MONTANA TECH PROCEDURES SUPPORTING THE POLICY TO ASSURE THE INTEGRITY OF RESEARCH AND SCHOLARLY ACTIVITY

I. Purpose

The purpose of this document is to describe the procedures and process used at Montana Tech to assure the integrity of research and scholarly activity conducted at Montana Tech and by Montana Tech employees and students.

II. Policy and Definition of Research Misconduct

<u>Policy Statement</u>: Research and scholarly activity by and at Montana Tech must be conducted responsibly, ethically, and in a manner consistent with the highest standards and commonly accepted practices within the scientific, engineering, and academic communities. Allegations of research misconduct will be investigated promptly, systematically, and in a way that protects both the person providing notification of the alleged misconduct and the person whose research practices are being questioned from undue publicity and impairment of reputation until the matter has been fully investigated and resolved.

<u>Summary Definition of Research Misconduct:</u> Research misconduct is significant misbehavior that improperly appropriates the intellectual property or contributions of others, that intentionally impedes the progress of research, or that risks corrupting the scientific record or compromising the integrity of scientific practices. Such behaviors are unethical and unacceptable in proposing, conducting, or reporting research, or in reviewing the proposals or research reports of others.

Research misconduct includes fabrication, falsification, and plagiarism associated with planning, proposing, performing, analyzing, reporting, and reviewing research and other scholarly activity, along with other willful violations of accepted research practices or administrative requirements or regulations associated with research. It does not include differences of opinion, interpretation or honest error. Violation of criminal or civil law in the course of conducting or reporting research is a crime and would normally be handled as such, rather than as research misconduct. The full definition can be found in the Policy.

III. Responsibilities and Requirements

The Vice Chancellor for Research (VCR) is Montana Tech's Research Integrity Officer (RIO).

All employees, students, and other individuals associated with Montana Tech are responsible for reporting observed, suspected, or apparent misconduct in research to the VCR/RIO. If an individual is unsure whether a suspected incident falls within the definition of research misconduct, he or she should contact the VCR to discuss the suspected misconduct informally.

As the RIO, the VCR is responsible for ensuring that Montana Tech:

- a. Fosters a research environment that promotes the responsible conduct of research.
- b. Provides responsible research training, discourages research misconduct, and deals promptly and fairly with allegations or suspicions of possible research misconduct.
- c. Interprets and complies with this Research Integrity Policy and files the required annual reports on research integrity with the National Institutes of Health (NIH) Office of Research Integrity (ORI).

- d. Confidentially hears any individual who comes forward with an allegation of research misconduct.
- e. Takes appropriate action in response to allegations or suspicions of research misconduct to protect the person reporting the allegation; to protect the person whose research practices are being questioned; to investigate the allegation or suspicion fairly and promptly; to protect public health, sponsor funds and equipment, and the integrity of the research process; to document the investigation and its results; and to provide the required reports to sponsor(s), if any, on the questioned research.
- f. In the case of an anonymous allegation of research misconduct, conducts a "Pre-Inquiry" to determine if there is sufficient evidence of alleged misconduct to warrant initiation of an Inquiry with no named complainant.
- g. If warranted, appoints an impartial Inquiry Committee and serves as its non-voting chair to oversee its fair and prompt Inquiry to determine within 60 days whether a full investigation is warranted.
- h. If warranted, appoints an impartial Investigation Committee and serves as its non-voting chairperson to oversee its fair and prompt Investigation to determine within 120 days whether the "preponderance of the evidence" indicates that misconduct occurred, considering both action and intent. For misconduct to be confirmed, the preponderance of the evidence must support the conclusion that the acts or practices in question were serious deviations from those commonly employed in the United States for proposing, conducting or reporting research and other creative activities.

The <u>Provost and Vice Chancellor for Academic Affairs (VCAA)</u> is responsible for serving as the RIO in a situation where the VCR is associated with the questioned research.

IV. PROCEDURES

1. Procedures for Filing a Complaint Alleging Misconduct

- A. Complainant reports the allegation of research misconduct to the VCR/RIO. If the VCR is associated with the research in question, report the allegation to the Provost/Vice Chancellor for Academic Affairs (VCAA). The RIO will inform the complainant about the process, described below, for investigating the alleged misconduct. If the alleged act(s) do not fall within the scope of this policy, the RIO may assist the complainant in a resolution, using whatever institutional channels best fit the situation, such as referral to a department chair, a dean, the Office of Human Resources or a grievance committee
- B. If the complainant chooses to make a formal allegation, he/she must submit a formal written report of the alleged misconduct to the RIO. If the complainant chooses not to make a formal allegation, the RIO may pursue the matter at his or her discretion, by initiating a Pre-Inquiry with no named complainant.
- C. The RIO shall explain to the complainant any limits to confidentiality that may be imposed by law, such as the obligation to respond to external subpoenas. If substantial evidence is readily available, further involvement of the complainant may not be necessary. It may not be possible to pursue the allegation without the participation of the complainant. If the case depends specifically on eyewitness accounts or other evidence which necessitates open participation of the complainant, the complainant must comply.
- D. In the event the RIO receives an anonymous allegation of research misconduct, he or she must initiate a Pre-Inquiry Phase to investigate the allegation to the fullest extent possible. The intent of the Pre-Inquiry Phase is to determine if there is sufficient evidence of alleged misconduct to warrant initiation of an Inquiry Phase with no named complainant. The RIO has the option of requesting conferences with anyone, who may help to clarify the anonymous allegation.

2. Procedures for Investigating an Allegation of Research Misconduct

- A. <u>The Pre-Inquiry Phase.</u> Upon receiving an allegation of research misconduct, the RIO shall conduct an informal, preliminary review of the facts to determine if there is a reasonable basis for initiating the formal process of inquiry.
- **B.** The Inquiry Phase. The Inquiry Phase determines if a full-scale investigation of a complaint is warranted. The Inquiry Phase shall include limited formal gathering of information, the review of evidence, a careful review of the allegation, and interviews with the complainant (if there is one) and the respondent.
 - a) Committee Structure. The Inquiry Committee shall consist of the RIO (as non-voting chairperson); the Dean of the College in which the alleged misconduct occurred or the Director of the Montana Bureau of Mines and Geology (Bureau) if the inquiry involves a Bureau employee or the Center Director if the inquiry involves a researcher in the Center; and three faculty members appointed by the VCAA. If a member of the Student Affairs or Administrative Affairs staff conducted the questioned research, appropriate peer representation will be appointed to this Committee by the VCR. If a student conducted the questioned work, the Dean of Students will be a member of the Inquiry Committee. The Chairperson will vote in the case of a tie. Decisions of the Inquiry Committee require a majority vote. Appointees to the Inquiry Committee must have no conflicts of interest with the respondent or the complainant and shall be relieved of their appointments to the Inquiry Committee at the outset if they believe that their personal or professional relationships with the principal(s) in the case may affect their judgment. Membership in the same academic unit is not automatically considered to be a conflict of interest within the context of this policy. The Inquiry Committee shall be informed of its responsibilities and the processes, including the requirement for the inquiry to be conducted in a strictly confidential manner.
 - b) Inquiry Process. Upon the initiation of the Inquiry Phase, the respondent shall receive from the RIO written confidential notification of the inquiry, of the allegations, and of the policies and procedures for investigating the allegation. The Committee shall have the authority to request and the respondent shall be obligated to provide evidence including, but not limited to lab notebooks, computer printouts and codes, electronic data storage, magnetic and voice-recorded tapes, notes, manuscripts, publications, tours of the research area, and any other item, evidence, or activity, which will assist the investigation and enhance or expedite the inquiry and its decision process. "Failure to cooperate" on the part of the respondent, including refusal to comply with requests of the Inquiry Committee, shall result in immediate transition to the Investigation Phase, and possibly to disciplinary actions, which could be recommended by the Inquiry Committee to the VCAA (or to the Chancellor, if the respondent is a Vice Chancellor). Montana Tech reserves the right to exercise mandatory processes, such as seizure and protection of physical evidence (e.g. laboratory notes and research materials) when necessary. If the respondent leaves Montana Tech prior to the close of the inquiry, the Committee shall complete the Inquiry Phase.
 - c) Inquiry Timetable. The Inquiry Phase must be completed within 60 days from the date of the written notification to the respondent that an inquiry will be conducted.
 - d) Inquiry Committee Report(s). A written report of the findings shall be completed by the Inquiry Committee at or before the end of the Inquiry Period. The RIO shall notify the respondent and the complainant of the Inquiry Committee's decision in writing and send them each and the VCAA (or Chancellor) a copy of the report. If the Inquiry Phase

- exceeds the 60-day deadline, the Inquiry Committee must prepare and submit to the VCAA (or Chancellor) an interim report prior to the deadline, describing the progress of the inquiry, the reasons for the delay, and a proposed completion date.
- e) Following Action(s). If the decision of the Inquiry Committee is that the allegations are unfounded (see Section VII Unfounded Allegations). If the Decision of the Inquiry Committee is that sufficient evidence exists to proceed to the Investigation Phase, the complainant, the respondent, and the witnesses hall be notified in writing by the RIO of the date the Investigation Phase will begin. If the research was funded by a sponsor, the RIO shall notify the appropriate official(s) of the sponsor of the allegation on or before the day the Investigation Phase is initiated (or on the timing required by the sponsor, if different). The decision by the Committee to proceed to the Investigation Phase shall be final.
- C. The Investigation Phase. The Investigation Phase formally examines the allegations of misconduct, which were found to be worthy of closer scrutiny in the Inquiry Phase, and to determine if the evidence gathered supports the conclusion that scientific misconduct has occurred. All persons involved are obligated to cooperate fully by providing all information pertaining to the case. The Investigation Phase must be initiated within 30 days of the completion of the Inquiry Phase (e.g. the submission of the final report from the Inquiry Committee). There are four aspects to the Investigation Phase: gathering and reviewing evidence; convening a hearing; drawing conclusions; and preparing a report.
 - a) Committee Structure. The Inquiry Committee shall consist of the Inquiry Committee, with two additional, preferably senior faculty, appointed by the VCAA, ideally with applicable research expertise. If special expertise is needed, additional non-voting members may be appointed who are not affiliated with Montana Tech. The RIO serves as non-voting chairperson, who will vote in the case of a tie. Decisions of the Investigation Committee require a majority vote. Appointees to the Investigation Committee must have no conflicts of interest with the respondent or the complainant, with the same criteria as for the Inquiry Committee. Committee members will be informed of the process and their responsibility to honor its confidentiality.
 - b) Four Aspects of the Investigation Committee's Work
 - i. Gathering and reviewing evidence/testimony-This activity includes collecting and examining raw research materials and records and receiving and documenting testimony from all relevant sources, including that from the respondent. All relevant evidence shall be considered in the Investigation Phase. "Evidence" includes all items requested during the Inquiry Phase, plus additional notes, journals, letters, computer printouts, equipment printouts, publications, manuscripts, tours of the laboratory or other research area, witness testimony, testimony of the accused, and any other item which is reasonably requested for examination by the Investigation Committee. All items pertaining to the case are to be carefully documented in written form by the Committee including the statements by the respondent, the complainant, and witnesses made during the hearing. At the discretion of the Vice Chancellor for Research and Graduate Studies, a court reporter may be retained for this purpose.
 - ii. <u>Convening a hearing-</u> The hearing is a formal procedure during which the respondent has an adequate opportunity to hear and question witnesses, to examine other evidence, and to present testimony and evidence on his /her own behalf.
 - iii. <u>Drawing conclusions</u>-After review of the evidence, the Investigation Committee shall draw conclusions about whether the evidence persuasively supports a finding that scientific misconduct took place, about the nature of deeds engaged in, and about who is responsible.
 - iv. Preparing a report- A report shall be prepared setting forth and documenting

evidence received, conclusions drawn, and actions recommended.

- c) Investigation Process. To initiate the process, the RIO sends written notification of the investigation to those involved. The respondent will be provided with a complete statement of the allegations and must prepare and submit to the RIO a written response within 10 working days of receiving the statement of allegations. The respondent and the complainant have the right to legal counsel at their own expense. Counsel shall be permitted to attend the hearing(s). However, attorneys for the respondent and the complainant shall not be permitted to testify, cross-examine witnesses, or otherwise take an active role in the proceedings. If a respondent leaves Montana Tech prior to the completion of the Investigation, Montana Tech will still complete the investigation.
 - i. <u>Strict Confidentiality.</u> The proceedings of the Investigation Phase shall be strictly confidential. Only members of the Investigation Committee, persons called as witnesses by the Investigation Committee, the complainant, the respondent, and their legal counsels, if any, shall be allowed in the hearing. Any member of the Committee or other affiliated person who breaches the confidentiality of the reports and paperwork shall be subject to disciplinary action, including removal from the Committee.
 - ii. <u>Protection of Research Subjects, Students, Property.</u> If it is deemed necessary by the Investigation Committee, interim administrative action may be taken to protect the health and safety of research subjects, the best interests of students and colleagues, and Montana Tech and community property. This action may range from requiring alterations in the research activities of the respondent to full suspension of his or her research activities. The Committee's recommendations shall be made to the VCAA.
 - iii. <u>Timetable.</u> The Investigation Phase shall be completed no later than 120 days after it was opened.
 - iv. Report(s). The findings of the Investigation Committee and recommended actions shall be submitted in written form to the VCAA (to the Chancellor, if a vice chancellor is the respondent) for implementation. The respondent shall be provided with a complete copy of the recommendations. If the investigation involves more than one person, only the portion of the report that pertains to each person will be provided to her or him. If the Investigation Phase cannot be completed in 120 days, the Committee shall submit an interim report to the VCAA describing the progress of the investigation, the reason(s) for the delay, and a proposed completion date. In addition, the RIO shall submit a request for an extension to the funding agency(ies), if any, and include an interim report on the progress and an estimated completion date.
- d. Following Action(s) if Research Misconduct Did Not Occur. If the Investigation Committee determines that research misconduct did not occur, all pertinent agencies and individuals will be notified as quickly as possible by the RIO (see Section VII Unfounded Allegations). If the scientific record needs to be corrected, the RIO shall ensure that the corrections to the scientific record are made. If the research needing correction has already been published, the Investigation Committee may recommend specific actions(s), if any, appropriate to the circumstances of the case.
- e. Following Action(s) if Research Misconduct Has Occurred. The RIO will inform the involved funding agencies, the complainant, the respondent, and other appropriate individuals of the results of the investigation as quickly as possible after the period during which an appeal may be initiated has lapsed. If there is an appeal, the notice will be communicated after the appeal has been resolved. If applicable, notification will be provided to:
 - Affected offices within Montana Tech;

- Co-authors, co-investigators, and collaborators for the affected work;
- Editors of journals in which the accused or, in the case of a collaborator (albeit unknowingly), published fraudulent research;
- State professional licensing boards;
- Editors of other journals, or publications, other institutions, sponsoring agencies, and funding sources with which the accused has been affiliated;
- Applicable professional societies;
- Criminal authorities, if appropriate;
- Others who might be affected.
- f. Disciplinary Action(s). Disciplinary action shall be recommended by the Investigation to the VCAA (if a faculty member or academic staff member), to the MBMG Director (if a Bureau researcher), to the appropriate vice chancellor (if a non-academic staff member), or to the Chancellor (if a vice chancellor). If the accused is a currently enrolled student, the Student Disciplinary Appeals Committee shall meet with the Investigation Committee and shall jointly recommend appropriate action to the VCAA. Recommended disciplinary action shall be in accordance with appropriate, established University policies and procedures. Disciplinary actions may include, but are not limited to, letter of reprimand, removal of chair holder or administrative position, reduction in salary, dismissal, and termination of employment. If the individual is a student, credit hours and the grade for the course in question may be withdrawn and the student may be suspended or expelled. If the research in question was the basis of a graduate thesis or dissertation or played a significant role in the award of an undergraduate, graduate or professional degree, Montana Tech reserves the right to withdraw the degree awarded. The student's transcript shall be amended and Montana Tech will notify professional societies, licensing boards and other pertinent parties of the decision. In the case of termination of employment, expulsion, or in the case of the respondent's decision to resign or withdraw from Montana Tech, the Director of Human Resources or the Registrar shall place the findings of the Investigation Committee in the respondent's personnel or student file

V. RECORDS RETENTION

The written report from the Inquiry Phase and all records pertaining to the Investigation Phase, including the final report written at the completion of the investigation, shall be kept in a locked file in the Research Office. The records shall be retained for a minimum of 7 years for Official University purposes and to enable the agency(ies) funding the research to obtain information regarding the case. At the discretion of the VCR, original notebooks, printouts and other original materials that were submitted by the respondent in response to the request of the Inquiry and/or Investigation Committees, shall be returned to the respondent after copies are made for the file. Only appropriate officials, based on the judgment of the VCR shall be permitted access to these files.

VI. APPEALS PROCESS

The respondent may appeal the decision of the Investigation Committee by submitting in writing a Statement of Appeal to the Chancellor within fifteen (15) working days of the notification to the respondent by the RIO of the Investigation Committee's decision. The appeal shall not constitute a new fact-finding process, but shall rather be a review of the record previously compiled. The appeal must be based on a contention that improper procedures were followed during the Inquiry or Investigation Phase; that the decision of the Investigation Committee, when taken as a whole,

was not based upon sufficient evidence; or that the decision of the Investigation Committee was reached in an arbitrary and capricious manner.

The respondent must set forth in his or her written Statement of Appeal a summary of the facts of the case, the investigative procedures which have taken place, the dates of hearing(s), the witnesses present, a brief summary of the relevant testimony and evidence presented at the hearings, and the particular bases or grounds for the appeal. The RIO shall make available to the respondent for his/her use in preparing the appeal the entire record of the case. The respondent must deliver a copy of the Statement of Appeal to the Chancellor and to the RIO. The RIO shall then deliver the entire record of the case, including the transcript of the hearing and all exhibits and documentary evidence, to the Chancellor. The RIO may make a written response to the Statement of Appeal in which he or she sets forth facts and arguments in support of the Investigation Committee's decision, with a copy provided to the respondent.

The Chancellor's review shall be completed within 30 calendar days. The decision of the Chancellor shall be final.

VII. UNFOUNDED ALLEGATIONS AND MALICIOUS ALLEGATIONS AND RETALIATION

1. Unfounded Allegations

If the Inquiry or Investigation Committee finds the allegations are not justified, but the complainant submitted the allegations in good faith, the case shall be dismissed and no further action will be taken except to inform the complainant, the accused and any witnesses of the decision. If necessary, the pertinent funding agencies shall be notified that during the course of the Investigation Phase, the allegations were found to be unjustified.

2. Malicious Allegations and Retaliation

If in the Pre-Inquiry, the Inquiry or the Investigation Phases, the allegations are found to have not been made in good faith and the complainant is found to have been maliciously motivated, the complainant shall be subject to disciplinary action.

Montana Tech will make every effort to protect the complainant against retaliation. If the complainant requests a transfer, Montana Tech shall act 'in good faith to help him or her to find a position of comparable responsibility and salary.

The RIO shall caution the respondent that engaging in acts of retaliation toward the complainant, members of an Inquiry or Investigation Committee, or other members of Montana Tech, shall be subject to disciplinary action, independent of the outcome of the inquiry and investigation.

3. Disciplinary Action

The disciplinary actions possible for both malicious allegations and retaliatory acts may range from a letter of reprimand to dismissal and termination of employment. The disciplinary action to be taken shall be recommended by either the Inquiry or the Investigation Committee to the VCAA. If the claimant or respondent, respectively, is a student, the Student Disciplinary Appeals Committee shall meet with the Inquiry or Investigation Committee, and the Committee and the Council shall jointly recommend appropriate action to the VCAA.

VIII MODIFICATIONS TO THESE PROCEDURES

Proposed modifications to these procedures shall be submitted to the Research Advisory Committee

(RAC) for consideration and recommended to the VCR and RIO for approval.

VIII. DEFINITIONS

Allegation—notice to the responsible official either in writing or orally that wrongdoing is suspected or known to have occurred. The individual who makes the allegation will be hereinafter referred to as the <u>complainant</u>. The individual against whom the allegation has been brought will be termed the <u>respondent</u>.

Appeal—an opportunity afforded by the institution for review of the final determination. Permissible bases for an appeal are limited to assertions that improper procedures were followed during the Inquiry or Investigation phase; that the decision of the Investigation Committee, when taken as a whole, was not based upon sufficient evidence; or that the decision of the Investigation Committee was reached in an arbitrary and capricious manner. An appeal shall only be on the record.

Complainant—a person who makes an allegation of scientific misconduct.

Conflict of Interest—real or apparent interference of one person's interests with the interests of another person, where potential bias may occur due to prior or existing personal or professional relationships.

Failure to cooperate—the failure to produce requested documents, data, research results, publications, audio or video tapes, or other materials in a timely manner; the failure to respond to questions, either orally or in writing, the refusal to permit members of the Inquiry or Investigation Committee or other authorized persons to enter the research area or laboratory; and other actions deemed by the Inquiry or Investigation Committee to be unsatisfactory in response to requests made to expedite the inquiry or investigation procedure.

Federal support—federal grants, contracts, or cooperative agreements or applications.

Final determination—the institutional conclusion concerning the extent of possible wrongdoing and culpability of the respondent, which occurs after the investigation. In deciding a case, the standard for weighing the evidence is "preponderance of the evidence," in which a simple majority of the evidence must weigh in favor of the decision. A presumption of innocence should prevail until a final determination concerning guilt has been made.

Good faith allegation—an allegation made with the honest belief that scientific or other misconduct may have occurred. An allegation is not in good faith if it is made with reckless disregard for or willful ignorance of facts that would disprove the allegation.

Hearing—a formal procedure during which the respondent has an adequate opportunity to hear and question witnesses, to examine other evidence, and to present testimony and evidence on his /her own behalf.

Inquiry—gathering information and initial fact-finding to determine whether an allegation or apparent instance of misconduct warrants an investigation.

Investigation—the formal examination and evaluation of all relevant facts to determine if misconduct has occurred, and if so, to determine the responsible person and the seriousness of the misconduct.

Misconduct in science or scholarly activity—research misconduct, professional misconduct, or other practices that seriously deviate from those commonly accepted within the scientific and academic community for proposing, conducting, or reporting research and other creative activities. It does not

include honest error or honest differences in interpretations or judgments of data.

NSF—National Science Foundation

NSF Regulation—The NSF responsible research regulation is 45 CFR Part 689. The Office responsible for research integrity is the Office of the Inspector General.

ORI—Office of Research Integrity, the office within the U.S. Department of Health and Human Services (DHHS) that is responsible for the scientific misconduct and research integrity activities of the U.S. Public Health Service. In the case of the National Science Foundation (NSF), the appropriate office is the Office of the Inspector General. In the case of other federal agencies, an appropriate office of the involved federal agency will be identified.

PHS—U.S. Public Health Service, an operating component of the DHHS.

PHS regulation—Public Health Service regulation establishing standards for institutional inquiries and investigations into allegations of scientific misconduct, which is set forth at 42 C.F.R. Part 93, entitled "Public Health Service Policies on Research Misconduct."

Research record—any data, document, electronic file, e-mail, or any other written or non-written account or object that reasonably may be expected to provide evidence or information regarding the proposed, conducted, or reported research that constitutes the subject of an allegation of scientific misconduct. A research record includes, but is not limited to, grant or contract applications, funded or unfunded; grant or contract progress and other reports; laboratory notebooks; notes; correspondence; videos; photographs; X-ray film; slides; biological materials; computer files and printouts; manuscripts and publications; equipment use logs; laboratory procurement records; animal facility records; human and animal subject protocols; consent forms; medical charts; and patient research files.

Respondent—the person against whom an allegation of scientific misconduct is directed or the person whose actions are the subject of the inquiry or investigation. There can be more than one respondent in any inquiry or investigation.

Retaliation—any action that adversely affects the employment or other institutional status of an individual that is taken by an institution or an employee because the individual has in good faith, made an allegation of scientific misconduct or of inadequate institutional response thereto or has cooperated in good faith with an investigation of such allegation.

RIO—Research Integrity Officer

Scientific Record—any documentation or presentation of research, oral or written, published or unpublished. Scientific record includes the results of engineering studies, humanities, and other research and creative scholarship.

VCAA—Provost and Vice Chancellor for Academic Affairs

VCR—Vice Chancellor for Research