

POLICY MANUAL

RESEARCH

Number 583 Subject: Research

Effective Date: 24 September 2004

583.1 INTRODUCTION

- 1.1 As Utah's land- and space-grant university, Utah State University (USU or "University") is committed to advancing knowledge through engagement in research and scholarship, and to integrating an excitement for discovery into the education of its students. USU provides a creative and ethical environment that supports free inquiry through both discovery- and applications-related research that will contribute to the economic, social and cultural welfare of humankind.
- 1.2 The Vice President for Research has the primary responsibility, under the direction of the President and Trustees of the University, for the review and approval of proposals and the oversight of Research conducted at USU. The Office of the Vice President for Research supports the execution of Sponsored Research programs involving a wide array of sources.
- 1.3 USU is charged with supporting Utah's economic development and fostering the health, well-being and cultural improvement of citizens here and abroad. USU contributes to Utah's entrepreneurial spirit by focusing on applied research that has a direct impact on the economy of the state, while also fostering new ideas through innovative basic research.
- 1.4 The purpose of this policy in conjunction with related policies #307-Conflicts of Interest, #584- Human Participants in Research, #585-Animal Care and Use, #327-Intellectual Property and Creative Works, #377-Consulting Service, #403-Academic Freedom and Professional Responsibility, and #407-Academic Due Process— is to provide guidance to USU's Investigators and administrators as they develop and execute programs of Research within the university.
- 1.5 For the purposes of this policy, definitions shall be as follows:

- 1.5.1 "Research" shall be understood to encompass all those activities carried out by Investigators within their respective role statements, employment assignments or courses of study which are designed to increase knowledge or improve upon human inventions.
- 1.5.2 "Sponsored Research" shall mean Research for which USU has dedicated funding, either from internal or third-party sources, and for which USU has oversight responsibility, either by contract or statute.
- 1.5.3 "Investigator" shall mean a person or entity affiliated with USU, whether as an employee, student or otherwise, whose role statement, job description, employment assignment and/or function within the University is, either in whole or in part, to carry out Sponsored Research. Such Investigators shall include, but not be limited to, USU faculty, professional researchers, research assistants, laboratory and clinical staff, and others as may be designated by the Vice President for Research.
- 1.5.4 "Utah State University Research Foundation" (USURF) is a whollyowned foundation of USU. Under its bylaws, USURF is authorized to act independently in certain functional areas including testing and Sponsored Research of a secret or classified nature.
- 1.5.5 "Technology Transfer" shall mean that body of activities calculated to fulfill the requirements of 37 CFR 401 (The Bayh-Dole Act of 1980) to provide the public with the benefits of technologies developed under Sponsored Research programs at USU. Responsibility for transfer of technology invented and developed at USU resides in the Technology Commercialization Office (TCO), within the USURF.
- 1.5.6 "Consulting Activities" shall mean activities carried out by employees of the university with third parties in accordance with Policy #377- Consulting Service.
- 1.5.7 "CFR" shall mean the Code of Federal Regulations, the codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the United States (U.S.) federal government.
- 1.5.8 "Human Research Participant" shall be a living individual, about whom an Investigator conducting Research obtains data through intervention or interaction with the individual, and/or identifiable private information.

583.2 HARMONY WITH USU'S INSTITUTIONAL MISSION

2.1 The quality of both undergraduate and graduate education is dependent upon active participation of Investigators in Research and other creative work in fields related to those they are teaching.

2.2 Sponsored Research, whether basic or applied, is to be encouraged when it is of such a nature and scope as to augment the learning and engagement programs of USU, such as when it may serve to extend the opportunities for student involvement and learning, Technology Transfer or diffusion of information to the public.

583.3 SOURCES OF RESEARCH SUPPORT

- 3.1 USU encourages its Investigators to actively seek external funding for their Research activities. Guidelines for seeking and accepting such funds are provided below.
- 3.2 Legislative and Congressional Appropriations
 - 3.2.1 The State of Utah provides support for departmental and organized research in all colleges at Utah State University. The state government and U.S. federal government also appropriate research and operational funds to certain units of the University.
 - 3.2.2 All efforts to augment existing appropriations or initiate new appropriations for Research activities at the University shall be coordinated through the Office of the Vice President for Research, and shall be conducted in accordance with state and federal statutes regarding lobbying.

3.3 Research Grants and Contracts

- 3.3.1 Agreements for grants and contracts may be entered into with the U.S. federal government, state governments, foreign governments in good standing, or with private industry, foundations or non-governmental organizations. These Sponsored Research projects shall be of direct interest and importance both to the sponsor and to USU. All grants and contracts are subject to review by USU using criteria as set forth in Section 583.4, below.
- 3.3.2 Research contract and grant agreements may help attract and retain imaginative and able faculty members, provide funds to support undergraduate and graduate students, and/or provide equipment and other facilities which enhance the quality of the University's learning, discovery and engagement programs.
- 3.3.3 Grant and contract programs accepted by the University shall be open and non-classified, as required under Section 583.4.3.
- 3.3.4 When the University deems it appropriate to accept contracts from the U.S. federal government in order to further knowledge in areas of national security, and work under those contracts would result in the creation or transfer of classified information, those contracts will be assigned to and carried out by the USU Research Foundation. For guidance concerning

acceptance of contracts dealing with classified information, see 583.7, below.

3.3.5 The Sponsored Programs Office (SPO), under the direction of the Vice President for Research, provides support for proposal preparation and application procedures. In order to assist Investigators, the SPO maintains publications such as the Annual Register of Grant Support and the Foundation Directory that provide funding information. In addition, USU may subscribe to products which facilitate collaborative science and provide information concerning programs of funding available from the U.S. Government and other sources. The SPO may also from time to time distribute electronic newsletters or web-based announcements concerning available funding opportunities. Investigators are encouraged to consult with the SPO in early stages of proposal preparation to facilitate appropriate attention to the specific requirements of prospective granting agencies.

3.4 Scholarship and Fellowship Funds

The primary purpose of scholarship and fellowship funds available from agencies of the U.S. federal government and elsewhere, is to provide educational opportunities to deserving students. In addition, graduate students supported by these funds carry out substantial research projects and provide for their work to be made available to the public. Many undergraduate students also participate in research activities while supported on scholarships. Thus, a great deal of fundamental and applied research is supported through such funds.

3.5 Institutional Support of Research Activities

In addition to direct financial support from the sources described above, the University is committed to encouraging Research and scholarly endeavors on the part of all Investigators. Encouragement is given through the adjustment of teaching loads to provide time for such activities and, to the extent possible, provision of access to equipment, laboratory space and literature, support for travel and participation in professional meetings, and assistance in preparation and publication of the results of Research and other scholarly works. A limited number of small grants-in-aid to encourage Research initiation, especially among the recently appointed and younger faculty members, and Investigators developing new fields of Research, are provided through the Office of the Vice President for Research.

583.4 CRITERIA FOR SUBMISSION, APPROVAL AND NEGOTIATION OF CONTRACTS AND GRANTS

4.1 Any proposed Sponsored Research should be of such nature that its prosecution enhances and is compatible with the regular programs of discovery and/or learning conducted by the University.

- 4.2 Research funds should not be sought or accepted by the University simply because they are available. They should strengthen its capability to achieve its main purposes, as defined in the University mission.
- 4.3 Except in cases of classified or proprietary work performed under the direction of the USU Research Foundation, sponsored programs must be compatible with the spirit of freedom of inquiry and the rights for publication must be fully assured to the Investigator and the University.
- 4.4 All Investigators may submit proposals for support of Research and scholarly projects. All proposals must be approved by an Investigator's research center director (if the work is to be carried out in whole or in part through a research center), by the department head, and by the cognizant dean(s) before submission to the Sponsored Programs Office for final campus approval.
- 4.5 All contract and grant proposals, including proposals to private foundations, shall be submitted through the Sponsored Programs Office (SPO). Each proposal shall be accompanied by a completed Proposal Approval Form as currently provided by the SPO, and all other documentation as required. Proposals with executed Proposal Approval Forms must be completed and provided to the SPO in accordance with current SPO procedures.
- 4.6 Negotiations with third parties of the terms of contracts and grants must ensure appropriate legal and financial protection to the University and conformity with established University policies. Proposals for contracts and grants must provide for payment of Facility and Administrative (F&A) costs, in accordance with recognized rates governing indirect-cost reimbursement. Any waiver of F&A costs must be approved in writing by the Vice President for Research. The SPO shall have primary responsibility for the negotiation of the terms and conditions of Sponsored Research agreements.
- 4.7 Proposals that commit the University to establish research centers or institutes upon receipt of an award require special handling. The Vice President for Research should be consulted in the early stages of preparing such proposals. The Vice President for Research, Provost or their designees, will work with the investigator(s) to ensure that proper procedures are followed for all such proposals, including review and approval by the President, the Board of Trustees, and the Board of Regents.
- 4.8 The administration of Sponsored Research projects and programs is normally handled through the regular departmental and college channels. The Vice President for Research may designate an individual or committee to assume direct administrative responsibility for certain projects of an interdisciplinary character involving direct participation of more than one college and/or center.

583.5 PROPRIETARY INFORMATION, DATA AND RESEARCH

- 5.1 It may be necessary for an Investigator to gain knowledge of information considered to be proprietary by a private company in carrying out a research project. It is likewise possible that sharing of information proprietary to the University may be necessary. Before entering into a research project which may involve the use of proprietary material, the parties involved, including sponsoring industries and universities, shall enter into an appropriate Confidential Disclosure Agreement (CDA), or other agreements approved by University Counsel and the Technology Commercialization Office (TCO), determining the nature and extent of the restrictions to be placed on the parties with regard to disclosure of the confidential information. Such agreements shall be negotiated and executed by the TCO, and shall be countersigned by the Investigator(s) directing the work. To the extent that graduate students or others may become receiving parties under such an agreement, they shall execute an internal agreement acknowledging the duties of confidentiality under which they receive such materials. Any extension of the scope or nature of the proprietary material involved will require a supplementary agreement to be signed by the parties involved, as detailed above, before implementation. Acceptance or utilization of any proprietary material without prior administrative approval, or failure to comply with the terms of a CDA is inappropriate, may result in employment action as provided under Policy #399-Termination of Classified and Professional Staff or Policy #407-Academic Due Process and will be deemed to be the sole responsibility of the individual Investigator.
- 5.2 The acceptance and use of proprietary material by Investigators must not compromise or diminish the freedom of publication rights as specified in this policy, nor inhibit free discussion of any graduate student project at an oral examination. Because preliminary and final graduate student examinations must be open to all members of the faculty, student theses or reports required for advanced degrees should not contain or use proprietary information.
- 5.3 From time to time, the University may determine that the public good is best served with regard to Technology Transfer by entering into an agreement with a public or private entity which provides that entity with a licensed interest in the results of a given study. For example, a company may provide support for further research on a topic or idea for which the University has filed for patent protection. Under such conditions, the University may agree to provide the company with an option to license the patent, if awarded, to the company. Such an arrangement would provide the company with an interest in the research results, but the Investigator would still be free to publish, consistent with the University publication policy. Under such conditions, short-term restrictions may be placed on publications, including theses and dissertations, as provided in Section 583.6 below.

583.6 PUBLICATION POLICY

6.1 Restrictions on publication of the results of Research are incompatible with the basic concept of a research and educational institution as a source of knowledge. Short-term restrictions of usually not more than ninety days may be permitted in the interest of actual or potential patent considerations, or to provide lead time to a company or organization that has financed the Research. Long-term permanent

restrictions should be undertaken only for exceptional or emergency reasons such as might occur during a period of national emergency, as provided in the National Emergencies Act (Title 50, U.S. Code, Section 1601 et seq), and would then be permitted only after review and approval by the Vice President for Research.

6.2 Except as provided in Section 583.7, below, the University will not knowingly enter into a research agreement with a sponsor under which Research results would be owned and/or solely controlled by the sponsor. However, from time to time testing services may be undertaken, especially within the USU Research Foundation, the results of which may become proprietary to the sponsor. Agreements to conduct services in USU labs shall define the ownership and use of data and shall establish whatever publication rights shall be granted related to data obtained from those services.

583.7 SECRET OR NATIONAL DEFENSE RESEARCH

- 7.1 USU will not knowingly conduct Research directed to offensive weapons development except in times of declared national emergency, as provided for in the National Emergencies Act and only upon request of U.S. federal governmental authority. The University does not attempt to determine whether or not a study, the results of which may have broader applications in the civilian economy, may conceivably also be used in some way for military purposes.
- 7.2 USU permits acceptance of certain research projects which are secret or otherwise classified and/or in which its rights to publish the results of the investigations are withheld, but all such research shall be administered within the USU Research Foundation.

583.8 CONSULTING ACTIVITIES AND OUTSIDE INTERESTS

- 8.1 The Board of Trustees of Utah State University has adopted Policy #377-Consulting Service. USU employees are required to adhere to this policy in providing consulting services. The following are some general guidelines which are considered appropriate for Consulting Activities:
 - 8.1.1 Certain employees as defined in Policy #377- Consulting Service are permitted to provide consulting services for private and/or public organizations. Provision of such Consulting Activities shall be pre-approved by the employee's direct supervisor.
 - 8.1.2 In certain USU programs, advice and service to individuals, organizations, and other agencies are an integral part of an Investigator's regular duties. In accordance with section 2.3.2 of USU Policy #376-Extra Compensation, no Investigator may receive extra compensation for performing services that are necessary to fulfilling their Primary Role Assignments. Such activities shall be excluded from the definition of Consulting Activities. However, in cases where Policy #376-Extra Compensation allows for extra compensation for the performance of extra

services, the guidelines of this section and Policy #377-Extra Compensation shall be taken into consideration when supervisors and university administrators approve extra compensation in connection with such services.

- 8.1.3 A consulting obligation or other outside activity should be undertaken only if it does not interfere with full and complete performance of the regular duties which an Investigator has been assigned, for which he or she is receiving compensation from Utah State University and which is normally expected of its employees.
- 8.1.4 Investigators must not compromise the position of the University through their Consulting Activities or other outside interests. Conflicts of interest must be disclosed and appropriately managed, reduced or avoided, in accordance with Policy #307-Conflicts of Interest.
- 8.1.5 Serving as an expert witness during legal proceedings is normally a Consulting Activity. Investigators serving as voluntary witnesses by virtue of their expertise during any legal procedure represent themselves and not the University.
- 8.1.6 If a request for assistance involves the use of the University's labor, facilities, or equipment, it should generally be performed on a contractual basis with the University rather than on a consulting basis.
- 8.1.7 Investigators working in a private capacity are obligated to make clear to their third-party employers that this work is private. University stationery and forms shall not be used in Consulting Activities or reports. The specific arrangements and compensation rates for such consultation shall not subject other professional persons outside the University to unfair competition. Improper use of University resources may result in employment actions as provided under USU Policy #399-Termination of Exempt and Non-Exempt Staff or Policy #407-Academic Due Process: Sanctions and Hearing Procedures.
- 8.2 After an employee has provided approved consulting services, the time expended in the Consulting Activity shall be reported to the employee's immediate supervisor, in accordance with Policy #377-Consulting Service.
- 8.3 USU does not take responsibility for the acts or omissions of its employees while they are engaged in Consulting Activities. University role statements shall not include language which requires faculty members to provide Consulting Activities in order to fulfill their USU role-related responsibilities.

583.9 USE OF HUMAN PARTICIPANTS IN RESEARCH

9.1 All Research projects involving the use of Human Research Participants must be handled in accordance with the principles set forth in the Belmont Report and the guidelines provided in 45 CFR 46. These

guidelines apply to all human Research performed at USU, regardless of the source of funds used. Special care must be taken in protecting the rights and welfare of vulnerable populations, as further defined in Policy #584-Human Participants in Research, including studies using questionnaires, surveys, interview procedures or observations, focus groups, educational tests, taste panels, existing data, clinical studies (drugs/medical devices), blood collection, or biological specimens.

- 9.2 Policy #584-Human Participants in Research has been adopted by USU, and shall guide USU employees recruiting for, designing and/or conducting any Research involving Human Research Participants.
- 9.3 USU is committed to a policy of safeguarding the rights and welfare of Human Research Participants and hereby gives assurance that it will comply with all applicable regulations of the Department of Health and Human Services (DHHS).

583.10 USE OF ANIMALS IN RESEARCH

- 10.1 The use of animals is essential to the research, teaching, and outreach missions of Utah State University. Significant benefits to the health and welfare of both animals and humans have resulted from animal use in Research, and continued use is crucial to future advancements. USU employees who utilize animals are orally and legally obligated to care for them properly and use them humanely. Each faculty member, staff member, or student involved in caring for or using animals under USU's jurisdiction and control is directly responsible for promoting and protecting animal welfare within the learning, discovery and engagement programs of the University. Animal procurement, care and use shall be governed by the terms of Policy #585-Animal Care and Use and shall be in accordance with standards and guidelines set forth in the Animal Welfare Act, the Health Research Extension Act of 1985, and subsequent revisions, and other guides as set forth in Policy #585-Animal Care and Use.
- 10.2 Animals should be used in learning, discovery and engagement programs only as required to demonstrate principles, to obtain new information, and achieve results, which will ultimately benefit society. Whenever feasible, mathematical models, *in vitro* biological systems, demonstrations, and computer and audiovisual aids should be used to reduce, refine or replace animal use in Research.
- 10.3 All research projects and educational or extension activities using live vertebrate animals under the jurisdiction or control of USU shall be reviewed and approved by the Institutional Animal Care and Use Committee.

583.11 SAFETY AND HEALTH IN RESEARCH

11.1 It is the policy of Utah State University that faculty, staff and students are entitled to a safe and healthy place in which to work, study, or perform Research free from hazards which may cause serious injury or death. The safety and health aspects associated with experimentation, research and development are so varied

that specific safety instructions are beyond the scope of this policy statement. Therefore, Investigators who have responsibility for the design and conduct of Sponsored Research at USU shall be responsible for designing and enforcing such safety procedures as are reasonable and prudent in their respective areas. They shall coordinate with the University's Environmental Health and Safety Office (EH&S) to be certain that all persons involved in Research and support in their areas receive appropriate training in proper handling techniques and emergency procedures. All Investigators shall take the initiative to become informed concerning exposure to toxic and hazardous materials in their work environment. The department head or unit director is responsible for the approval and safe conduct of all research projects carried out within his or her unit.

- 11.2 The University, by statutory requirement, must comply with the provisions of the Utah Occupational Safety and Health Act (UOSHA). To help comply with UOSH Rules and Regulations, the EH&S provides various safety-related publications, available at the EH&S website, and in their offices.
- 11.3 Proposals involving 1) the use of any hazardous materials which may expose Investigators or other persons to potentially unsafe conditions, including but not limited to Select Agents, as defined in 42 CFR 1003, 2) Human Research Participants, 3) live vertebrate animals, 4) the use of radiological materials or 5) the use or manipulation of Recombinant DNA must be reviewed by the appropriate committee to provide assurance that all reasonable precautions have been taken to avoid potential health or safety hazards.. Examples of such committees are: Safety, Biosafety, Chemical Hygiene, Radiation Safety, Recombinant DNA and Risk Control. Information on these committees may be obtained from the Office of the Vice President for Research or a member of the committee of interest. Committee membership is published in the "USU Councils and Committees Handbook."

583.12 PATENTS, COPYRIGHTS AND CREATIVE WORKS

- 12.1 Policy #327-Intellectual Property and Creative Works governs the pursuit of intellectual property rights and commercialization for Investigators. Further procedures related to intellectual property and copyrights are available in the Office of the Vice President for Research and the Technology Commercialization Office (TCO).
- 12.2 It is the policy of the University to carry out its scholarly work in an open and free atmosphere and to freely publish results obtained there from, limited only by a short time delay when necessary to establish patent rights or ensure the protection of third-party confidential or proprietary information. Although the University does not undertake Research or developmental work principally for the purpose of developing patents and commercial applications thereof, patentable inventions sometimes arise out of the Sponsored Research activities of its Investigators which are carried out wholly or in part using University resources. As mandated by the Bayh-Dole Act of 1980, and in keeping with its role as a public service institution, the University has an interest in assuring the utilization of such inventions for the public good.

- 12.3 As a condition of employment, and in accordance with 37 CFR 401.14, USU employees are required to disclose those inventions and creative works to the TCO which are not defined by Policy #327-Faculty Scholarly Works, Section 1.2. Faculty Scholarly Works to which USU does not claim ownership include faculty instructional materials, journal articles, works of art, literary works and musical works that were not commissioned by USU and that are not subject to any obligation of the University to a third party. For all other employee inventions and creative works, it is the policy of the University to assess their commercial potential, to retain title to them as allowed under the Utah Employment Inventions Act and 37 CFR 401, and protect them when deemed appropriate to do so by the TCO.
- 12.4 As a public institution, the University is committed to providing Research sponsors with access to technologies developed in whole or in part under their sponsorship that is fair to the sponsor and the inventor(s), and that does not unduly disadvantage third parties or the public at large. Sponsored Research shall be undertaken by the University under support from governmental entities and private parties only if it is consistent with, and complementary to, the University's goals and responsibilities to the public.

583.13 RESEARCH MISCONDUCT

- 13.1 Integrity in research is a core University value. Those involved in academic Research must safeguard the truth and protect the public trust. It is the shared responsibility of every member of the University community to create and preserve an environment in which activities that interfere with an honest search for truth are not tolerated. Misconduct in scholarly Research cannot be prevented by university regulation or federal law but only by each individual's firm commitment to academic ideals and integrity. Investigators, mentors, project directors, and academic leaders must impress the importance of such commitment upon all who are involved in University Research.
- 13.2 Honest mistakes do not constitute scientific misconduct. Rather, scientific misconduct is defined as falsification, fabrication or misappropriation of data. This definition is in accord with the USU Faculty Handbook, Policy #403-Academic Freedom and Professional Responsibility.
- 13.3 Research misconduct is a broader concept than scientific misconduct, and includes any instance of scientific misconduct, as well as any other unethical practice in the conduct of Research that is found not to be in keeping with the normative standards of the scientific community.
- 13.4 Whenever any USU Investigator is accused of serious misconduct in scientific or scholarly research, the university will conduct an inquiry; make a determination concerning the truth or falsity of the allegations, and take appropriate investigative and disciplinary action. The process of inquiry and investigation will be expeditious and protect the rights of all those concerned, including the

complainant (also referred to as the "whistleblower," or "accuser") and the accused. Allegations of scientific misconduct by USU employees, whether initiated by USU faculty, staff, students, or by individuals outside of USU, shall be handled in accordance with USU Policy #403-Academic Freedom and Professional Responsibility, Policy #407-Academic Due Process: Sanctions and Hearing Procedures;" and USU's "Scientific Misconduct Procedures." In accordance with those policies and procedures, and with federal statutes, all findings of scientific misconduct at USU shall be reported to the cognizant funding agency of the federal government. USU cooperates with U.S. federal government agencies as required by statute in the prosecution of scientific misconduct inquiries and investigations.