

PRINCIPAL INVESTIGATOR'S
H A N D B Ö Ö K



TABLE OF CONTENTS

Who Should Use This Handbook?	3
How to Use This Handbook	3

Sponsored Projects at Montana Tech	4
Who Administers Sponsored Projects at Montana Tech?	4
Special Committee Related to Research	5

What Constitutes a Proposal?6	
A Proposal is a Request for Financial Support.	6
Types of Proposals.....	6
Who Must Approve a Proposal?.....	7
General Format for Formal Proposals	8
Calculating Your Budget.....	10
Representations and Certifications	12
Regulatory and Safety Issues.....	13
Steps to Submitting a Proposal.....	14

Awards	15
How Will I know if I get an Award?	15
How are Awards Made?	15
Contracts.....	15
Subcontracts	15
Policies Governing Research Activities	16

Project Administration	18
Pre-award Costs	18
Account Setup	18
Personnel	19
Purchasing	20
Travel.....	21
Financial Management	21
Invoicing and Reporting	22
Indirect Costs (IDC)	22
Property Management.....	23
Ethical Conduct in Research.....	24
Intellectual Property	24
Project Extension and Termination	25

Terms and Definitions	26
------------------------------------	-----------

Campus Directory.....	34
Web Address Directory	34

Table of Contents.

Inserts and Supplemental Information to the PI Handbook

Institutional Information and Identification Numbers	Inside Cover
Proposal Preparation Checklist.....	1
Proposal Timeline.....	2
Proposal Budgeting Information and Guidelines.....	3
Sample Budget—Simplified.....	5
Sample Budget—Detailed.....	6
Proposal Certification Form (PCF).....	7
Proposal Certification Form (PCF) Instructions.....	8
Proposal Submission Checklist.....	9
Montana Tech Research Policies Listing.....	10
Montana Tech Employment Policy for Research Positions.....	11
Montana Tech Conflict of Interest Policy.....	12
Treatability Study Regulatory Guidance.....	23
Montana Tech Safety Policy.....	29
Student/Visitor Incident Report Form.....	35
Montana University System-Policy and Procedures Manual: Invention and Patents.....	36
Montana Tech Invention Disclosure Form.....	40

Table of Contents, Inserts and Supplemental Information.

WHO SHOULD USE THIS HANDBOOK?

Activities conducted under College auspices carry an important public and personal responsibility for careful management. This handbook is published by the Office of Research and Graduate Studies (ORGS) to help you fulfill that responsibility. It describes general procedures, policies, and services available regarding research and sponsored projects at Montana Tech. All members of the College community—faculty, academic professionals, staff, and students—who wish to conduct externally funded projects utilizing College facilities, personnel, or other resources must comply with applicable institutional policies and procedures.

How to Use This Handbook. Scan the material in this handbook for a general impression of the procedures described, and then refer to it as necessary. The material included in this handbook and its Inserts will be updated periodically to reflect changes in organization, policies, and procedures. Comments and suggestions for improvements to this guide would be appreciated. Please direct them to the Office of Research and Graduate Studies.

The Office of Research and Graduate Studies (ORGS) will be happy to augment the information given here or assist with any issues that may not be covered in this handbook.

Who Should Use This Handbook? How to Use This Handbook.

SPONSORED PROJECTS AT MONTANA TECH

Most grants, contracts, and other agreements from outside sources are sponsored projects. Projects that meet any of the following criteria are considered sponsored projects:

- the proposed project binds the College to a specific scope of work and technical, final reports or other deliverables are required.
- billing, separate accounting procedures, or report of expenditures are required.
- unexpended funds must be returned to the sponsor at the end of the project period.
- the project involves disposition of property, whether tangible or intangible, that may result from the project (e.g. equipment, records, inventions, copyrights, or rights in data).
- the project has a specified performance period or completion date.

Donations to the College for its ownership and use, if they do not include any of the above conditions, are generally considered to be gifts. Gift solicitation is the responsibility of the Montana Tech Foundation. All potential donors should be referred to the Montana Tech Foundation for processing and receipt of their gift.

When there is a question regarding whether external funding should be classified as a sponsored project, contact the Office of Research and Graduate Studies.

Who Administers Sponsored Projects at Montana Tech?

Responsibilities of the Principal Investigator (PI). Although sponsored project awards result from the Principal Investigator's professional expertise, funds are awarded to the College, to be spent only for the designated purpose. Sponsored projects are undertaken using College resources, and the Principal Investigator and the College are jointly responsible for accepting funds and carrying out the sponsored project according to the sponsor's guidelines.

The Principal Investigator is responsible for implementing the sponsored project in accordance with sponsor guidelines, hiring staff, expending project funds, and conducting the project as described in the proposal and agreed to in the award.

Principal Investigators on sponsored projects normally should be regular employees of the College. (A regular employee is someone employed to work for a period of six or more months by a Board of Regents Letter of Appointment, contract, or as a tenure track faculty appointment.)

The Office of the Associate Vice Chancellor for Research and Graduate Studies (ORGS). This office is responsible for the research programs and other sponsored activities of the College. This office provides leadership in the development of policies and procedures to enhance the research mission while protecting programs and interests of the College. ORGS assists Montana Tech faculty in their efforts to seek and secure external support for their instructional research, public service, scholarly, and creative activities. ORGS will help identify potential funding sources, provide assistance with budget and proposal development, review and submission, and act as liaison between faculty and sponsors, negotiating and executing mutually binding agreements and sub-agreements. ORGS reports to the Chancellor and the Vice Chancellor for Academic Affairs and Research. The Associate Vice Chancellor for Research and Graduate Studies is responsible for several areas including the Office of Grants and Contracts, the Office of Research, the Graduate School, the Center for Advanced Mineral and Metallurgical Processing (CAMP), and the Mine Waste Technology Program (MWTP).

Office of Grants and Contracts (OGC). The OGC is responsible for all pre-award and post-award financial matters dealing with Montana Tech grants and contracts. OGC is required to review and approve all proposed budgets for new proposals. OGC is responsible for post-award compliance with non-technical sponsor requirements, such as financial reporting and invoicing, cash management, and account close-out procedures. OGC also responds to requests for audits of sponsored agreements, prepares the indirect cost proposal, negotiates the indirect cost rate, provides support for documentation of direct salary charges and personnel cost share, performs special cost studies for recharge centers, and prepares management information reports on proposals and awards.

Special Committees Related to Research

Research Advisory Committee.

Advises ORGS on policies and programs to promote and enhance research and creative activities. Performs reviews and serves as the College committee responsible for oversight of misconduct in research.

Radiation Protection.

Assigned to the Coordinator of the Office of Environmental Health and Safety.

Hazardous Waste and Safety Committee.

Advises ORGS to ensure coordination between committees and functional service units. Membership includes departmental representatives and staff persons to comply with regulatory requirements imposed by Federal, State, local, or College policies. The College's Coordinator of the Office of Environmental Health and Safety chairs the Committee.

People to Contact for Special Committees

Research Advisory Committee: Dr. Joseph Figueira, Associate Vice Chancellor for Research and Graduate Studies.

Radiation Protection: Marilyn Cameron, Radiation Safety Officer.

Hazardous Waste and Safety Committee: Marilyn Cameron, Office of Environmental Health and Safety.

Sponsored Projects: Special Committees Relating to Research.

WHAT CONSTITUTES A PROPOSAL?

A proposal is a request for financial support. Generally, it has two parts: a technical section and a budget. The technical section is a description of the work or activity to be performed. The budget is the Principal Investigator's (PI) best estimate of the financial support needed to perform and accomplish the technical goals and activities. It is usually accompanied by a narrative budget justification showing exactly how the budget relates to the technical section.

Types of Proposals

Formal Proposals

Solicited proposal- solicited proposals are submitted to a specific funding source and should be written to the guidelines issued by that sponsor. Deadlines (receipt or postmark) may recur annually or several times a year.

Unsolicited proposal- the Principal Investigator develops the idea and uses the proposal to make a formal request to a sponsor for support.

Response to a Request for Proposals (RFP) - The proposed project must respond to the specific work statement developed by the sponsor or negotiated with the sponsor. RFPs may have a stated deadline and are one-time solicitations for specific needs that are not expected to recur.

Informal Proposal

A short (usually 2-5 pages) description of the proposed project that does not involve a commitment of College resources or a signature on behalf of the College. These do not need to be routed for signatures although the Principal Investigator is strongly encouraged to discuss the draft budget proposal with the College's Grants and Contracts officer prior to submittal.

Renewal and Continuation Proposals

A competing renewal proposal (also called a competing continuation) is a request for continued funding of a project for which funding is about to terminate. Such proposals usually contain the same information as new proposals. Non-competing continuation proposals, which request the next year's funding within a multi-year grant, usually consist of a progress report, budget, and other relevant materials such as research results, reprints, vitae for new personnel, etc. They sometimes include a report of expenditures including the residual balance and any carryover from the previous year.

Competing renewals must be routed and approved in the same manner as new proposals. For non-competing continuations, if the sponsor requires a proposal (not just a progress report), the proposal must be routed and approved in the same manner as new proposals. This is to assure that appropriate College officials are informed of the current status and any changes from the original proposal before an institutional endorsement is provided.

What Constitutes a Proposal? Types of Proposals.

Who Must Approve a Proposal?

Since the ORGS is responsible for performance and administration of any award resulting from the proposal, certain internal approvals (institutional authorizations) are required before the proposal may be submitted to the sponsor.

Approvals Required on All Proposals

1. All Principal Investigators must review and sign the Proposal Certification Form (PCF). *Refer to the Inserts for form.* Note: This form now contains a place for each PI to certify reading and understanding the Montana Tech Policy on Conflict of Interest. Department Heads and the Office of Grants and Contracts must also approve the proposal. Final approval must be obtained from the Associate Vice Chancellor for Research and Graduate Studies before submission of the proposal.
2. Department Heads must sign the Proposal Certification Form (PCF). This signature reflects departmental review of the proposal for substance and academic appropriateness, consistency with the department's priorities, Principal Investigator's eligibility, and for commitment and availability of department resources, personnel, space, facilities, and/or equipment. (For proposals involving more than one department, all affected administrators must review and approve the proposal.) Departments share responsibility with the investigators for performance of the work, compliance with sponsor and College requirements, and verification of cost share obligations. If faculty release time is requested, approval of the Vice Chancellor for Academic Affairs and Research (VCAAR) is required. If special space requirements are requested, the appropriate Dean must approve.
3. The Director of Montana Bureau of Mines and Geology (MBMG) must approve proposals originating from MBMG staff. Proposals originating from other administrative units must be approved by the Director or Program Manager of that unit.
4. After the Department Head has approved and signed the Proposal Certification Form, it is then submitted to the Director of the Office of Grants and Contracts for review and signature.
5. The Associate Vice Chancellor for Research and Graduate Studies is the "Authorized Institutional Representative" and must give final signature approval prior to proposal submission.

Do you have the necessary signatures for your proposal?

1. The Director of Grants and Contracts has checked the budget and signed the Proposal Certification Form?
 2. Your Department Head has reviewed the proposal and signed the Proposal Certification Form?
 3. The Director of Montana Bureau of Mines and Geology has signed the Proposal Certification Form for proposals originating from MBMG staff?
 4. The Vice Chancellor for Academic Affairs and Research has initialed the form for requested release time?
 5. The Coordinator of the Office of Environmental Health and Safety has signed the Proposal Certification Form if your proposal involves hazardous materials or wastes?
- ❖ If you have obtained all the required signatures, submit your proposal to the Associate Vice Chancellor for Research and Graduate Studies for final approval and signature.

General Format for Formal Proposals

Many sponsors supply standard application forms or have a prescribed format for proposal preparation. Many sponsors also have page limitations making it particularly crucial to meet all requirements on the narrative. If forms are provided, use them (application forms for most federal and many private sponsors may be obtained from ORGS or from the sponsoring agency's WEB site). Failure to follow requirements may jeopardize a proposal's success.

For sponsors without specified formats, suggested organization of the proposal is as follows:

- Transmittal Letter/Cover Letter
- Title Page and/or Application Form
- Abstract/Project Summary
- Table of Contents
- Project Description/Introduction, Problem Statement, Preliminary Studies and/or Literature Review, Methodology, Evaluation, Dissemination
- References (Literature Cited)
- Personnel Description
- Budget and Budget Justification
- Current and Pending Support (usually only for NSF proposals)
- Montana Tech Facilities and Equipment Overview
- Letters of Support
- Appendices and Vitae

Transmittal Letter/Cover Letter

The transmittal letter can be prepared by ORGS from data provided by the Principal Investigator (PI) and the Proposal Certification Form (PCF). The PI should draft a letter if specific information about the proposal needs to be emphasized.

Title Page and/or Application Form

If a standard application form is not required, the title page should contain enough information to clearly identify the proposed project and offer the following:

- Project Title
- Identification of the sponsor's program (RFP or program number)
- Name and address of sponsor
- Name and department of the Principal Investigator
- Name and address of the College
- PI and all authorized officials' signatures, their titles, offices, and phone numbers.
- Date of Submission and/or Deadline Date

Abstract/Project Summary

The abstract should be a condensed version of the proposal with about 250 words and should concisely state the significance of the project, what will be accomplished, how it will be accomplished, and the proposed period of performance. The abstract is vital in creating a favorable first impression. Proposal writers often write the abstract last.

Table of Contents

A typical Table of Contents should identify the page numbers and other requested material as well as appendices and other additional information. Often sponsors request that proposals are organized in a specific order—Table of Contents should be organized to match.

Project Description

In the proposal guidelines, the funding organization often specifies what to include in the narrative. The description should answer basic questions about the project: *What problem/need do you address with your project? What do you plan to do? Why is this work important? What have you or others already done on the project? How do you plan to achieve your objectives? Is the project accomplishable within the stated period of performance?* Provide enough detail as necessary to explain what you intend to do and how you will carry out the project. Objectives should match the need statement and procedures should describe how objectives would be accomplished. This section of your proposal will likely be reviewed thoroughly by experts in your field. If the project requires an evaluation component, this usually follows the project description section. Many sponsors also require discussion of how project results will be disseminated (i.e. conferences, journal articles, newsletters, travel to meetings, or by other means).

References (Literature Cited)

List full references of any citations made in the project description or body of the proposal and ensure that all references used are up to date. Using updated references demonstrates to more seasoned reviewers that the work proposed is on the cutting-edge and for less experienced reviewers provides a background or a foundation on which the study is proposed.

Personnel Description

Identify staff members, describe their project duties, and emphasize their experience as it relates to the project. Include current vitae for all professional staff and consultants. Vitae are usually included in the appendices unless otherwise specified.

Budget and Budget Justification

Developing the budget is often the most difficult part of preparing a proposal. Since a proposal budget may become an award budget, careful front-end preparation is important. The Director of the Office of Grants and Contracts can assist in interpreting guidelines and completing budgeting forms. If the sponsor does not provide standard budget formats contact ORGS for assistance. ***Refer to Proposal Budgeting Information in the Inserts.***

Current and Pending Support

Many sponsors require a list of project staff's proposals and awards, which includes level of activity and time commitments to other projects.

Montana Tech Facilities and Equipment Overview

Describe and explain why the physical facilities, resources, and equipment available at Montana Tech make this an advantageous location for the project. In some cases, this equipment will be used as a basis for providing matching funds for the grant.

Letters of Support/Consultants/Subcontractors

Obtain letters of support/commitment from all individuals or organizations mentioned in the narrative, especially if the individual has been designated as an important collaborator or consultant, or if the organization is named as a subcontractor, or has agreed to provide matching funds for the proposal. Depending on the circumstances (i.e. work will be paid) it may be necessary to obtain a proposal with budget for the portion of work the consultant or subcontractor plans to complete. Proposals from subcontractors should be signed by their authorized institutional representative. Contact the Director of the OGC and ORGS for additional information if other organizations will need to be paid from project sources.

General Format: What to include in your proposal.

Be sure to provide sufficient detail throughout the proposal for any outside work to be performed or funds necessary for consultants and subcontractors. Copies of proposed statements of work and budgets should be included in proposals.

Appendices and Vitae

As mentioned in the Table of Contents section, provide a separate list of appendices especially when there are many or large appendices attached to the proposal. This helps to organize any proposal consisting of many different parts and makes it less confusing to the reader. Oftentimes, although the information in the appendices is considered to be crucial to the overall proposal by the Principal Investigator (PI), this information is less important to the review committee. **It is recommended that the proposal narrative include any important information, is able to stand alone, and is not dependent on any information in the appendices.** Any important graphical information in support of the proposed project should be included in the body of the proposal and not in the appendices.

If not already required elsewhere, copies of curriculum vitae for the PI and other key collaborators proposed in the project should be included in the appendices.

Calculating Your Budget

The proposal budget provides the framework within which all the expenditures for the proposed statement of work will take place. The Office of Grants and Contracts can provide valuable assistance in preparing the project budget. A proposal budget lists and groups the proposal expenditures into categories. For ease in working within Montana Tech's financial system, the major budget categories are:

- **Direct Costs-** Personnel (Salaries & Wages, Fringe Benefits), Operations, Subcontracts, Travel, Student/Participant Support, Capital Equipment
- **Indirect Costs**

A discussion of the costs that should be included in a proposal budget follows. This discussion is not comprehensive since only the more common costs are specifically itemized. It is important to keep in mind when preparing your proposal budget that the items should be consistent with the project description, and the more realistic the budget the easier it will be to work within the budget when the project is funded.

Direct Costs- those expenses that will be incurred solely for work on the proposed project. Provide justification as appropriate to establish benefits of proposed spending to the project.

Personnel

Salaries and Wages- list the amount of time to be spent by each Montana Tech employee who will work on the project and their rate of pay. Time can be shown in percent of full-time effort or in person-hours, -days, -weeks, or -months. Percent of full-time effort or months are the preferred methods because hours, days, and weeks vary by pay period, and using these units to measure can create some discrepancies in budgeting estimates versus actual costs.

- Compensation on sponsored projects must not exceed an employee's authorized base rate of pay at Montana Tech. The Personnel Office can provide assistance in obtaining information on salaries for employees. For multi-year projects, the budget should add potential salary increases.
- New job classifications and compensations must conform to Montana Tech employment classifications.
- Additional justification for administrative, secretarial, or clerical positions as required.

Fringe Benefits-also known as “employee-related expenses” (ERE), are employer costs for employee programs including: retirement, worker's compensation, federal social security (FICA), unemployment tax (FUTA), and insurance. There are different budgeting rates for faculty, staff, and students. ***Refer to Proposal Budgeting Information in the Inserts.***

Operations

- Materials and Supplies- may include lab supplies, teaching aids, and office supplies.
- Publication Costs- anticipated cost of publishing the results of the research including page charges and reprint costs.
- Consultants- personnel who provide professional service for a fixed period of time and are not College employees. Consultants should be budgeted only where on-campus expertise does not exist or is not readily available. May include fees and travel expenses. The use and payment of consultants is often restricted; therefore, discuss it with ORGS.
- Photocopying, telephone costs, mailings, equipment maintenance, rental and/or lease.
- Space rental and renovation as appropriate.
- Registration fees for conferences as appropriate.
- Hazardous Waste Disposal Costs (Contact the Montana Tech Office of Environmental Safety and Health).

Subcontracts- Include the proposed subcontractor's statement of intent to participate in the project if funded, including a statement of work, estimate of time required, and proposed budget.

Travel- Itemize each trip and include transportation costs, number of travel days, and per diem. Any travel outside the US and its territories or Canada should be listed separately as foreign travel; since it almost always requires specific authorization from the sponsor. All travel is subject to College and sponsor regulations.

Student/participant support costs- books, tuition and fees, stipends, etc., as appropriate.

Capital Equipment- Capital equipment is generally defined as any movable property with a life expectancy of one year or more, costing \$1000 or more per unit. Shipping, taxes, insurance, and installation charges should be included under this category. (However, these costs are not considered when determining if an item meets the \$1000 or more per unit capitalization criteria.) Equipment rental should be listed under operations costs.

Indirect Costs (IDC)- Indirect costs or overhead include all activities essential to support sponsored projects that cannot be broken down and directly charged to a specific grant or contract (e.g. lab and office space; utilities and building maintenance; administrative services such as purchasing, accounting, human resources; and library resources). Indirect cost percentages are determined for each fiscal year through a detailed cost accounting procedure and are negotiated with the federal government. Indirect costs are applied to the sum of salary and fringe benefits only. ***Refer to Proposal Budgeting Information in the Inserts for current fiscal year IDC rate structure.***

There are a few sponsors who, through published rule, limit payment of indirect costs. If applicable, discuss the IDC limitation with the Associate Vice Chancellor for Research and Graduate Studies and/or the Director of the Office of Grants and Contracts.

Cost Sharing and Matching Funds

In some instances, the College may be requested to contribute to the costs of a sponsored project. Cost sharing obligations must be met between the effective start date and end date of the agreement. If the obligation is not met, the sponsor may reduce the project funding and any costs not funded must be paid from departmental non-sponsored funds. The College is subject to audit on any quantified cost sharing. All cost sharing proposals must have consent of the AVCRGS, your Department Head and your Dean.

Contributed effort (payroll and fringe benefits) - It is advantageous to select items for cost sharing that are easy to document. One such cost is effort of employees supported by non-sponsored funds who will be contributing their effort to the project. Commitment of Montana Tech employees' time to a project must be authorized by the appropriate Department Head and/or Dean and approved by the Vice Chancellor for Academic Affairs and Research. Contributed effort is documented with biweekly time cards. The individual's time as well as associated fringe benefits and indirect costs may be included in calculating these costs.

Other direct costs- other types of cost sharing, such as matching funds for equipment or supplies, should be discussed in detail with your Department Head and Dean. The source of contributed funds must be explicitly indicated in the proposal. If awarded, documentation of cost sharing is the primary responsibility of the Principal Investigator and department. Minimal systems exist to document non-personnel cost sharing and thus some costs can be burdensome to document, e.g. telephone and copying charges. Talk to the Director of the Office of Grants and Contracts about feasibility of documenting costs prior to making any commitment of non-personnel matching funds.

Indirect costs- Montana Tech generally does not reduce its IDC rate to provide cost sharing.

If the sponsor requires a lower rate or waiver of all IDC, the difference between Montana Tech's rate and the sponsor's allowable rate should normally be shown as cost sharing. ***Refer to Proposal Budgeting Information in the Inserts.***

Representations and Certifications

Some federal sponsors may require applicants to provide assurances, or sign certifications of compliance with a variety of federal concerns whether or not they may be applicable to the proposed project, such as regulations regarding civil rights, lobbying, drug-free workplace, debarment and suspension, procurement integrity, and others. When such forms are needed, supply the forms to ORGS and notify ORGS to allow them time to complete the forms and obtain the authorized College signature. ORGS will transmit the forms with the proposal.

Conflict of Interest

There is currently a heightened awareness of conflict of interest issues concerning research performed by College faculty and staff. National Science Foundation (NSF), Public Health Service (PHS), and several other sponsors have policies regarding conflict of interest. NSF and PHS policies have required institutions to put in place systems to identify, resolve, and report on financial conflicts of interest. For additional information and supplemental forms that are required when a proposal is submitted to NSF or PHS, contact ORGS or their WEB pages. Faculty and staff engaging in ANY outside activities or outside employment should be familiar with the College Conflict of Interest Policy. Principal Investigators are required to keep their Department Head, Dean or Supervisor fully informed of potential conflict of interest situations. ***Refer to the Conflict of Interest Policy in the Inserts.***

Regulatory and Safety Issues

Projects that involve any of the issues listed below are subject to special review processes to assure compliance with federal, state, and/or College regulations and to ensure the health and safety of those involved in the project. Principal Investigators are responsible for obtaining the approval of the Coordinator of the Office of Environmental Health and Safety (OEHS) before submitting proposals for external funding. **Refer to the Montana Tech Safety Policy in the Inserts.**



Human Subjects

All research and teaching projects involving human subjects must be submitted to the Office of Research and Graduate Studies (ORGS) and approval must be documented before submitting the proposal for external funding. Contact ORGS well in advance of the proposal deadline for guidance and assistance, at least one month before the deadline during the academic year and possibly longer in the summer.

Laboratory Animals

All research or teaching activities involving the use of vertebrate animals must be reviewed and approved prior to use of the animals by ORGS. No animal may be procured or accepted unless approved. Principal Investigators should carefully consider if animal use is necessary and whether alternatives exist to animal use. Principal Investigators should contact ORGS early in the proposal development to discuss the process for approval.



Radiation Safety

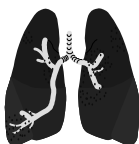
Principal Investigators are individually responsible for ensuring use of radiation sources complies with Federal, State, and College standards. Projects involving radioactive materials, ionizing radiation generating equipment and lasers must be coordinated with the Office of Environmental Health and Safety (OEHS).

Hazardous Materials

All research and teaching activities involving the use of hazardous materials generation of hazardous wastes must be reviewed and approved by the Office Environmental Health and Safety (OEHS).



or
of



Respiratory Protection Program

According to OSHA 29 CFR 1910.134, Montana Tech is responsible for adhering to strict provisions set for the use of respirators in preventing human exposure to potentially harmful contaminants. For clarifications on this or other OSHA standards that may affect teaching or research activities, contact the OEHS.

Treatability Studies

All research and teaching activities are subject to Montana Hazardous Waste Administration Rules. The Administrative Rules of Montana (ARM) require a 45-day Notification of Treatability Studies and Waste Management Permits.

Failure to secure permits and notifications may result in a \$10,000 fine.

Principal Investigators **MUST** contact the OEHS about ALL treatability

studies. OEHS is responsible for required notifications and acquiring permits, but responsibility for paying fines will fall on PIs and their departments. Protect yourself and your department from **PAYING FINES**. **Refer to Treatability Study Regulatory Guidance in the Inserts.**



Steps to Submitting a Proposal

1. **Develop your idea.** Contact others who will be involved (colleagues, College and Department Administrators, outside groups, etc.).
2. **Search for a funding source.** Visit ORGS for information and assistance with your search and the ORGS WEB page for some funding sources. The Montana Tech Library has on-line searching capabilities. Acquire guidelines and application forms from potential sponsors.
3. **Contact the Offices of Research and Graduate Studies** for assistance on interpretation of guidelines, application forms, budget development, and for advice on applicable requirements.
4. **Make an appointment with the Director of the Office of Grants and Contracts** for assistance in developing a budget and budget justification.
5. **Write your proposal.**
6. **Get an objective view.** Use other faculty to review and critique your proposal.
7. **Obtain any special approvals needed.** If the project involves human subjects, lab animals, hazardous materials, or bio-safety agents, obtain the appropriate approvals.
8. **Complete the Proposal Certification Form (PCF).** If cost share (contributed effort, matching funds, or waiver of indirect costs) is involved, contact ORGS. Any tuition waivers also need to be documented and require approval of the appropriate office— Director of the Graduate School, Vice Chancellor for Academic Affairs and Research, Dean or Department Head. Supplemental forms may be required for NSF and PHS. ***Refer to the Conflict of Interest Policy in the Inserts.***
9. **Obtain appropriate College approvals.** Submit the proposal and applicable internal forms to the Department Head and Dean. If more than one department is involved, obtain the signature of each Department Head and Dean.
10. **Obtain Office of Grants and Contracts approvals.**
11. **Submit the proposal to ORGS.** The Associate Vice Chancellor for Research and Graduate Studies is the Official/Authorized Institutional Representative and is the only designated person who can commit the College to Grants and Contracts. Be sure to allow sufficient time (a minimum of three working days prior to proposal deadline) to obtain final signature from the Associate Vice Chancellor. If you require assistance for assembly, copying, or mailing, notify ORGS one week prior to deadline. One complete copy of the proposal must be submitted to ORGS with the Proposal Certification Form at the time of submission.

Steps to Submitting a Proposal.

Determining if you are ready to submit your proposal.

Before you submit your proposal to the sponsor, be sure that you confirm the following:

- ✓ The Office of Grants and Contracts looked over and authorized the budget.
 - ✓ The participating and authorized personnel have signed the proposal.
 - ✓ The necessary information, certifications, and forms are included in the proposal.
 - ✓ The proposal has been compiled in the proper order.
 - ✓ The correct number of copies requested by the sponsor are included.
 - ✓ The sponsor checklist has been reviewed.
 - ✓ The Office of Research and Graduate Studies has a complete copy to file.
 - ✓ The envelope has been addressed properly.
- ❖ Be sure that when you send your proposal it will reach its destination by the specified deadline.

AWARDS

How will I know if I get an award? The Principal Investigator and the Office of Research and Graduate Studies (ORGS) will receive written notification of the sponsor's decision regarding the proposal. Sometimes a Principal Investigator receives a telephone notification that the proposal will be funded. Unfortunately, verbal notification is not sufficient for the College to authorize work to proceed so it often requires patience to await the written notification.

How are Awards Made?

Awards are usually made in the form of grants, cooperative agreements, or contracts. The terms and conditions of awards will vary accordingly.

Award Acceptance

Award documents that require a signature for acceptance are to be signed by the Associate Vice Chancellor for Research and Graduate Studies. Only those persons specifically authorized by the Montana Board of Regents may legally sign agreements for the Montana University System.

The Montana Board of Regents has authorized the Associate Vice Chancellor for Research and Graduate Studies to sign agreements on behalf of Montana Tech. The Vice Chancellor must authorize all agreements.

In consultation with the Principal Investigator, ORGS will review the budget, terms, and conditions of the award before obtaining an authorized signature and, if necessary, will return the document for the sponsor's signature. The processes that follow formal acceptance of the award are covered in the section entitled Project Administration.

Contracts

Awards made by contractual agreements are usually more complicated than awards made by grants. ORGS is responsible for preparing and negotiating contracts with industry, agencies of state and federal government, local municipalities, and nonprofit organizations. Cooperative efforts are encouraged with private and public partners to support research and creative activities that are consonant with the College's research, teaching, and public service missions. General policies applicable to agreements between Montana Tech and industrial and commercial organizations are stated below. Many of these policies apply to Federal, State, local governments, and nonprofit organizations as well.

Subcontracts

Projects requiring work outside of MT Tech or requiring consultants require sub-contracts issued through ORGS. Principal Investigators should work with ORGS to develop Memorandums of Understanding, Letter Contracts, Work Statements, and sub-contract budgets.

College Review and Administration

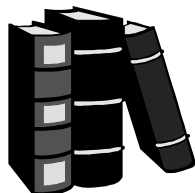
Initial discussions between sponsor representatives and Montana Tech faculty and staff are encouraged since this is sometimes necessary to confirm mutual interest. Sponsored projects can be formally established at Montana Tech only after a proposal has been submitted and approved through regular internal review procedures, and an acceptable agreement is negotiated and signed by the authorized representatives of the organizations involved.

Awards: How are Awards Made? Contracts. Sub-Contracts.

Policies Governing Research Activities

All persons conducting research activities must comply with Montana Tech and Montana University System policies, regulations, and procedures. Verify all questions related to Campus or University policies with the Chancellor's Office or the appropriate Campus Department or Office. ***Refer to the College Policies Listing in the Inserts for a complete list of policies and the appropriate Department or Office to contact.*** Verify all questions related to Research with the Associate Vice Chancellor for Research and Graduate Studies.

Publication Policy



Montana Tech's sponsored activities are conducted as an integral part of the total educational program, and these activities often form the basis for articles in professional journals, seminar reports, presentations at professional meetings, and student dissertations and theses. Therefore, Montana Tech will only enter into contracts if the results can be published or otherwise disseminated. For development work that may be competition sensitive, Montana Tech may enter into an information embargo agreement for duration not to exceed one year. Copyrights and publication rights belong to Montana Tech and/or the author. Montana Tech may allow the sponsor to retain ownership of information, as long as Montana Tech has full publication rights as described above and the Principal Investigator signs a statement acknowledging such.

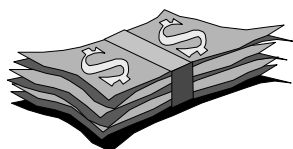
Intellectual Property



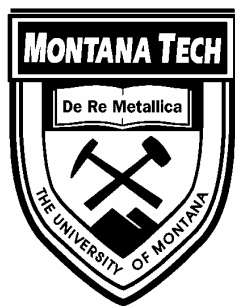
Montana Tech is subject to the Montana Board of Regents' intellectual property policies, which are intended to promote the progress of science and technology, assure that discoveries and inventions are used to benefit the public, and provide recognition to the inventor(s) and the College.

When negotiating sponsored project agreements that may involve patents, ORGS will coordinate with the Principal Investigator in negotiating any terms and conditions involving patent rights or licensing agreements following the Montana Board of Regents policy. The policy states that Montana Tech retains ownership to all inventions and discoveries arising from its research whether patentable or not. Under contracts with industrial sponsors, the first right to negotiate for license rights is normally granted to the sponsor. If neither organization chooses to pursue the patent, the inventor may petition the sponsoring agency for the right to pursue patent at his or her own expense. Montana Tech cannot be responsible for the protection of confidential or proprietary information. Any proprietary information disclosed by a sponsor to a Montana Tech employee shall be governed by individual nondisclosure agreements between the sponsor and the individuals performing the work.

Compensation and Payments



Contracts with for-profit sponsors are performed on a full cost recovery basis. Project budgets must include both direct costs and full indirect costs at Montana Tech's federally negotiated rate. Montana Tech will request payment from for-profit sponsors in advance since the College does not have a source of funds with which to finance sponsored projects. The schedule of payments is negotiable depending on type and scope of project, length of project period and anticipated pace and pattern of actual expenditures.



Use of the College Name

It is Montana Tech policy that under no circumstances shall a sponsor be permitted to state or imply in any publication or other published announcement that Montana Tech has approved any product that is or might be manufactured, sold, or otherwise distributed. Montana Tech also requires that its name is not used in connection with any advertisement, press release, or other form of business promotion or publicity, nor may a sponsor refer to an agreement without prior written approval.

Visual Identity of the College

All publications, correspondence, and other communication originating from the College are subject to strict standards for visual icons. The guidelines are to insure consistency among visuals used to identify Montana Tech. Refer to Montana Tech's *Graphics Standards Manual* for specific details on color, font, size, and leading.

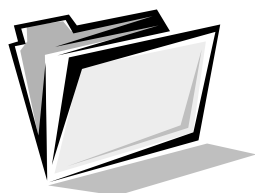
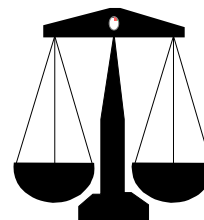


Best Effort

Since research by its nature is unpredictable and without guarantee of successful results, Montana Tech will not accept contract provisions that guarantee results, impose penalties for failure to make progress by firm deadlines, or provide withholding of payment if the sponsor is not satisfied with the results.

Liability and Risk

Both constitutional and statutory restrictions preclude Montana Tech from contractually indemnifying another party. This is not intended to affect any common law or statutory rights to indemnity or contribution that either party may have against the other relative to an incident arising out of the performance of a contract. Montana Tech is self-insured by the State of Montana Risk Management Program and does maintain coverage for liabilities arising from the acts and/or omissions of its employees.



State-Required Clauses

Montana Tech, as a State-supported entity, has constitutional and statutory requirements to insert in all contracts certain clauses dealing with non-discrimination, conflict of interest, non-appropriations, and arbitration. For further information, contact ORGS.

Termination of the Agreement

In the event the sponsor for any reason terminates a funding agreement, the sponsor will be expected to reimburse Montana Tech for all costs incurred up to the date of termination and for all noncancelable obligations. Any expenditure for which Montana Tech does not receive reimbursement is the responsibility of Principal Investigators and their departments.



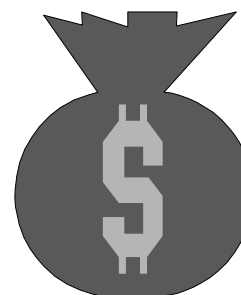
PROJECT ADMINISTRATION

As Principal Investigator, you have primary responsibility for achieving the technical success of the project while complying with financial and administrative policies and regulations. *Refer Policies Governing Research in this Handbook for more specifics.* For administrative matters, it will save you time and energy to talk to the Office of Research and Graduate Studies (ORGS) for many actions such as re-budgeting, prior approvals, and no-cost extensions.

For invoicing and financial reporting, Principal Investigators should contact the Director of the Office of Grants and Contracts.

Pre-award Costs

Sometimes the technical officer at the sponsoring agency will inform Montana Tech that a project has been recommended for funding. If it is important to order equipment or begin a personnel-recruiting process prior to official notification from the sponsoring agency, there are procedures that may allow for an account to be established. There is always an element of risk in starting project work prior to formal award notification. Charging costs to another established account should also be avoided since transferring charges from accounts are problematic. Instead, contact ORGS before you make any financial commitments to determine what pre-award approval process is available to you.



Pre-award costs may be incurred within 90 days of the effective date for most grants from the National Science Foundation (NSF), the Public Health Services (PHS), National Aeronautics and Space Administration (NASA), Department of Energy (DOE), US Department of Agriculture (USDA) and some Department of Defense agencies. A UPAS form is used to request an account for pre-award costs and to authorize a non-sponsored account to cover the costs in case the award does not come through.

Account Setup

When ORGS receives the final, fully executed award document, a Grant Award Verification Form, indicating the account number, the project start and stop dates, and the award amount, will be forwarded to the Office of Grants and Projects (OGC) and they will set up an account with an RC number. OGC will mail you the Grant Award Verification Form along with a copy of the award document. Copies of the notice also go to the Department Head and College Dean.



Questions about the sponsor's policies on financial and administrative management should be discussed with the OGC.

Personnel

College policy applies to all personnel actions, including those funded by external sponsors. The Personnel Office or someone within your department with personnel responsibilities can assist with personnel actions. *Refer to the Inserts for a listing of related policies.*



Hiring

The Principal Investigator is responsible for initiating all hiring and payroll actions, and supervision of sponsored project personnel. The following regulations may aid you:

- All personnel must be paid in accordance with College guidelines. Salary rates, job classifications, and regulations for personnel employed on sponsored programs are the same as those established for all other employees of the College.
- Letter Contracts for limited term and/or non-tenure positions supported by grants or contracts are processed through the Associate Vice Chancellor for Research and Graduate Studies (AVCRGS) and must be approved by the Personnel Office and the Chancellor. Contact ORGS for instructions.
- Currently employed faculty, staff, or students may be assigned to a sponsored project. Each department is responsible for processing such assignments with the help of the Personnel Office. The Financial Aid Office processes assignments for students.
- Individuals not currently employed by the College or employed at a different job classification may fill any sponsored project position. Individuals must be recruited, interviewed, and selected in accordance with College personnel procedures. Request a *Selection and Recruitment Manual* from the Personnel Office before you advertise.

Salaries and Wages

Any salary adjustment, including a merit increase, must be consistent with institutional procedures. If a College-wide salary increase is not authorized, employees working on sponsored projects will not receive pay increases even though funds may have been budgeted to cover the additional costs. Personnel benefits paid from a sponsored project account are subject to the same policies as personnel benefits paid from other College funds. Contact the Personnel Office for additional information on policies and procedures

Only actual costs are charged to the account, however, variances from budgeted amounts sometimes occur. Often the costs will be less than budgeted and such savings generally can be used for other project-related purposes during the award period, assuming that the sponsor allows spending flexibility under the terms of the award.

Vacation and Sick Leave Accruals

All eligible staff employed on sponsored projects accrue vacation and sick leave time and are encouraged to use accrued vacation before the project's termination date. Faculty and graduate assistants with academic year appointments do not accrue vacation benefits. See Montana Tech's Employment Policy for Research Assistants, Research Associates, and Research Faculty for additional information.

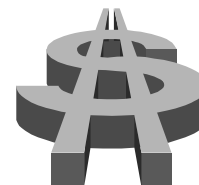
Effort Reporting

The federal government requires effort certification. Compliance is necessary to assure continued federal funding. It is the Principal Investigator's responsibility to make sure the actual level of effort corresponds to the reported level of effort, whether paid or contributed. Cost share in excess of that required by agreement is unnecessary and costly for the College.

Purchasing

Purchase of goods and services for sponsored projects must comply with both the overall intent and specific detail of the sponsor's regulations as well as with College policies. It is important to become familiar with the terms and conditions governing expenditures to ensure that all expenditures are allowable and are adequately documented to demonstrate how expenditures benefit the project.

The College is audited regularly so it should be evident to an outside reviewer that a certain purchase advances the project goals and is an allowable expenditure. The Department must cover any disallowed costs.



Purchasing Procedures

Procedures for purchasing on sponsored projects are generally the same as other College projects. Departments may already have someone whom handles purchasing; if not, contact the Purchasing Department for assistance. Some issues that are specifically related to purchasing on sponsored accounts are discussed below.

Purchasing Outside Services

Subcontracts— normally defined as any purchase of services or program related tasks in an amount greater than \$10,000.

In order to subcontract a portion of the work on a sponsored project to another organization or individual, provision must normally have been stated in the funded proposal or in subsequent written approval from the sponsor. Contact ORGS for assistance before any discussions with a potential subcontractor. Once an agreement is negotiated and signed by the university's authorized official, the PI initiates a purchase requisition to establish a purchase order with the subcontractor. Subcontractors submit invoices directly to OGC.

Consultants— independent contractors (individuals or organizations) who provide services for the College. They cannot be College employees. Many sponsors require specific prior approval for each consultant or may limit the daily rate or days for consultant services.

Equipment

Ideally, all equipment purchases are itemized and approved in the original proposal. Prior approval may be needed from the sponsor to buy equipment not previously authorized and this approval may take several weeks. Some federal sponsors have delegated this prior approval authority to Montana Tech for most of their grants and those requests can be quickly handled through the College. Other agencies such as the Department of Defense also require specific prior approval of certain types of equipment (e.g. automated data processing equipment) and/or formal screening for equipment availability prior to purchase even if the equipment is listed in the approved budget. The PI is responsible for verifying that approval is given prior to submitting any purchasing or payment requests. As a rule general-purpose equipment such as computers or furniture usually will not be approved unless its justified use is primarily or exclusively for the actual conduct of research or technical activities.

Purchases Near To Termination Date

Items not received during the project period are not considered by a sponsor to be beneficial to the project and may be disallowed. Orders for supplies and equipment should be placed well in advance of the account closure to ensure delivery and use before project completion.

Travel

Standard Montana Tech travel policies and procedures apply to travel on sponsored accounts *unless sponsor regulations are more restrictive*. Travel may be limited in terms of dollars and/or specific trips. If the purpose of the travel is attendance at a conference to disseminate research results, the travel authorization request should include a statement to that effect and the title of publication or lecture. Justify travel in terms of project benefit. To be allowable, travel must directly benefit the project rather than enhance the reputation of the College.

Overspending the travel budget category (including domestic and foreign travel) by more than 25% often requires prior approval from the sponsor. The OGC is available to provide advice on travel restrictions for your particular project.



Foreign Travel

Foreign travel often requires specific prior approval and American flag carrier restrictions usually apply. Most sponsors require written approval for each foreign trip, sometimes even if the travel was itemized in the proposal and included in the award budget. Requests for written approval of foreign travel should be submitted to the sponsor well in advance of the planned travel. Some sponsors require that the travel request be submitted 60 to 90 days in advance of the planned travel.

Financial Management

Principal Investigator's Responsibilities

The Principal Investigator is ultimately responsible for accomplishing the technical goals of the project and also for fiscal management in accordance with all sponsor and College regulations. ORGS provides advice and assistance to facilitate compliance with the regulations. The Principal Investigator's fiscal responsibilities include:

- Understanding general policies, specific terms, and conditions of the sponsor agreement.
- Authorizing only those expenditures that are reasonable and necessary to accomplish the project goals and are consistent with the sponsor's terms and conditions.
- Spending no more than the amount authorized by the sponsor for the project period.
- Adhering to sponsor limitations on the amount of money that may be spent in any single budget category.
- Incurring costs only for goods or services that are used or received during project period.
- Charging project costs directly to the appropriate project account (avoid cost transfers)
- Documenting cost share commitments.

Re-budgeting

Sponsors have different budget flexibility policies. OGC staff can help you determine whether the award agreement and sponsor permit reallocation among budget categories. A written request to the sponsor, countersigned by ORGS, may be required. Any re-budgeting request must detail how the request will benefit the project design and goals. In most cases, no more than a 5% variance from the original budget is allowed without written approval from the sponsor. Contact the Office of Grants and Contracts for assistance.

Accounting Corrections

Contact OGC to correct any mistakes if expenditures are charged to the wrong account.

Deficits

If the project's expenditures exceed the sponsor's award and/or payment upon completion of project, the PI will be asked to identify another funding source to cover the cost overrun.

Invoicing and Reporting

Financial Status

You will receive several monthly financial reports generated and distributed by the State of Montana's accounting system (SBAS). These reports should be reviewed to verify that the expenditures and encumbrances are correct and charged to the right account. The report also provides budget availability information. It can also be used to do projections based on your intended spending. You can also contact the OGC with specific questions.

Invoicing and Financial Reporting

The Office of Grants and Contracts (OGC) will prepare and submit all financial reports and invoices to the sponsor. OGC also operates in an accounts receivable capacity and pursues prompt payment of sponsor commitments. Occasionally, difficulty in collecting amounts owed by sponsors arises. In this situation, Principal Investigators might be consulted as to whether it is in the best interest of the PI and College to continue work on the project.

Technical Reports

The Principal Investigator is responsible for interim technical progress reports, deliverables involving technical results, and the final technical report. One copy of each technical report and the transmittal letter should be provided to ORGS for the College's official project file.

Miscellaneous Reports

OGC completes or coordinates the submission of the following reports that are often required for sponsored programs: contractor's release forms; contractor's assignment of refunds, rebates, and credits; patent reports; and property certification or inventory reports.

Indirect Costs (IDC)

Indirect costs are costs incurred by the College that cannot be readily identified or associated with a single sponsored project or institutional function. Typical examples are utilities, public safety, building and equipment use and maintenance, libraries, student administrative services, personnel, payroll, academic and sponsored administration, and purchasing. *Refer to Proposal Budgeting Information in the Inserts.*

Determination

The US Office of Management and Budget (OMB) has established procedures for institutions of higher education to determine Universities' IDC. Ratios are developed that relate these indirect costs to the direct costs of the primary functions of the institution, such as instruction, organized research, and other activities. The resulting rates are then reviewed by Tech's Federal audit agency, the US Department of Health and Human Services (San Francisco), final rates are negotiated, and a formal rate agreement is signed. The established rates apply to all agreements with the College unless other mandatory stipulations apply.

Calculation

The applicable indirect cost rate and percentage for an agreement is identified in the award process. Indirect cost is charged to your account each month based on the agreed upon rate. The federally negotiated indirect cost rate is applied to the actual total direct cost expenditures for labor (salaries plus fringe benefits). Indirect costs are not charged on equipment, student support, participant support, and subcontract amounts.

Distribution of Recovered Indirect Costs

Indirect cost recovery partially reimburses the College for actual costs incurred for conducting sponsored projects at Montana Tech. A portion of the recovered indirect costs is distributed to the Principal Investigators and their departments to provide research incentive funds. Indirect cost recovery is also used to cover the administrative costs of complying with the various sponsor regulations, to fund internal College grant programs for faculty and students, and to meet cost share requirements for large equipment purchases that enhance the College's research capability.

Property Management**Acquisition of Property for Sponsored Projects**

Property is considered capital equipment if the unit cost is \$500 or more (not including sales/use tax and freight) and has a life expectancy of two years or more. Note, however, that if you buy a computer, monitor, keyboard, and operating software all on the same purchase order, all four items will be considered capital if the aggregate cost is \$500 or more. If you purchase the items on separate purchase orders the capital equipment definition will apply to each item separately.

Any planned property purchases on a sponsored project should be itemized in the proposal budget and agreement. However, some sponsors and agreements still require specific prior approval on certain types of property even if listed in the approved budget.

Management of Sponsored Property

Sponsors require property purchased with their funds to be used only for the reason for which it was intended during the project period. Some sponsored property will remain the property of the sponsor and should not be integrated with Montana Tech property if it will lose its identity. Sponsor-owned property must be managed with strict control.

The Montana Tech Business Office is responsible for the property system, inventory, and audit at Montana Tech. This office maintains a two-year perpetual physical inventory cycle, tags all College and sponsored property, and maintains inventory records. In addition, the Property Control Office is responsible for passing yearly audits including those conducted by the Legislative Auditor Division, and various federal and state agencies as required.

Ethical Conduct in Research

Montana Tech is committed to maintaining integrity and truthfulness in research and scholarship through the responsible and ethical conduct of its faculty, staff, and students. To this end, the College has established procedures for dealing with alleged misconduct. The Chancellor, through the Associate Vice Chancellor for Research and Graduate Studies (AVCRGS), has assigned the initial responsibility for handling inquiries and investigations into allegations of misconduct in research to the Research Advisory Council.

Formal allegations of misconduct should be presented in writing and in a confidential manner to the Associate Vice Chancellor for Research and Graduate Studies. After determining that an allegation falls under the misconduct policy, the Associate Vice Chancellor for Research and Graduate Studies will see that the allegations are evaluated, first in an inquiry, then, if warranted, in an expanded investigation under College policy.

Conflict of Interest

Montana Tech faculty and staff engaging in outside employment or activities should be familiar with College policy and state law regarding conflict of interest. Principal Investigators should keep their Department Head and Dean fully informed of potential conflict of interest situations. **Refer to Montana Tech Conflict of Interest Policy in the Inserts.**

Intellectual Property

Montana Tech is subject to the Montana Board of Regents' intellectual property policies. Inventors should keep detailed, dated records during the course of research, and it is advisable to obtain the signature of a witness on dated research notes to assure validity. For any potentially patentable or marketable invention or discovery, the inventor should file an invention disclosure with ORGS. The disclosure is reviewed and the Associate Vice Chancellor for Research and Graduate Studies either recommends pursuit of patenting and licensing the invention or determines if the invention can be released to the inventor/discoverer (many times the sponsor has rights to pursue a patent before the inventor). **Refer to the Montana University System-Policy and Procedures Manual: Invention and Patents in the Inserts.**

In order to protect potentially patentable discoveries, Principal Investigators are advised to keep detailed, dated records during the course of their research. When a discovery that may be patentable is made, PIs should contact ORGS for further instruction.

If at any time during the course of a sponsored project it is determined that there may be a potentially patentable invention or discovery, it is important to contact ORGS. Many sponsored program agreements require submission of an invention disclosure report within a relatively short, defined time frame, as well as a patent and inventions report annually and/or at the close of the program. ORGS can supply the patent and inventions report forms and coordinate the submission of any disclosure and/or periodic reporting to the sponsor.

Montana Tech is committed to maintaining integrity and truthfulness in research and scholarship through the responsible and ethical conduct of its faculty, staff, and students.

Principal Investigators should know and understand the policies surrounding research at Montana Tech. Contact ORGS for clarification, concerns or questions regarding policies or regulations.

Project Extension and Termination

No-Cost Extensions

If it is necessary to extend the project period (without requesting additional funds) in order to complete the project, such requests must occur at least 45 days prior to the grant end date. Different procedures are used depending on the type of award and sponsor. To request additional time, contact the Office of Research and Graduate Studies (ORGS) with information describing why the additional time is needed to accomplish project goals. If an extension is needed and cannot be granted internally, ORGS will need to request approval from the sponsor. The Principal Investigator will need to submit a memo to ORGS that requests the extension, describes why the additional time is needed, how much time is needed, and how the remaining funds will be spent. Additional information may be necessary depending on sponsor requirements. Extension requests should be sent at least 60 days prior to the scheduled termination (time period may vary depending on the sponsor's requirements).

Project Termination

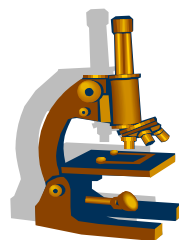
The Principal Investigator should arrange to move personnel paid on the project to an alternate funding source or advise them of pending layoff at least two weeks before the project ends. He/she may also need to terminate maintenance agreements, remove telephones or change billing instructions, return leased equipment or take other action. Final reports are usually due on the program's end date or up to 90 days later.

In addition to sending technical reports to the sponsor, copies of the reports should be made and given to the ORGS. The reports should accompany a Project Closure and Final Technical Report Transmittal Form. *Refer to the Inserts for a copy of the Form.*



Disposition of Waste

Notify the **Environmental Health and Safety Coordinator** for procedures to dispose of anything considered to be hazardous materials or waste. It is important to remember that there can be significant charges associated with the disposition of hazardous waste. If this was not budgeted for in your proposal, the costs will be charged to your department.



Disposition of Property

Notify the **Sponsored Property Coordinator** for procedures to dispose of inoperable or unwanted property. In some cases, prior approval from the sponsor may be necessary. Never trade, cannibalize, or dispose of property purchased with sponsored funds without prior approval from the Sponsored Property Coordinator, Montana Tech Business Office.

TERMS AND DEFINITIONS

Some of the defined terms are not in the narrative portion of this handbook, but are included because they are commonly used in sponsored project administration.

Activity Distribution Report (ADR)

Effort reporting and certification form required for compliance with federal regulations.

Administrative Rules of Montana (ARM)

The governing and regulatory rules of Montana.

Allowable Costs

Determined by the Office of Management and Budget (OMB), the sponsor's requirements and/or College policy. OMB Circular A-21 defines allowable costs as those that are reasonable; allocable to the project; given consistent treatment by use of Generally Accepted Accounting Principals; and conform to any limitations or exclusions set forth by the sponsored agreement or OMB Circular A-21. Contact the OGC for advice on questions regarding the consent of expenditures.

Assurances

See Certifications.

Award

Funds provided from an external sponsor for support of a project at Montana Tech. This term is used for both original award and supplements; it can mean moneys or equipment.

Broad Agency Announcement

An announcement from a Federal Agency that is general in nature and that identifies areas of research interest, including criteria for selecting proposals and soliciting the participation of all offers capable of satisfying the government's needs.

Budget

An estimate of expenditures proposed to be incurred in the performance of a proposed statement of work.

Budget Category

A portion of the budget designated for certain kinds of expenditures, e.g. salaries, operations, travel, equipment.

Budget Justification

A narrative accompanying the budget explaining exactly how the budget relates to the technical section.

Center for Advanced Mineral and Metallurgical Processing (CAMP)

Affiliated with Montana Tech, CAMP is a research, engineering, consulting, and development facility that provides high quality solutions to industrial clients worldwide.

Center for Disease Control and Prevention (CDC)

A Federal agency of the Public Health Services and the US Department of Health and Human Services that sponsors research activities.

Certifications

Conflict of Interest (Disclosure of Financial Interest)- For NSF and PHS (effective October 1, 1995) a new certification has been added that requires an institutional representative to certify that the institution has implemented and is enforcing a written policy on conflicts of interest consistent with federal regulations, all financial disclosures required by the conflict of interest policy were made; and that conflicts of interests, if any, were or will be prior to the institution's expenditure of any funds under the award, and will be satisfactorily managed, reduced or eliminated in accordance with the institution's conflict of interest policy and or disclosed to the agency (as required by the agency). This certification is required for all proposals submitted to NSF or PHS on or after October 1, 1995.

Debarment and Suspension- A certification assuring the federal agency that research personnel and the institution are not presently declared ineligible for receiving federal support, have not been convicted of fraud or a criminal offense in the performance of a federal award, are not in violation of federal or state statutes, are not presently indicted for criminal or civil charges and have not within a three year period preceding the application had one or more federal, state or local transactions terminated for cause or default.

Delinquent Federal Debt- A certification provided to the federal awarding agency that the applicant organization is not delinquent on the repayment of any federal debt.

Drug-Free Workplace- A certification assuring the federal agency that the institution does, and will, continue to provide a drug free workplace as required by the Drug-Free Workplace Act of 1988.

Lobbying- A certification assuring the federal agency that no federal appropriated funds or any other non-Federal funds have been paid or will be paid for influencing any federal official or employee in connection with the awarding of any contract, grant or agreement.

Misconduct in Science- A certification that the institution has established administrative policies dealing with and reporting possible misconduct in science, and that it will comply with the policies and requirements as published in the federal agency's regulations.

Classified Research

Research sponsored by a federal government entity that involves restrictions imposed by agreement or otherwise on the distribution or publication of the research findings or results following completion, for a specified period or for indefinite duration.

Cognizant Audit Agency

The office or staff that is designated to perform audits on behalf of the federal government for sponsored projects at a College. The cognizant audit agency for Montana Tech is the

Department of Health and Human Services (DHHS).

Conflict of Interest Certification

See Certifications.

Consortium

A consortium is two or more institutions working on the same research project, either funded directly by the supporting agency or one prime institution subcontracting out the funds to the other members of the consortium.

Consultant

An individual whose expertise is required by the Principal Investigator to perform the research. (A consultant may be a paid or unpaid contributor).

Contract

For purposes of this handbook, a contract is an agreement to acquire services that primarily benefit the sponsor. For an award to be considered a contract, it normally must contain all of the following elements:

1. Detailed financial and legal requirements must be included with a specific statement of work to be performed.
2. A specific set of deliverables and/or reports to the sponsor is required.
3. Separate accounting procedures are required.
4. Legally binding contract clauses must be included.
5. Benefits of the project accrue first to the sponsor, then to the College.

Contractor Purchasing Systems Review (CPSR)

A complete and in-depth review and evaluation by the US government of Montana Tech's purchasing system. This evaluation includes the Purchasing Department's system and ORGS's system established for procurements issued under sponsored projects.

Contributed Effort

Effort expended on a sponsored project that the sponsor does not compensate for. It is a form of cost share.

Cooperative Agreement

A funding mechanism which can be used by federal agencies when a program requires more agency involvement and restrictions than a grant but requires less agency supervision than a contract.

Co-Principal Investigator (Co-PI)

An investigator who shares equal responsibility for the direction of a research program with another Principal Investigator. (PHS/NIH does not recognize the concept of co-Principal Investigator).

Cost Reimbursement Contract

A type of contract whereby payments are based on actual allowable costs incurred in performance of the work.

Cost share

College and non-sponsor resources provided in support of sponsored programs; includes contributed effort and matching funds.

Debarment and Suspension Certification

See Certifications.

Delinquent Federal Debt Certification

See Certifications.

Department of Energy (DOE)

A Federal Agency that sponsors research activities.

Department of Health and Human Services (DHHS)

A Federal Agency that sponsors research activities.

Donated Property

Property provided by an outside party for specific activities related to sponsored project and/or research activities of the College; title to the property passes to the College at essentially no cost.

Drug-Free Workplace Certification

See Certifications.

Effort

The amount of time usually expressed as a percentage of the total that a faculty member or other employee spends on a project. Effort is certified and documented through the "Hourly Faculty, Contract Professional, and Temporary Employee" Time Card Reporting system.

Employee Related Expenses (ERE)

Fringe benefits.

Environmental Protection Agency (EPA)

A Federal agency that sponsors research activities.

Equipment

Generally, articles of non-expendable, tangible personal property having a useful life and an acquisition cost which meets or exceeds the established thresholds for defining equipment. Equipment is not a replacement part or component returning a piece of equipment to its original condition. If a component increases the capability of the original equipment and has an acquisition cost that meets or exceeds the established equipment cost thresholds, it is considered a capital item.

Expanded Authorities

Policy implementation by some Federal granting agencies which delegate certain prior approval authorities to grantee institutions. This delegation allows for internal College approval of administrative and spending actions, thus avoiding delays in project progress.

External Support

Funding for research, training or public service programs provided by federal or private sources outside the College.

Fabrication

Equipment that is constructed by combining or assembling modular components and/or materials into one identifiable unit. Procurement of the components and/or materials may preclude open competition and may require the cooperation of the Principal Investigator, ORGS, and Purchasing.

Firm Fixed-Price Contract

A type of contract whereby payment is not based on actual costs expended but upon a mutually agreed upon price, Statement of Work, and deliverables.

Foreign Travel

Foreign travel includes travel outside of the United States and its territories and possessions (Guam, American Samoa, Puerto Rico, the Virgin Islands, and the Canal Zone) and Canada. A trip is considered foreign travel for all legs of the itinerary if the traveler does not return to his or her post prior to departure for a foreign destination.

Formal Proposal

Any proposal submitted by a College employee to an outside entity that may directly lead to an award. All formal proposals require an institutional endorsement by the Associate Vice Chancellor for Research and Graduate Studies.

Fringe Benefits

Also known as Employee-related expenses. Employer costs for retirement, worker's compensation, federal social security, unemployment tax, and unemployment.

Full and Open Competition

The solicitation of bids from prospective suppliers that is used to assure that every responsible bidder is permitted to compete for the procurement.

General Purpose Equipment

Equipment that is not limited to use for research, scientific, or other technical activities. Examples of general-purpose equipment include office equipment and furnishing, air conditioning equipment, reproduction and printing equipment, motor vehicles, and automatic data processing equipment.

Gift

A unilateral transfer of money, property, or other assets to the recipient for the recipient's ownership and use by a donor who makes no claims on the recipient in connection with the gift. Gifts normally have the following characteristics: the statement of work allows the Principal Investigator significant freedom to change emphases within the general area of work as the project progresses; no deliverables are involved; separate accounting procedures are not required; benefits of the project are to accrue to the nation and the world; sponsor has no audit rights; and no regulatory issues are involved, such as human subjects or animal care.

Governmental Donated Property

Property donated or transferred to the institution by a municipality, county, state agency, or the federal government.

Government Furnished Equipment (GFE)

Equipment provided to the College by the Federal government or government contractor. The title may or may not remain with the government.

Grantee

A grantee is the recipient of a grant. When the College accepts a grant award, on behalf of an individual, it becomes the grantee.

Hazardous Waste

A waste or combination of wastes as defined by the Administrative Rules of Montana. *Refer to Treatability Study Regulatory Guidance in the Inserts.*

Hazardous and Solid Waste Amendments (HSWA)

The 1984 Amendments in which the EPA defines a hazardous waste. *Refer to Treatability Study Regulatory Guidance in the Inserts.*

Human Subjects

A Human Subject is a living individual about whom an investigator conducting research obtains data through intervention or interaction with the individual or identifiable private information.

Identifiable Information

Information from which the identity of the subject is or may be readily ascertained or associated.

Indirect Costs (IDC)

Also referred to as overhead, overhead costs or administrative costs. Indirect costs are actual costs incurred to conduct the normal business activities of an organization that cannot be readily identified or directly charged to a specific project or activity.

Indirect costs are real, auditable costs incurred by the College each time it accepts an award for a sponsored project. If the College does not collect full reimbursement for these costs, other College resources must be used to subsidize them.

Indirect Cost Rates

The rates used to recover the indirect costs of a sponsored project. Negotiated, approved rates are to be used for all agreements with the federal government and for most non-federal projects, as allowable. Information on current indirect cost rates is available from the Office of Research and Graduate Studies or the Office of Grants and Contracts.

Informal Proposal

A short (generally 2-5 pages) description of the proposed project that does not involve a commitment of College resources or a signature on behalf of the College. An informal proposal may include a total cost estimate but does not include a budget and is not expected to result directly in an award. The purpose of an informal proposal is usually to inform and interest the potential sponsor enough to request a more detailed formal proposal. Also sometimes called a letter proposal, mini-proposal, preliminary proposal, pre-application, or concept paper.

Informed Consent

The voluntary agreement obtained from a subject (or the subject's legally authorized representative) to participate in research or related activity, before participating in that activity. The consent must permit the individual (or legally authorized representative) to exercise free power of choice without undue inducement or any element of deceit, fraud, force, duress, or other form of coercion or constraint.

In-Kind Contribution

A non-cash commitment (such as contributed effort, facilities use, or supplies) to share the costs of a sponsored project.

In-State Travel

Travel within the borders of Montana.

Institutional Authorized Officials

Individuals authorized by the Board of Regents to sign grants, contracts, and agreements on behalf of Montana Tech.

Intergovernmental Agreement (IGA)

An agreement whereby two or more public agencies of the state may contract with each other provided that such contracts are authorized by the governing bodies of each agency and that the contracts are executed in accordance with Montana law.

Invitation to Bid

Also known as a Request for Proposal (RFP). Written documents soliciting pricing and/or technical proposals to supply goods or services as specified in the requesting document. Correct use of RFPs constitutes full and open competition.

Key Professional Personnel

Key professional personnel (or key personnel) are all individuals who participate in the scientific development or execution of the project. Typically, key personnel have a Ph.D. or MD, but may also include the master's or baccalaureate level, provided they contribute in a substantive way to the research.

Letter of Inquiry

A letter of inquiry is initiated by an applicant to determine if a proposed project is within a private agency's fundable program areas and to request agency policy and program information, instructions and forms.

Letter of Intent

A letter of intent advises a funding agency that an application will be submitted in response to their solicitation. The letter may contain general program information, unofficial cost estimates, and a request for specific application guidelines, instructions and forms.

Lobbying Certification

See Certifications.

Loaned Equipment

Property provided by an outside party for use by the institution for sponsored project or research related activities; title to the property does not pass to the College.

Matching Funds

A cash commitment to share the costs of a sponsored project.

Mine Waste Technology Program (MWTP)

The MWTP is funded and managed by the EPA. The program, implemented by MSE Technology Applications, Inc., of Butte, Montana, is concerned with mine and mineral waste issues. Montana Tech is responsible for three of the six MWTP activity areas, including Training, Education, and Research.

Misconduct in Science Certification

See Certifications.

Modification

Any change made to an existing sponsored agreement.

Montana Hazardous Waste Administrative Rules

The specific part of the Administrative Rules of Montana (Title 17, Chapter 54) that deals with Hazardous Wastes, Treatability Studies and related regulations. *Refer to Treatability Study Regulatory Guidance in the Inserts.*

Montana Bureau of Mines and Geology (MBMG)

A Department of Montana Tech and a non-regulatory applied research agency of Montana that provides advisory, technical, and informational services on geology, mineral, energy, and water resources in the State.

Montana Department of Environmental Quality (MDEQ)

The State Department that enforces ARM policies related to hazardous wastes. *Refer to Treatability Regulatory Guidance in the Inserts.*

National Aeronautics and Space Administration (NASA)

A Federal agency that sponsors research activities.

National Institutes of Health (NIH)

A Federal agency of the US Department of Health and Human Service that sponsors research activities.

National Science Foundation

An independent Federal agency that promotes advancement of scientific and engineering progress through competitive sponsored research activities.

No-Cost Extension

Provides for an additional period of performance to accomplish project goals. May be handled internally in certain circumstances or sought externally from the sponsor.

Occupational Safety and Health Administration

The administrative body that enforces rules regarding worker safety.

Office of Grants and Contracts (OGC)

The Office responsible for review and approval of all proposal budgets and any other financial matters of proposal budgets. OGC is also responsible for generating financial reports, responding to audits, negotiating cost rates, cost shares rates, and other financial information.

Office of Research and Graduate Studies (ORGS)

The Office from which the Associate Vice Chancellor for Research and Graduate Studies works. Assists the Associate Vice Chancellor in his duties of managing all research and contract activities involving College property and faculty.

Office of Environmental Health and Safety (OEHS)

OEHS is the office responsible for coordinating and overseeing hazardous materials, generation of hazardous waste, disposal of Hazardous materials, OSHA regulations, and most other safety issues at the College.

Out-of State Travel

Travel outside the borders of Montana.

Peer Review

A process utilized by some federal and private agencies, whereby committees of research investigators in the same area of research or with the necessary expertise review and recommend applications to the funding agency.

Public Health Services (PHS)

A Federal agency of the US Department of Health and Human Services that sponsors research activities.

Principal Investigator (PI)

Typically, a faculty member who submitted a proposal that was accepted and funded by an external sponsor. The PI has primary responsibility for technical compliance, completion of programmatic work, and fiscal stewardship of sponsor funds.

Program Income

Gross income earned by a research grant recipient from the activities, part or all of which are borne as a direct cost by the grant.

Project Director

See above for Principal Investigator; terms used interchangeably in this Handbook.

Proprietary Research

Research sponsored by non-governmental entity or individual that involves restrictions on the distribution or publication of the research findings or results following completion, for a specified period or for indefinite duration.

Responsibility Center Number (RC)

Also known as an account number, this code identifies each award within the College financial system.

Re-budgeting

Process by which funds available for spending are reallocated between budget categories to allow best use of funds to accomplish project goals.

Request for Applications (RFA)

Any resulting awards would normally be funded by a grant. The RFA instructions include the information necessary to complete the application and mailing instructions

Request for Proposals (RFP)

Also known as an invitation to bid. A RFP contains the detailed information that must be supplied in the proposal. The proposal procedure is often complex and must satisfy specific requirements. Any resulting award would normally be funded by a contract.

Research and Related Activities

All formal investigative efforts (whether or not funded) by faculty, students, and staff that are designed to develop or contribute to generalized knowledge, including analyses of secondary data.

Resource Conservation and Recovery Act (RCRA)

The 1976 act in which the EPA defines a hazardous waste and other related issues. *Refer to Treatability Study Regulatory Guidance in the Inserts.*

State Budget Accounting System (SBAS)

Monthly statements of expenditures are generated from this system.

Single Source Acquisition

Issuing an award to a subcontractor without full and open competition. This may be done if an award is the result of collaboration (where two parties jointly develop the ideas, concepts, and methodology). There are restrictions on the use of this means of procurement and documentation must show justification for using single source acquisition

Site Visit

An agency-initiated review of a proposed project conducted at the applicant's institution.

Sole Source Acquisition

A procurement that does not provide full and open competition but is effected because only one source is available.

Special Purpose Equipment

Equipment which can be used only for research, scientific, or other technical activities.

Sponsor

An external funding source which enters into an agreement with the College to support research, instruction, public service or other sponsored activities. Sponsors include private businesses, corporations, foundations and other non-profit organizations, other Colleges, and federal, state and local governments.

Subcontract

A contract issued under a prime contract, agreement, purchase order, or grant for the procurement of services or program-related tasks. Issuance of subcontracts under federal prime award are subject to compliance with federal law and all subcontracts are subject to the terms and conditions of the prime award and the normal purchasing requirements of the State of Montana and Montana Tech policy.

Total Direct Labor Costs

The portion of direct costs on which the indirect costs are based, namely: salaries and wages, plus fringe benefits.

United States Department of Agriculture (USDA)

A Federal agency that sponsors research activities.

UPAS

A UPAS form is used to request an account for pre-award costs and to authorize a non-sponsored account to cover the costs in case the award does not come through.

Vice Chancellor for Academic Affairs and Research (VCAAR)

The approval of the Vice Chancellor is required for any requested faculty release time.

Associate Vice Chancellor for Research and Graduate Studies (AVCRGS)

The Associate Vice Chancellor oversees all grant, contract, subcontract, and research activities involving Tech Employees or property. The Associate Vice Chancellor is the ONLY delegate that can sign agreements on behalf of Montana Tech.

CAMPUS DIRECTORY

Vice Chancellor for Academic Affairs and Research

MG 304, 496-4127

Dr. Susan Patton, Vice Chancellor

Karen Monaghan, Administrative Assistant

Associate Vice Chancellor for Research, Graduate Studies, and International Programs

Museum 206, 496-4102

Dr. Joseph Figueira, Associate Vice Chancellor

or

Irvena Kavanagh, Research Office Administrator

Office of Grants and Contracts

Main 203, 496-4176

Lynn Job, Director

or

Main 215, 496-4769

Carleen Cassidy, Accountant

Office of Environmental Health & Safety

Hazardous Waste, Chemistry and Biology Building,

496-4463

Marilyn Cameron, Coordinator

Radiation Safety Officer

Montana Bureau of Mines and Geology

Main 204A, 496-4180

Edward Deal, Director

Charlotte McKenzie, Administrative Associate

Budgets, Payroll, and Personnel

MG 302, 496-4316

Maggie Peterson, Director

WEB ADDRESS DIRECTORY

MT Tech Home Page-Research

<http://www.mtech.edu/research/>

MT Tech Home Page-Library

<http://www.mtech.edu/library>

University of Montana Research Home Page

<http://umt.edu/research/>

University of Montana NSF EPSCoR Home Page

<http://www.umt.edu/epscor/>

Grants.gov

<http://www.grants.gov>

National Science Foundation Home Page

<http://www.nsf.gov>

National Science Foundation—FastLane

<https://www.fastlane.nsf.gov/>

Community of Science

<http://www.cos.com>

US Department of Energy

<http://www.doe.gov>

US Environmental Protection Agency

<http://www.epa.gov>

For announcements and application

instructions:

<http://www.epa.gov/ncerqa>

University of Montana Research Page Funding Sources

For Federal Funding Sources:

<http://www.umt.edu/research/fed.htm>

For Non-Federal Funding Sources:

<http://www.umt.edu/research/nonfed.htm>

For International Funding Sources:

<http://www.umt.edu/research/intnatl.htm>

CAMPUS E-MAIL INFORMATION UPDATE SOURCE

Microsoft Exchange/E-Mail/Public Folders/Research Office Folder