://www.usmd.edu/regents/bylaws/SectionIV/

All inventions, discoveries or other intellectual property must be disclosed to UMD through the Division of Research's Office of Technology Commercialization (OTC) http://otc.umd.edu/. This office also manages the required sponsored project invention reports from faculty researchers.

UMD Ownership of Intellectual Property

Policy IV.3.20(A) stipulates that the UMD "owns all rights, title and interests, including Intellectual Property rights, in Inventions, Software, Research Data and Tangible Research Materials that are created, conceived or reduced to practice by Personnel or Students in the performance of Sponsored Research activities and other research or creative activities administered by the University, supported by funds controlled or administered by the University or an affiliated foundation or corporation of the University or under a contract requiring University ownership". Generally speaking, intellectual property ownership is vested in the UMD.

Except in cases of statutory or other legal restrictions the UMD does not waive its rights to inventions arising from projects performed under its auspices. UMD will make every effort to have inventions evaluated, patented, and licensed, so that the results of research can benefit the public.

These efforts are carried out through the Office of Technology Commercialization.

Prior Approvals:

As part of the Federal Research Terms and Conditions modifications to federally sponsored research projects require prior written approval by the institution from the federal sponsors,i.e. NSF, NIH, DOE. These are outlined by type of action and federal agency in the **Research Terms and Conditions Appendix A Prior Approval Matrix October 1, 2017 https://www.nsf.gov/bfa/dias/policy/fedrtc/appendix_a.pdf.** Any of the authorities set forth in the Prior Approval Matrix can be overridden by a special term and condition of an award. It is important that appropriate documentation of the prior approval is obtained and saved for possible later audit reviews or site visits by federal sponsoring officials.

Mandatory Cost Sharing Records and Reports

Cost Sharing Records:

UMD shall maintain records of all project costs that are claimed to meet mandatory cost sharing requirements specified in a program solicitation.

Cost Sharing Reports:

Compliance with cost share reporting (annual/final) is dependent upon agency specific requirements, as set forth in the agency specific terms and conditions and/or in accordance with the Uniform Guidance, December 26, 2014. Such financial reports are done by SPAC.

Modification to Cost Sharing Amount Specified in Award Notice:

If modifications are necessary to the cost share amount identified in the Award Notice, then UMD will need to provide written notification to the sponsor's grant official of the situation. Any modifications/adjustment will be made in accordance with the sponsor's policies and procedure.

Annual and Final Project Reporting:

The Uniform Guidance, 200.328 sets forth program performance reporting requirements for assistance awards, stating, '*The non-Federal entity must submit performance reports at the interval required by the Federal awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequently than annually not more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due 90 calendar days after the reporting period. Alternatively, the Federal awarding agency or pass-through entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due 90 calendar days after the period of performance end date. If a justified request is submitted by a non-Federal entity, the Federal agency may extend the due date for any performance report.*'

With few exceptions, every federally funded sponsored project will require a number of reports during the life of the project and at the conclusion of the project, unless otherwise indicated as unnecessary by the award's terms. Every Principal Investigator should be prepared to submit a final project (technical) report at the very least, whether the sponsor is federal or not.

The importance of the submission of such reports on a timely basis cannot be overstated. Annual and Final Project (technical) Reports are federally mandated requirements. In a grant or contract arrangement, unlike a gift, the sponsor expects and deserves to be informed of results. Negligence by the Principal Investigator may substantially impact his or her (and UMD's) ability to receive other support from the sponsor; it could also result in a loss of payment to UMD for costs already incurred. Such losses could become a liability chargeable to the department and college.

In addition to the Annual and Final project (technical report) other reports may be required relating to inventions, equipment accountability, fiscal data, and voucher submissions. Equipment Reports are the responsibility of the Inventory Control office and the last two are the responsibility of SPAC. With the Principal Investigator's input, the Office of Technology Commercialization will provide assistance to ORA with invention reports.

Graduate Fellowships:

Final project reports may not be required for institutional graduate research fellowships. However, final reporting requirements for individual fellowships are established in the applicable program solicitation.

Projects Outcomes Reports (POR) for the General Public (specific to NSF):

NSF instituted a new reporting requirement as a result of specific legislation in the America COMPETES Act of 2007, (Section 7010: Reporting of Research Results), which required that all final project reports and citations of published research documents resulting from research funded in whole, or in part, by the NSF, are made available to the public in a timely manner and in electronic form through NSF. This requirement is effective for new awards made or existing awards that receive funding increments or supplements on or after January 4, 2010. The policy for preparing and submitting these reports is provided in NSF's Proposal and Award Policies and Procedures (PAPPG).

The guidance for the preparation and submission of Projects Outcomes Reports is available on Research.gov, https://www.research.gov/common/attachment/Desktop/Project%20Report%20Getting%20Started%20Guide.pdf

In addition, NSF provides guidance on its NSF's Frequently Asked Questions (FAQs) on Project Outcomes Report for the General Public (POR) - updated January 2013, https://www.nsf.gov/pubs/policydocs/porfaqs.jsp.

Compliance with Technical Reporting Requirements:

The failure to provide any of the above technical reports on a timely basis may delay future proposal reviews for all identified researchers associated with a given award or may prevent the funding of other projects from that sponsor until the reporting requirements are met.

Accounting

Primary responsibility for technical and fiscal management of any project begins with the Principal Investigator. Many departments have services that provide assistance in fiscal and other administrative matters. SPAC is the entity responsible for recording and facilitating all financial matters relating to expenditures and revenues. SPAC will make no adjustments such as encumbrances, expenditures, or cost transfers without initiation of such adjustments from the Principal Investigator or his or her designee. In order to transfer incorrect charges from one account to another the proper form must be filled out, authorized and submitted to SPAC via the Kuali Financial System. Information on Accounting for Sponsored Projects may be found on the SPAC website or by contacting them directly.

Audit Process:

When the UMD accepts funds from outside organizations for research and other activities, those organizations presume the UMD will expend the funds for the purposes for which they were given and in accordance with any terms and conditions set forth in the award document. Similarly, the Federal Government has an obligation to the United States taxpayers to assure that recipients of federal funds are providing proper stewardship.

In addition, UMD's sponsors reserve the right to audit the UMD financial records for sponsor awards and, in some cases, may audit the project's scientific records and data. Typically, these audits will be of the awards themselves.

Financial and other sponsored project records are regularly audited. Such records are maintained primarily by ORA and SPAC. In addition each Department is expected to maintain records at the local level, such as those recording and justifying charges to sponsored accounts for personnel appointments, salaries, payroll documents, purchase requisitions and orders, and other primary documents. These records must also be available for audit.

Records at the SPAC, ORA and the department are audited regularly by federal, state, and other external auditors and by the UMD's internal audit office. However, no external auditors may examine records or interview staff within any campus department or unit without first presenting a letter of authorization to SPAC Compliance or the UMD Comptroller. SPAC Compliance or the Comptroller will then notify the appropriate departmental representatives.

These procedures are designed to protect campus departments from audit "fishing expeditions," and from unnecessary and unauthorized audit reviews.

Audits fall into the categories of either pre-award, post-award or system audits. They are as follows:

Pre-Award Audits:

Occasionally, the Federal Government will require an audit before the issuance of an award. Such pre-award audits generally involve responses to federal Requests for Proposals that will result in the issuance of a contract that is more than $500,000 per year. These audits may be performed as desk audits at the sponsoring agency or the federal auditors may visit UMD to review documentation supporting the proposed project costs.

Post-award Audits and System Audits:

Federal audits are generally:
- Post-award audits conducted by federal auditors from the cognizant audit agency assigned to the auditee (in the case of UMD, the Department of Health and Human Services);
- Staff auditors or contract audit staff from Office of the Inspector General of the respective federal sponsor. Audits conducted by federal sponsors are conducted as part of their oversight responsibilities and are meant to determine whether UMD is managing federal funds consistent with federal laws and regulations; or
- Those audits conducted annually by the University System of Maryland's certified public accountants, as required by the "Single Audit Act of 1984" and 2 § CFR 200.501, "Audit Requirements."

Source Documents/ Documentation:

Source documents are original records that contain details to substantiate financial transactions entered in an institution's financial accounting system of record. Typically, source documents will reflect the date of the transaction; a specified amount charged, and an authorizing signature or electronic certification. Auditors will review source documents as evidence to verify that costs were properly incurred, consistent with federal regulations and award terms and conditions. Lack of required source documentation, or alternative evidence, to substantiate incurred costs may result in audit findings known as questioned costs.

During audit engagements and subsequent resolution of questioned costs and/or internal controls findings, UMD under audit may be questioned about the existence and maintenance of source documents. Broader questions around the general decision making, especially that of financial and administrative staff, may also be raised. A review of system business rules would also be in order. The auditors will also review business rules embedded in administrative systems in lieu of source documentation and determine whether compliance has been met.

Federal agency officials and auditors have the discretion to use their professional judgment to accept alternative documentation in certain instances as full or partial evidence that a transaction occurred, should source documentation be lost or otherwise unavailable. For example, calendar or journal entries may be considered alternative documentation, if time and effort records are not available.

UMD indicates compliance as follows:

- Source documents/documentation
- Business systems and business rules
- Sound professional judgment and competence, strong collaboration with the Division of Research; ongoing professional development and training

UMD's administrative systems play a major role in being an alternate documentation source for auditors in determining whether research compliance has been accomplished. System business rules function as:

- Support financial and administrative compliance.
- Enforce Federal and UMD policies and procedures.
- They are integral to the UMD's internal control structure.

During audit engagements and subsequent resolution of questioned costs and/or internal controls findings, audited organizations may be questioned about the existence and maintenance of source documents. Broader questions around the general decision making, especially that of financial and administrative staff, may also be raised. A review of system business rules would also be in order.

General Areas of Audit Findings and Risk

Each sponsoring federal agency's Office of the Inspector General (OIG) develops an annual work plan and a review of those indicates that universities across the country have consistently received audit findings in several key areas:

- Consistent treatment of direct and indirect costs
- Cost allowability
- Cost transfers
- Payroll distribution/effort reporting
- Subrecipient monitoring
- Tracking and reporting of cost sharing

In addition, several other audit areas have emerged recently due to changing federal priorities and/or regulations, including:

- Adequacy of internal controls
- Data management and security
- Direct charging of administrative costs
- Quality control reviews of A-133 audits

Subaward Processing

The Uniform Guidance, December 26, 2014 defines '**Subaward**' as an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through

any form of legal agreement, including an agreement that the pass-through entity considers a contract.

UMD is responsible for compliance with the Uniform Guidance 2 C.F.R. Part 200-337 as it relates to the making of subawards to entities that are excluded from the Single Audit requirements; to communicate those requirements to the responsible officials; and to provide the appropriate resource references.

ORA is responsible for advising the subawardee of requirements imposed on them by federal laws, regulations and the provisions of grants, contracts and cooperative agreements, as well as any supplemental requirements imposed by UMD.

If a sponsored project proposal is to include a subaward for a portion of the work, UMD's Principal Investigator must first receive the subawardee's Statement of Work and Budget and endorsement from the subawardee's authorized official, and then incorporate this information into the proposal. The proposal is then reviewed by the appropriate Chair and Dean before it is routed to ORA for review and submission to the sponsoring agency.

When an award is accepted from the sponsor, ORA sets up the account in KR, which is disseminated to the PI(s), departmental business person(s) and others electronically and provides notification that a KFS account number has been assigned to the project. Once ORA's Subaward Team has received the Principal Investigator's/Department's request to issue a subaward, via the [Subaward Request Form,](#) ORA's Subaward Team will prepare the subaward and submit it to the subrecipient for approval. ORA will negotiate any changes to the agreement and issue the subaward. Once the subaward has been signed by both UMD and the subrecipient, the subaward amount is encumbered in the project KFS account.

In order for a subrecipient to be paid, invoices from the subrecipient must be reviewed and approved by the PI/Department first, and then forwarded to the Accounts Payable Office for payment.

For more information on subcontracts, see O[RA's Subcontract Manual](http://www.ora.umd.edu/resources/subcontract-manual)
http://www.ora.umd.edu/resources/subcontract-manual

Chapter 4: Project Close Out

This section addresses the requirements that must be met in the close out stage of the project. The research grant close out process is a collaborative effort between investigators, administrators, and accounting/financial staff to meet all requirements and deliverables per the terms and conditions of the award as the project end date approaches.

The following need to be addressed in the close out stage:

- The federally mandated requirements for final project report completion and submission are set forth by the Uniform Guidance, December 26, 2014. These requirements are outlined in the section **Project Administration**, subsection **Annual and Final Project Reporting.** https://www.whitehouse.gov/omb/circulars_a110/

- Cost share or matching funds commitment requirements are outlined in this Handbook's section **Preparing the Proposal**, subsection **Cost Sharing**. UMD's policies on cost sharing are set forth in policy issuance IV-4.00(A) UMD POLICY AND PROCEDURES FOR COST SHARING. https://www.president.umd.edu/administration/policies/section-iv-research/iv-400a.

  Though referenced under Handbook section **Preparing the Proposal,** subsection **Cost Sharing**, it's important to reiterate that, "*Throughout the project's life, the PI and the administering unit must maintain sufficient documentation to substantiate all expenditures including cost sharing contributions and make those records available to the funding agency and/or auditors as required.*'

- To demonstrate funds accountability, including expenditures made consistent with approvals, retain approvals and related documentation for potential audit and internal controls monitoring.

- The Principal Investigator and ORA are responsible for determining whether agency grant terms and conditions have been met, as well as any award-specific requirements. The latter are contained within any special language of the award document. Each sponsored project contains grant general terms and conditions that must be met during the life of the projects as well as part of the final close out requirements.

- **Archive and disseminate data**: Consult award terms and conditions for resources and information related to archiving your data and disseminating your research findings.

- **Protect intellectual property**: Work with the Office of Technology Commercialization to disclose any IP created on the project.

- **Close Subawards:** Per the Subaward Guide ensure receipt and approve the final invoice from the subawardee and ensure receipt of require final or other reports or deliverables required from subawardee.

Chapter 5: Research & Ethics Compliance

Ethics and compliance in research covers a broad range of activity from general guidelines about conducting research responsibly to specific regulations governing a type of research (e.g., human subjects in research). The core principles are to foster ethical conduct, ensure compliance with federal and state regulations, set forth UMD guidelines, and safeguarding researchers and research.

ORA is responsible for certifying compliance with applicable laws and regulations and with UMD administrative rules. ORA works with the Compliance Office within the Division of Research and the Department of Environmental Safety, Sustainability and Risk to review matters involving human subjects, DNA research, hazardous substances, export control issues and the experimental use of animals. There are a number of federally mandated compliance requirements that ORA is responsible for certifying to on behalf of UMD, prior to the acceptance of an award, particularly during the proposal development and submission phase of the process.

IRB - Institutional Review Board (Human Subjects):

Sponsored projects involving research with human subjects must ensure that subjects are protected from research risks in conformance with the relevant federal policy known as the Common Rule (Federal Policy for the Protection of Human Subjects, 45 CFR 690). Sponsored projects involving human subjects must either (1) have approval from the organization's Institutional Review Board (IRB) before an agency can issue an award or funds can be expended, (2) must affirm that the IRB or an appropriate knowledgeable authority previously designated by the organization (not the Principal Investigator) has declared the research exempt from IRB review in accordance with the applicable subsection, as established in section 101(b) of the Common Rule. UMD policy issuance is set forth **in Policy IV-2.10 – Policy on Human Subjects of Research**:
https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/IV-210.pdf.
Additional guidance is available at the IRB web site at: https://research.umd.edu/irb

IACUC – Institutional Animal Care and Use Committee:

Research proposals that include use of animals must comply with federal and UMD policies governing their use and care. Information regarding the policy guidance for animal care can be found on the IACUC – Institutional Animal Care and Use Committee website https://research.umd.edu/iacuc. The policy overview provides guidance and cites the necessary federal regulations that underpins **UMD**'s policies on animal care and use.   The IACUC website also directs users/researchers with questions and concerns to the Director of Animal Research Support and IACUC Manager for additional guidance**.**

This is important since this compliance requirement traverses the award life cycle. Consistent with the requirements of the Animal Welfare Act [7 U.S.C. 2131 et seq.] and the regulations promulgated by the Secretary of Agriculture [9 CFR, 1.1-4.11], agencies require that proposed projects involving use of any vertebrate animal for research or education be approved by the submitting organization's Institutional Animal Care and Use Committee (IACUC) before an award can be made. For the approval to be accepted, an organization must have a current Institutional Animal Welfare Assurance established with the Public Health Service (PHS).

COI – Conflicts of Interest
https://research.umd.edu/coi

There are a number of UMD policy issuances related to Conflict of Interests and Conflicts of Commitment. Conflicts of Interest policy is identified by the UMD as inclusive of Code of Academic Integrity in Student Life, Financial/Institutional Conflicts, Conflicts (Personal/Individual) of Interest, Conflicts of Interest in Public Health Services, as well as Responsible Conduct in Research (RCR).

An individual conflict exists when a relationship between a covered individual's private business or financial interests, or those of the covered individual's family members, and the covered individual's UMD expertise and responsibilities might cause an independent observer to reasonably question whether the individual's objectivity in the performance of UMD responsibilities could be compromised by considerations of personal gain.

Conflict of Interest (COI) is a legal term that encompasses a wide spectrum of behaviors or actions involving personal gain or financial interest. Under UMD policy, the term "conflict of interest" denotes situations in which a member of the UMD community is in a position to gain personal benefit (broadly construed) or financial advantage arising from his/her UMD position, either through outside professional activities or through his/her actions or decisions at the UMD, including research, administrative, or educational activities. Because UMD employees are also State employees, the Maryland State Ethics Law governing conflict of interest also applies. It's important to note that federal conflicts of interest requirements serve to underpin policies and procedures, individual states have their own separate set of requirements that have been incorporated into individual universities' policy issuance.

Conflicts of Interest policies and procedures are mandated by federal statutes. Included among those requirements in the Uniform Administrative Requirements Cost Principles and Audit Requirements for Federal Awards – 2 Subpart B, General Provisions §200.112, Conflicts of Interest which states, 'The Federal awarding agency must establish conflicts of interest policies for Federal awards. The non-Federal entity must disclose in writing any potential conflicts of interest to the Federal awarding agency or pass-through entity in accordance with applicable Federal awarding agency policy.

In addition, the 18 U.S. Code § 208 - Acts affecting a personal financial interest set forth conflict of interest policies and procedures, states "The financial interest is the possibility of gain or loss (of the value of an asset or other interest) resulting from a particular matter, not the asset or interest itself. Thus, a person could have a large holding, but only a relatively small financial interest if the particular matter, because the potential for gain or loss is small."

ICOI-Institutional Conflicts of Interest

https://president.umd.edu/administration/policies/section-x-miscellaneous-policies/x-1400a

This compliance requirement governs institutional conflicts of interest, applicable to all UMD officials. This policy does NOT govern situations in which individuals who are NOT UMD Officials (i.e. faculty, staff, and students) might realize financial gain from the conduct of research or performance of other responsibilities at the UMD; UMD's Conflict of Interest Committee, using existing policies and procedures, adequately identifies such situations and independently manages their associated risks to scientific objectivity and proper treatment of human and animal subjects.

UMD defines an ICOI as occurring whenever the financial interests of the institution, or of a UMD Official acting within his or her authority on behalf of the institution, might affect, or appear to affect, the objectivity of institutional processes for the selection, design, conduct, reporting, review, or oversight of the UMD enterprise.

The OMB Uniform Administrative Guidance (December 2014) includes Subpart B, General Provisions, §200.112, Conflict of Interest, which states, "The Federal awarding agency must establish conflict of interest policies for Federal awards. The non-Federal entity must disclose in writing any potential conflict of interest to the Federal awarding agency or pass through entity in accordance with applicable Federal awarding agency policy."

FCOI - Financial Conflicts of Interest in Public Health Service Funded Research

https://www.president.umd.edu/administration/policies/section-ii-faculty/ii-310c

UMD adopted this policy as required to implement and to comply with U.S. Public Health Service (PHS) regulations, including the National Institutes of Health, on Responsibility of Applicants for Promoting Objectivity in Research for which PHS Funding is Sought (42 C.F.R. Part 50, Subpart F). Their goal is promoting objectivity in PHS Funded Research by establishing standards that provide a reasonable expectation that the design, conduct, and reporting of research funded under PHS grant, cooperative agreements and contracts will be free from bias resulting from Investigators' Financial Conflicts of Interest.

Annual FCOI disclosures are required in order to submit proposals to PHS agencies (and several other agencies found here https://research.umd.edu/fcoi#annual). Changes/Updates must be

made as they may occur due to a new conflict during the submission of a new proposal (new disclosure), in Interim FCOI can be submitted to modify the FCOI Disclosure.

Training is required for investigators engaged in research which includes PHS funding, whether a Financial Conflict of Interest exists or not. Details on what does or does not constitute a Financial Conflict of Interest is outlined in the above referenced policy issuance.

RCR – Responsible Conduct in Research (NSF):
https://research.umd.edu/rcr

The 2007 America COMPETES Act, directed NSF to require each funded proposal have in place a plan for appropriate RCR training and oversight for responsible and ethical conduct of research by undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project. The Authorized Organizational Representative (AOR) is required to complete a certification that the awardee organization has described in its grant proposal a plan in place to provide appropriate training and oversight. Each proposal submission certifies that research misconduct plan is in place and training has been accomplished.

It's important to highlight the department's responsibility regarding an RCR plan and student training:

- Have a plan somewhere that speaks to how they train research students on sponsored projects is accomplished
- Be able to demonstrate training occurs
- Be able to demonstrate they monitor the implementation of the plan

It's important to emphasize the importance of research misconduct policy in the integrity of research, as well as the need for a RCR training plan. The National Science Foundation's Important Notice 140, dated August 17, 2017 is a reminder of the need for 'Training in Responsible Conduct of Research' is a NSF requirement. At each proposal submission, the AOR certifies that research misconduct training has been accomplished.
https://www.nsf.gov/pubs/issuances/in140.pdf?destination=node/3045

The UMD's Division of Research provides detailed policy and procedural guidance for RCR training on its web site: https://research.umd.edu/rcr. In addition, NSF guidance is available at: https://www.nsf.gov/bfa/dias/policy/rcr.jsp.

Policy on Research Misconduct
 https://president.umd.edu/administration/policies/section-iii-academic-affairs/iii-110a

UMD's Policy and Procedures Concerning Research Misconduct applies to all UMD community members involved in scientific and scholarly work and other creative activities. UMD

community members are inclusive of students, staff, faculty and administrators that share responsibility for developing and maintaining standards to assure honesty, accuracy and objectivity in scientific and scholarly work and other creative activities and detection of abuse of these standards.

This policy applies to all scientific and scholarly work, and other creative activity, research training, applications and proposals and related activity containing a research component, performed at UMD by any person, including faculty, staff, students, visitors and others; or performed with the use of UMD resources; or performed elsewhere, by a person acting under the auspices of UMD.

Institutions that apply for or receive federal funds for research are required by law to share responsibility for the integrity of the research process (e.g., Public Health Service Policies on Research Misconduct, 42 CFR Part 93). UMD voluntarily applies the common federal standards for integrity in research to all UMD research regardless of funding source. Both the UMD and its personnel have a duty to ensure the integrity of research and research training by assuming primary responsibility for responding to allegations of Research Misconduct.

Policy on Sexual Harassment:

UMD's policy on sexual harassment is memorialized in **VI-1.60(A) UNIVERSITY OF MARYLAND SEXUAL MISCONDUCT POLICY & PROCEDURES** (Approved on an interim basis October 13, 2014; Amended May 4, 2015; Amended October 1, 2015; Amended March 21, 2016; Amended and approved by the President May 13, 2016.

UMD's extensive policies and procedures are available to researchers at: https://www.president.umd.edu/administration/policies/section-vi-general-administration/vi-160a-0

Instances of sexual misconduct need to reported immediately to the Title IX Coordinator in the Office of Civil Rights and Sexual Misconduct.

Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs, services and activities that receive Federal financial assistance (grants) from the Federal Government. Covered programs and activities includes admissions, recruitment, financial aid, academic programs, student treatment, services, counseling and guidance, discipline, classroom assignment, grading, vocational education, recreation, physical education, housing and employment. Forms of discrimination include sex-based discrimination, gender-based harassment, sexual harassment.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature. Examples of such prohibited practices would include gossiping, slurs, offensive or derogatory comments, or other verbal or physical

conduct. Federal guidelines and case law define sexual harassment as including "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature" not only when the conduct is made as a condition of employment ("quid pro quo" harassment), but when the conduct creates an intimidating, hostile, or offensive working environment.

Researchers need to be familiar with individual federal sponsors' policies and procedures regarding the reporting requirements for instances of sexual harassment. In addition, federal sponsors may include special terms and conditions applicable to sexual harassment.

In addition, sexual harassment can qualify as discrimination under Title IX if it is "so severe, pervasive, and objectively offensive that it effectively bars the victim's access to an educational opportunity or benefit." The courts have generally found that even a single instance of rape or sexual assault by another student meets this standard.

An Institution's Responsibilities:

- To be held responsible, the college or university must have authority over the harasser and over the environment in which the harassment takes place.
- According to the Supreme Court, a school becomes legally responsible when the school's response to harassment "is clearly unreasonable in light of the known circumstances."
- The Supreme Court has ruled that a college or university receiving federal funding may have to pay damages to the victim of student-on student sexual harassment or assault if the victim can show that the college acted with "deliberate indifference to known acts of harassment in its programs or activities."

Policy on the Code of Academic Integrity:

This policy oversight is managed by the Office of Student Conduct. This policy is not directly related to the conduct of federally sponsored research projects. However, it's important that all members of UMD understand and adhere to established goals and values related to proper academic integrity. The Code of Academic Integrity is designed to ensure that academic honesty is upheld. While all members of the UMD community share this responsibility, the Code of Academic Integrity is designed so that special relationship for upholding the principle of academic honesty rests with the student.

It is important that UMD students engaged in sponsored research activities understand the Responsible Conduct in Research (RCR) policy. Students involved in research should also review and understand the specific policies on personal conduct, harassment, retaliation, and responsibilities of supervisors.

UMD's policy is ensconced in **III-1.00(A) UMD CODE OF ACADEMIC INTEGRITY.** https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf

Export Controls:

The Export Administration Regulations (EAR), promulgated and enforced by the Department of Commerce, and the International Traffic in Arms Regulations (ITAR), promulgated and enforced by the Department of State, prohibit the export of specific unlicensed technologies for reasons of national security or protection of trade.

If UMD research is controlled under EAR or ITAR, UMD may be obligated to obtain a license from the Department of Commerce or the Department of State in order for foreign nationals to participate in the research, research to be conducted in cooperation with a foreign company or foreign colleagues, research equipment to be sent to foreign countries, or research to be shared – either verbally, visually, or in writing – with persons who are non-United States citizens or permanent resident aliens.

Additionally, the Office of Foreign Assets Control (OFAC) in the Treasury Department, administers and enforces boycotts against specific countries. The scope of the boycott varies depending on the country and may change from time to time. Full descriptions of all countries currently subject to boycott programs are available here.

UMD is responsible for assisting the PI in assessing the application of export control regulations and OFAC boycotts to specific projects, however, the primary responsibility for compliance rests with the PI.

Principal Investigators have the responsibility to cooperate with the Export Compliance Office and ORA to determine that applicability of export control before starting any research and notifying the Export Compliance Office and ORA of any change in the scope or staffing of any research project that could alter the determinations about the applicability of export control regulations. Additionally, the PI must notify the Export Compliance Office well in advanced of sending scientific equipment, including GPS equipment and encrypted software, out of the country. All nondisclosure agreements must be routed to ORA for review and signature by the Export Compliance Office.

More information and guidelines, including links to the specific codes and definitions can be found at the **Export Compliance Office** website: https://research.umd.edu/eco

Classified and Proprietary Work:

UMD's policy was approved by the Board of Regents, June 16, 2017 and available at: https://www.usmd.edu/regents/bylaws/SectionIV/IV220.html This policy provides guidance on the dissemination of unclassified information to the public by an individual or organization external to the University of Maryland System. See previous section in this Handbook regarding this policy.

Policy on Recombinant DNA and Biosafety:

The UMD policies are ensconced in three separate policy issuances on biosafety. The Recombinant DNA policy is set forth in **Policy VI-17.00(A) UMD Policy on Biosafety,** https://www.president.umd.edu/administration/policies/section-vi-general-administration/vi-1700a

Hazardous chemical use in laboratories is set forth in **Policy VI-13.00(A) UMCP Policy on Occupational Exposure to Hazardous Chemicals in Laboratories,** https://www.president.umd.edu/administration/policies/section-vi-general-administration/vi-1300a

Exposure to bloodbourne pathogens is set forth in **Policy VI-11.00(B) UMCP Policy on Occupational Exposure to Bloodbourne Pathogens,** https://www.president.umd.edu/administration/policies/section-vi-general-administration/vi-1100b

Recombinant DNA:

Policies and procedures on Recombinant DNA, Hazardous Chemicals, and Biosafety are the oversight responsibility of the Department of Environmental Safety, Sustainability and Risk (ESSR) at UMD. Compliance with the NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines) is mandatory for every award recipient organization that receives sponsored projects research funding involving recombinant or synthetic nucleic acids. Every award recipient organization must have a standing Institutional Biosafety Committee (IBC) as specified in Section IV of the NIH Guidelines. Recombinant DNA research subject to the Guidelines must be registered with the IBC indicating compliance with the containment requirements specified in Part III of the Guidelines. IBCs are required to keep records of recombinant DNA research conducted at their organization in a form that is available to federal sponsors upon request. Principal Investigators are responsible for registering with the Institutional Biosafety Committee (IBC) all experiments involving these materials.

Policy guidance related to Recombinant DNA can be found here: https://www.essr.umd.edu/research-safety/biological-safety/recombinant-or-synthetic-nucleic-acids . The ESSR website provides links to the PDF file with the current NIH Guidelines for

Research Involving Recombinant or Synthetic Nucleic Acid Molecules.
https://osp.od.nih.gov/wp-content/uploads/2013/06/NIH_Guidelines.pdf

The NIH policy provides guidelines to be followed on microorganisms involved in research laboratories supported by federally funded sponsored projects. It's important to point out that this policy is separate from responsible, professional safety practices to be followed by researchers in research laboratories at universities and colleges. As stated in NIH guidelines These guidelines are to specify the practices for constructing and handling: (i) recombinant nucleic acid molecules, (ii) synthetic nucleic acid molecules, including those that are chemically or otherwise modified but can base pair with naturally occurring nucleic acid molecules, and (iii) cells, organisms, and viruses containing such molecules.

ESSR is responsible for assisting any other UMD department in providing training and guidance for implementation of this policy. ESSR's provides an extensive Policy on Hazardous Chemicals and Biosafety at https://www.essr.umd.edu/documents. The website provides an inclusive list of manuals, procedural guidelines, and policies related to an array of biosafety concerns, including, laser safety, radiation safety, bio waste management, asbestos management, lead management, infectious agents, non-human primate materials as well as the requirements to have an Institutional Committee be in place.

Exposure to Hazardous Chemicals in Laboratories:

The Occupational Safety and Health Administration (OSHA) Standard 1910.1450 subpart Z entitled 'Toxic and Hazardous Substances,' underpins policy guidance related to the exposure to hazardous chemical in laboratories for recipients of federally-funded sponsored research funds.

OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories standard (29 CFR 1910.1450), sets up the Standard to be followed, and specifies the mandatory requirements of a Chemical Hygiene Plan (CHP) to protect laboratory workers/researchers from harm due to hazardous chemicals. In addition to the CHP requirements, the Standard stipulates the need for annual training, as well as requirements needed to develop Standard Operating Procedures (SOP).

Since laboratory research is conducted under federally funded research projects, it's important to emphasize the importance of following the federal compliance mandates for occupational exposure to bloodborne pathogens as well as other biosafety

See link above to the UMD's policy issuance on exposure to hazardous chemicals in laboratories.

Occupational Exposure to Bloodborne Pathogens:

OSHA is responsible for providing guidance and directives for Bloodborne Pathogens Exposure for federally funded sponsored projects. OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) as amended pursuant to the Needlestick Safety and Prevention Act of 2000, prescribes safeguards to protect workers/researchers against the health hazards caused by bloodborne pathogens. OSHA's standard (CFR 1910.1030) as well as the Needlestick Safety and Prevention Action of 2000 underpin all policies and procedures regarding exposure to bloodborne pathogens.

UMD's ESSR provides guidance in the form of a manual, guidelines, and policies on an array of occupational safety concerns, including annual training for occupational exposure to bloodborne pathogens.

See link above to UMD's policy issuance on exposure to occupational exposure to bloodborne pathogens.

Policy on Suspected Fiscal Irregularities:

UMD's policy is ensconced in **Policy on VIII-7.10(A) UMD Procedures on Reporting Suspected or Known Fiscal Irregularities.**
http://www.usmh.usmd.edu/regents/bylaws/SectionVIII/VIII710.html

Fiscal misconduct is defined as: a) an activity or set of activities that lead to the intentional spending of UMD resources that are not approved; b) inappropriate use of UMD resources including assets and personnel; c) knowingly violating UMD financial policies; d) manipulation of UMD data and documentation to allow spending where funds do not exist; or e) intentionally misreporting UMD transactions.

Fiscal irregularities include a wide range of financial activities, processes, and procedures at a particular institution. These are addressed by institutions as part of their all-inclusive internal controls policies and plan. Internal controls may be generally viewed and defined as financial, however, it's inclusive of all compliance requirements and mandates at a particular institution. To further clarify, internal controls should address the issue of financial conduct, effectiveness and efficiency of operations of the organizations, and compliance with applicable laws and regulations.

Internal control requirements and procedures are further addressed in the subsequent section on **Internal Controls**.

Internal Controls:

What is Internal Control?

Internal Control is the system and process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies. An internal control system is a continuous built-in component of operations, policies and procedures, that provides reasonable assurance, not absolute assurance, that an entity's objectives will be achieved.

Required by the Uniform Guidance

The Uniform Guidance, at §200.303, requires that all recipients of federal financial assistance establish and maintain effective internal control as a predicate for the receipt of funding. Instead of considering internal control as an isolated management tool, organizations should integrate efforts to meet either the Comptroller General's "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States or the "Internal Control Integrated Framework" issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. These documents are consistent in prescribing internal control as an integral part of the entire cycle of planning, budgeting, management, accounting, and auditing that should support the effectiveness and the integrity of every step of the process and provide continual feedback to an organization's management.

A key part of the control environment they prescribe is the requirement to take prompt action with instances of non-compliance with statutes, regulations and terms and conditions of federal awards are identified. This can be accomplished most effectively through the establishment of a risk-based monitoring strategy across the institution's business lines, to guard against material misstatements to the university's financial statements.

Internal controls are a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of the following:

- To ensure effectiveness and efficiency of operations
- Reliability of financial reporting and
- Compliance with applicable laws and regulations

UMD management has a fundamental responsibility to develop and maintain effective internal control. The proper stewardship of UMD's resources is an essential responsibility of agency managers and staff. UMD's employees must ensure that programs operate and resources are used efficiently and effectively to achieve desired objectives. Programs must operate and resources must be used consistent with agency missions, in compliance with laws and regulations, and with minimal potential for waste, fraud, and mismanagement.

UMD management is responsible for developing and maintaining effective internal control. Effective internal control provides assurance that significant weaknesses in the design or operation of internal control, that could adversely affect the agency's ability to meet its objectives, would be prevented or detected in a timely manner.

Every institution must have a robust internal controls plan and procedures in place. There are no exceptions, it is required by law. The Sarbanes-Oxley Act of 2002 has made this requirement mandatory. *ALL organizations must comply with this act.*
https://www.sec.gov/about/laws/soa2002.pdf

The Office of the CFO (or equivalent) is responsible for ensuring that adequate policies and business processes related to the overall financial management sector of the internal controls structure of UMD is in place. In this role, the CFO's office will insure that appropriate documentation and guidance exists in the form of written policies, procedure and guidelines, and that those are incorporated as business rules and control into the Kuali Financial System. Financial policies will describe the Control Activities which create a system of checks and balances to ensure that management's directives are implemented. The Vice President for Research Administration or delegate(s), is responsible for the subset of financial internal controls governing sponsored projects administration, throughout the proposal and award management lifecycle.

Currently an UMD-wide Internal Control assurance process is used as an alternative process. The '*Guide to Internal Controls in the UMD*,' dated July 1, 2017, updated June 19, 2018 serves as a starting point for a broader and more comprehensive policy on internal controls, inclusive of procedures for reporting suspected fiscal irregularities.

Risk Assessment identifies UMD's institution specific risk and establishes appropriate internal controls to manage it; this should be aligned with the strategic objectives of UMD.

Risk Assessment and Risk Management:

Financial Auditors as well as Agency Management Oversight Officials increasingly have been adopting risk assessment techniques in service of their stewardship responsibilities. Risk factors used within a data analytic framework allow oversight officials to identify potential areas of non-compliance with the compendium of policies that apply to federal financial assistance awards. Recurring instances of non-compliance that are observed across awardees offer an opportunity for federal sponsors to clarify policies and develop targeted outreach and training activities for the awardee community.

The identification of risk factors does not add new compliance requirements to awards, for researchers, or for ORA officials. It does highlight the importance of understanding federal, sponsor, award-specific and university policies and requirements, to ensure the exercise of

professional judgment, due diligence, as well as, proper stewardship across all phases of the proposal and award continuum.

That UMD uses this approach is additional evidence to oversight officials and auditors of the seriousness we bring to our stewardship responsibilities.

How does this work in practice?

Pre-award
- The pre-award office (ORA), Department Business Managers and Principal Investigators should review the proposal and budget to ensure both a realistic budget, and proper costs, is being proposed.
- Cost categories like travel, participant support and administrative support have specific requirements; be sure the project can comply.
- Unless required by the solicitation, cost sharing, in any form, should not be included.
- The timeline should be realistic, and well justified, based on the PI's discipline-based experience.
- If any of the above are an issue the Department Business Manager and PI should work to revise or justify costs, as needed.

Post-award:

- An example of post-award risk management in action relates to SPAC Accounting's review of grant invoices.
- We don't review 100% of the transactions, costs and/or documentation presented for payment.
- However, using a risk-asset framework, we have identified factors we apply to requests for payments to judgmentally sample invoices and apply additional scrutiny to the supporting documentation associated with the sampled invoices.
- Risk factors include: type(s) of award/funding instrument; amount of award; sponsor; discipline; late purchase(s); repeated delinquent reporting.
- Additionally, specific types of costs that are known to be questioned by auditors and oversight officials are sampled, e.g., participant support, travel, consultants, sub-awardees, clerical and administrative costs.
- This approach allows UMD to obtain reasonable assurance that costs are allowable, allocable, and being treated consistently.
- Should such review result in questions, UMD engages in more intensive inquiry and takes appropriate action(s).
- Such actions may include a determination of allowability or may result in cost disallowances and adjustments to the invoice/award in question.
- The results of our risk assessment, with information from outside oversight officials, including federal sponsors and auditors, is analyzed to assess risk

Monitoring is a periodic review of established procedures and any specific follow up inquiries will likely be performed by the supervisor of the individual responsible for the activity. The University System of Maryland's Internal Control Auditor reviews and tests compliance with

procedures. This is supplemented by external oversight activities. In the case of sponsored research projects, these supplementary oversight activities include sponsor monitoring visits, require A-133 audits, and audits conducted by the federal agency's Inspector General.

ALL institutions, must have in place policies and procedures on internal controls. These internal control policies and procedures must be clear and easily accessible. Having policies in place for internal controls includes both the financial and accounting processes of an institution, as well as, program, operational, and administrative areas. Internal controls at an institution help to determine any material weaknesses which can be included in its annual financial statement audit.

Debarment and Suspension:

Executive Order (E.O.) 12549 provides that, to the extent permitted by law, Executive Branch departments and agencies must participate in a government-wide system for non-procurement debarment and suspension. A researcher who is debarred or suspended must be excluded from federal financial and non-financial assistance and benefits under Federal programs and activities.

The Federal government-wide debarment and suspension system requires grant applicants to certify that, to the best of their knowledge and belief, they and their principals, including PIs and other key personnel:

- Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- Have not, within the 3-year period preceding the application submission, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction, for violation of a Federal or State antitrust statute; for commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, or for making false statements or receiving stolen property;
- Are not presently indicted or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated above; and
- Have not, within a 3-year period preceding the application submission, had any public transaction (Federal, State, or local) terminated for cause or default.

If the applicant is unable to certify to these statements, it must, nonetheless, submit the certification and attach an explanation. The inability to certify does not automatically disqualify an organization from receiving an award; however, failure to submit the required certification or the necessary explanation will cause the agency not to make an award.

Subcontractors under grants (where the contract requires the provision of goods or services that will equal or exceed $100,000) and all consortium participants must certify that neither they nor their principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal agency, and, if unable to certify, the grantee must attach an explanation to the application or provide the information to the Federal funding agency prior to awarding the contract or entering into the agreement.

Lobbying:

Recipients of Federal grants, cooperative agreements, contracts, and loans are prohibited by 31 U.S.C. 1352, Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions, from using Federal (appropriated) funds to pay any person for influencing or attempting to influence any officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress with respect to the award, continuation, renewal, amendment, or modification of any of these instruments.

Applicants for awards with total costs expected to exceed $100,000 are required to certify that they (a) have not made, and will not make, such a prohibited payment; (b) will be responsible for reporting the use of non-appropriated funds for such purposes; and (c) will include these requirements in consortium agreements and contracts under grants that will exceed $100,000 and obtain necessary certifications from those consortium participants and contractors. The signature of the authorized institutional official on the application serves as the required certification of compliance.

Federal appropriated funds may not be used to pay the salary or expenses of an employee of a grantee or contractor or those of an agent related to any activity designed to influence legislation or appropriations pending before Congress or any State legislature. This prohibition extends to the use of funds for publicity or propaganda purposes, including the preparation, distribution, or use of any kit, pamphlet, booklet, publication, radio, television, or video presentation designed to support or defeat legislation pending before Congress or a State legislature except in presentation to the Congress or State legislature itself or as part of normal, recognized legislative-executive relationships.

Drug Free Workplace:

The Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D, as amended) requires that all awardees receiving Federal assistance awards from any Federal agency agree that they will maintain a drug-free workplace. By signing the application, the authorized institutional official (AOR) agrees that the grantee will provide a drug-free workplace and will comply with requirements to notify the Federal funding agency in the event that an employee is

convicted of violating a criminal drug statute. Failure to comply with these requirements may be cause for debarment.

Non-delinquency on Federal Debt:

The Federal Debt Collection Procedure Act, 28 U.S.C. 3201(e), provides that an organization or individual that is indebted to the United States and has a judgment lien filed against it is ineligible to receive a Federal grant. Before a grant can be awarded, the applicant organization must certify that neither it nor any person (involving in sponsored research) to be paid from grant funds is delinquent in re-paying any Federal debt. If the applicant discloses delinquency on a debt owed to the Federal Government, the Federal funding agency may not award the grant until the debt is satisfied or satisfactory arrangements are made with the agency to which the debt is owed. In addition, once the debt is repaid or satisfactory arrangements made, the funding agency will still take that delinquency into account when determining whether the applicant would be responsible with respect to a grant, if awarded.

Anyone who has been judged to be in default on a Federal debt and who has had a judgment lien filed against him or her should not be listed as a participant in an application for grant support until the judgment is paid in full or is otherwise satisfied. No funds may be rebudgeted following an award to pay such an individual. The federal funding agency will disallow costs charged to awards that provide funds to individuals in violation of this Act.

Acknowledgement of Federal Funding:

Federal agencies' policy requirements set forth that all grantees must acknowledge Federal funding when issuing statements, press releases, request for proposals, bid solicitations, and other documents describing projects or programs funded in whole or in part with Federal money. Grantees are required to state (1) the percentage and dollar amounts of the total program or project costs financed with Federal money; and (2) the percentage and dollar amount of the total costs financed by nongovernmental sources.

The Privacy Act:

The Privacy Act of 1974, 5 U.S.C. 552a, provides certain safeguards for individual information maintained in a system of records when the Act deems such information identifiable (i.e., information may be retrieved by the individual's name or other identifying information). These safeguards include each individual's right to determine what information about them is maintained in Federal agency files, whether hard copy or electronic, and how it is used; to have access to such records; and to correct, amend, or request deletion of inaccurate, irrelevant, or outdated information in such records.

Records maintained by Federal Agencies with respect to grant applications, grant awards, and the administration of grants are subject to the provisions of the Privacy Act. In considering a request for information concerning an individual made by a party other than that individual, the Federal Agency must take into account both the requester's right to know under FOIA and the individual's right to privacy under the Privacy Act. If certain types of information, such as reviewer comments, are not automatically provided to individuals who have applied for Federal Financial Assistance, the Privacy Act should be cited when formally requesting this information from the agency.

Freedom of Information:

The Freedom of Information Act (FOIA) of 1967, 5 U.S.C. 552, requires federal funding agencies to release certain grant documents and records requested by members of the public, regardless of the intended use of the information. These policies and regulations apply to information in the possession of the federal agency and do not require grantees or contractors under grants to permit public access to their records. The regulations also indicate types of information that are generally exempt from release.

The Freedom of Information Act (FOIA) provides the public the right to request access to records from any Federal agency. It is often described as the law that keeps citizens in the know about their government. Federal agencies are required to disclose any information requested under the FOIA unless it falls under one of nine exemptions which protect interests such as personal privacy, national security, and law enforcement.

The following types of information/materials will generally be released in response to an FOIA request, whether the materials are maintained in paper or electronic format:

- Funded applications;
- Pending and funded non-competing continuations;
- Grant progress reports; and
- Final reports of any audit, survey, review, or evaluation of grantee performance that have been transmitted to the grantee.

The following types of information/records will generally be withheld in response to an FOIA request:

- Pending competing grant applications;
- Unfunded new and competing continuations and competing supplemental applications;
- Financial information regarding a person, such as salary information pertaining to project personnel;
- Information pertaining to an individual, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

- Pre-decisional opinions expressed by Government officers, employees, or consultants in inter- or intra-agency memoranda or letters;
- Evaluative portions of site visit reports and peer review summary statements, including priority scores;
- Trade secrets and commercial, financial, and otherwise intrinsically valuable items of information that are obtained from a person or organization and are privileged or confidential;
- Information that, if released, would adversely affect the competitive position of the individual or organization; and
- Patent or other valuable commercial rights of the individual or organization.

If the federal funding agency receives an FOIA request and has substantial reason to believe that information in its records could reasonably be considered exempt, the appropriate agency FOIA Officer will notify the grantee before the information is released, allowing the grantee an opportunity to identify potentially patentable or commercially valuable information that should not be disclosed. After agency consideration of the grantee's response, if any, the grantee will be informed of the agency's decision as to what documents will be released and to whom. If a document contains both disclosable and non-disclosable information, the non-disclosable information will be deleted by a designated agency FOIA Officer, and the balance of the document disclosed.

Federal agencies are required to respond to a FOIA request within **20 business days**, excluding Saturdays, Sundays, and legal holidays. For the Privacy Act, the time limit is 10 business days. This period does not begin until the request is actually received by the FOIA office of the Federal agency.

In addition, a Federal agency may receive a request (not identified as FOIA) for a copy of a grant application (proposal). The awardee institution will be contacted by the Federal agency regarding this request, informing that the proposal will be released with certain person and salary data redacted from the proposal application. These requests are not required to follow the 20-day limitation response time as set forth in the FOIA Act.

Non-Discrimination Statutes:

These statues, federal requirements need to be in place prior to proposal submission by any institution seeking federal funding. They are as follows:

- Title VI of the Civil Rights of 1964
- Section 504 of the Rehabilitation Act of 1973
- Title IX of the Education Amendments of 1972
- Age Discrimination Act of 1975
- Equal Employment Opportunity under E.O. 11246, and
- Limited English Proficiency (LEP) under E.O. 13166

Details on specific discrimination requirements may be obtained by accessing the individual federal agencies proposal and award guidance, manual or handbook. In addition, these are referenced in individual awards terms and condition incorporated into each award document.

Authorized Organizational Representative (AOR) Signature:

Federal sponsors require that each proposal be signed by the Principal Investigator and by an official Authorized Organizational Representative (AOR) to endorse on behalf of their organization. The signature of the AOR accepts the obligations imposed by the requirements and conditions for any grant award, cooperative agreement or contract, including applicable federal regulations. Should the sponsor additionally require the endorsement of the department chair or other senior academic official, such requirement will generally be indicated in the application instructions. The AOR at UMD is the final review, approval/signature prior to submission to the external sponsor. The UMD President has delegated AOR signature authority to ORA for sponsored research activities.

Most federal and non federal sponsors support completely electronic proposal submission, so that no hard copy signatures are necessary. ORA's electronic signature must be the final concurrence before online submissions through various sponsor portals. There are still some sponsors that still require submission of signed hard copy proposals.

Certifications, Representations, and Assurances:

Certifications and representations are used together in procurement actions and are statements made by one of two contracting parties to the other, before or at the time of making the contract, regarding some fact, circumstance, or state of facts, pertinent to the contract, which is influential in bringing about the agreement.

In financial assistance, the terms, **"certifications and assurances"** are used together and often interchangeably. There are distinctions that are not well articulated, but are important.

The term **"assurance"** is used primarily as official indication of institutional agreement to prospective actions an institution and its researchers will take to comply with regulation and policy, throughout the life of an award.

Certifications are used to demonstrate that at the time of the proposal, and throughout an award, an Authorized Organizational Representative (AOR), certifies to a state of a matter or action. For instance, in the case of lobbying, the AOR certifies that no federal funds were used to pursue an award or persuade an official to support the funding of a proposal. Further, the AOR is certifying that, should an award be made, no funding from that action will be used for lobbying activities; non-federal funds used for lobbying will be disclosed using "Disclosure of Lobbying Activities" form (SF-LLL).

Certifications are used to demonstrate that at the time of the proposal, and throughout an award, an Authorized Organizational Representative (AOR), certifies to a state of a matter or action. For instance, in the case of lobbying, the AOR certifies that no federal funds were used to pursue an award or persuade an official to support the funding of a proposal. Further, the AOR is certifying that, should an award be made, no funding from that action will be used for lobbying activities; non-federal funds used for lobbying will be disclosed using "Disclosure of Lobbying Activities" form (SF-LLL).

Proposal Certifications on behalf of the UMD requires the following:

- The UMD must ensure that only a properly Authorized Organizational Representative (AOR) certifies proposals.
- Signature authority must be delegated solely to an individual(s) who can legally bind the UMD.
- The individual is agreeing that the UMD will comply with the certifications through the life of the award.

Certifications:

"By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)."

Research & Ethics Compliance

Assurance	Action					
	Protocol/project relationship	**Proposal Stage**	**Award Stage**	**Renewal**	**Closeout**	**When there are subawards or lead institutions**
IRB - Human Subjects	Each project involving human subjects needs to have a protocol Same protocol can be used by more than one project	OK to submit proposal when IRB is pending; takes about 2-4 weeks to obtain IRB approval	Must have approved protocol before ORA can set up accounts	Must request Continuing Review approval annually if human subjects work will continue	Protocol can close before award closes if research on humans is complete; submit Closure Report through IRBNet when human subjects work is complete.	Typically there is one institution of IRB record and often follows location of the award
IACUC - Vertebrate Animals	Each project needs to have a protocol Same protocol can be used by more than one project	OK to submit proposal when IACUC is pending, takes about 1-2 months to get approval	Must have approved protocol before ORA can set up accounts	Must renew yearly. Every 3 years must apply for new protocol even if the project is ongoing	Protocol can close before the award; need to notify IACUC when protocol needs to close; 2 times each year, IACUC checks protocols	There is no IACUC of record, assurances typically follow the location of the research
ESSR	Each project needs to have a protocol Same protocol can be used by more than one project	Disclose issues at proposal stage, with in 1 week DES contacts the PI for information and needed training/registration numbers	Must have approved protocols before ORA can set up accounts	ESSR initiates review every 5 years, must be renewed in a reasonable amount of time	Notify ESSR when done with project and/or as necessary	UM is responsible for knowing what subawardees are doing and that they are covered under their ESSR
Conflict of Interest	Each project needs to have a protocol when conflict is present or if funded by a PHS agency	OK if pending at proposal stage, but it must be disclosed at proposal stage. Resolution takes 4-6 weeks	Conflict must be resolved (eliminated or plan to deal with) in order for ORA to establish account NIH – requires report NSF - requires report of those that can't be resolved	No renewal needed, COI Chair does annual check for changes	No action needed for department	Each organization responsible for their own Conflict of Interest, communication encouraged

For more information, visit http://www.umresearch.umd.edu/RCO/