THE
UNIVERSITY OF
MONTANA

NCURA PEER REVIEW

FINAL REPORT

FEBRUARY 23, 2012

ABOUT THIS REPORT

The National Council of University Research Administrators (NCURA) is a national organization of over 7,000 members. NCURA serves its members and advances the field of research administration through education and professional development programs, the sharing of knowledge and experience, and by fostering a professional collegial, and respected community.

This document focuses on sharing knowledge and experience as a result of the recently conducted review of the research administration area of sponsored programs. Our objectives are to provide the institution with feedback on the institution's management in support of research and to share some national best practices that might be considered at the institution.

While the review utilizes the NCURA National Standards, the reviewers recognize that policies and practices vary at institutions and that not all Standards are applicable to each institution.

The NCURA peer review does not evaluate personnel, nor does it perform an audit function. The results of this review, therefore, cannot assure fiscal, regulatory, or ethical compliance with federal, or local regulations. The recommendations offered in this review report should not be construed as an exhaustive list as these recommendations necessarily represent an analysis by a particular set of reviewers and at a single point in time. A decision by an institution to not adopt one or more recommendations does not, in any way, mean that the institution is failing to meet legal requirements. Rather, the recommendations reflect an opinion by nationally recognized research administrators who may not be fully cognizant of local history, environment, or decisions. This document does not provide legal advice. NCURA does not warrant that the information discussed in this report is legally sufficient.

- The **Executive Summary** provides an overview of the report and a listing of all the recommendations in abbreviated form.

- The **Background, Charge, and Approach** lays out the charge to the reviewers and the approach utilized during the peer review.

- The section on **National Standards for Sponsored Projects Operations** provides an overview of the National Standards utilized for the review (the complete listing of National Standards appears as an appendix).

- The **Current Environment for Sponsored Programs at Research Universities** section discusses the many influences and pressures that have recently impacted research administration and created some of the current stresses.

- The remaining two sections on **Institutional Infrastructure** and **Core Operations** provide a detailed discussion of these areas followed by a set of recommendations and rationale for the recommendation being made.

NCURA will treat the contents of this report as confidential and will not disclose nor distribute the report outside individuals affiliated with the peer review program. There are no such restrictions on how the institution chooses to utilize the report.

University of Montana

NCURA PEER REVIEW

EXECUTIVE SUMMARY

An evaluation of Sponsored Projects Administration at University of Montana was conducted at the request of Vice President for Research and Development (VPRD) Dan Dwyer by a Peer Review Team from the National Council of University Research Administrators.

The evaluation covered the Institutional Infrastructure and Core Operations of the National Standards for research administration. The review assessed the following broad areas:

1) **Institutional Infrastructure**, consisting of Organizational Structure; Communication, Outreach, and Education; Compliance and Risk Assessment; and Electronic Research Administration

2) **Core Operations**, consisting of Proposal Services; Award Acceptance and Initiation; Award Management; and Research Ethics

The NCURA Peer Review Program performs a review of the effectiveness of the sponsored programs operation using National Standards. The program does not perform an audit function. The results of this review, therefore, cannot assure fiscal, regulatory, or ethical compliance with federal, state, or local regulations. Additionally, the program does not evaluate personnel.

Every university that engages in research has improvements that can be made to its structure, policies, and practices, but not every university is willing to engage in a process of independent review of its management of extramural funding. The University of Montana must be commended for undertaking a comprehensive, outside evaluation of its administration of sponsored programs.

The Reviewers have used a set of national Standards as the basis for the review, and, as a result, there are a number of recommendations about steps that can be taken to strengthen Montana's ability to meet the Standards. However, the Reviewers also recognize that not every standard carries the same weight at every institution. Each university that undergoes a Peer Review must make choices about which recommendations can be accommodated in the time available with the resources at hand. It is important, too, to consider the risk of audit exposure associated with each weakness in the fabric of research administration. We urge the University to take the specific recommendations seriously and to develop a plan for addressing any deficiencies over the next few years. Some recommendations need immediate attention, and others can be managed as the institutional capacity develops to support the research enterprise.

The recommendations are listed here in abbreviated form. The first set of recommendations includes issues that the Reviewers believe should have immediate attention. These

recommendations are termed "Key Recommendations." Following those, the report lists additional important recommendations for the University. Those appear in the order they are discussed in the report. A more complete description and rationale for each recommendation below appears in the body of this report.

Key Recommendations

- **Recommendation: University leadership needs to construct a communications plan with goals and clearly articulated priorities to engage University researchers and the people who support them. There must be a dialogue with the academic community to listen to their ideas and concerns as part of the process of developing research priorities.**

- **Recommendation: The Research Strategic Plan demands a response from administration. The VPRD and the Provost should initiate conversations with faculty, staff, and deans about the issues raised in the Plan.**

- **Recommendation: ORSP should recruit and hire two pre-award research administrators who will focus specifically on providing assistance to faculty who are developing, preparing and submitting proposals**

- **Recommendation: ORSP should physically relocate the dedicated IT support person from the office of Administration and Finance into its own offices.**

- **Recommendation: The VPRD should empower ORSP to immediately recruit and hire assistant directors to manage the primary functional areas of the office. Typically, those assistant directors would be for the pre-award and post-award areas.**

- **Recommendation: The VPRD should aggressively support the efforts of the Director of ORSP in working with UM's HR office to investigate research administrator career path opportunities.**

- **Recommendation: The VPRD should serve as a regular member of the Provost's Council and should engage with deans on a regular basis.**

- **Recommendation: The VPRD and the Provost should immediately direct the preparation of policies and procedures to articulate the University's approach to F&A waivers, F&A distribution, and access to cost matching funding.**

The recommendations below are a complete list of recommendations, in abbreviated form.

Organizational Structure

NCURA Standard II.A.i. Organizational Structure

- **Recommendation: University leadership needs to construct a communications plan with goals and clearly articulated priorities to engage University researchers and the people who support them. There must be a dialogue with the academic community to listen to their ideas and concerns as part of the process of developing research priorities.**

- **Recommendation: The Research Strategic Plan demands a response from administration. The VPRD and the Provost should initiate conversations with faculty, staff, and deans about the issues raised in the Plan.   A true strategic plan, not just an issues document, should emerge from the ideas in this Plan and the conversations with the research community as well as from the articulation of institutional priorities.**

- **Recommendation: The VPRD should consider the current structure of the office of the VPRD as it supports those two primary functions.**

- **Notable Practice: The merger of pre- and post-award activities appeared to the Reviewers to be a strong move towards developing and implementing an infrastructure that will support research administration functions as the University continues to grow.**

- **Recommendation: ORSP should recruit and hire two pre-award research administrators who will focus specifically on providing assistance to faculty who are developing, preparing and submitting proposals.**

- **Recommendation: The VPRD should plan to evaluate campus research growth and the placement of support for the research enterprise over the next three years.**

- **Recommendation: The VPRD and the Director of ORSP should lead a campus-wide effort to assess where responsibilities for research management currently lie and to recommend optimal reallocation of roles and responsibilities. This evaluation team must include faculty, associate deans, and staff at various campus levels.**

- **Recommendation: Resources and staffing need to be allocated to support the research enterprise as defined through the roles and responsibilities.**

- **Recommendation: The VPRD in concert with the Director of ORSP should begin discussions with their counterparts about UM business operations. The goal is ultimately to streamline and simplify business policies and procedures in order to meet the needs of research and to efficiently utilize scarce resources.**

- **Recommendation:** ORSP should physically relocate the dedicated IT support person from the office of Administration and Finance into its own offices.

- **Recommendation:** ORSP should work with the VPRD and central IT to develop a plan for electronic research administration priorities, both new software development and improvements to current systems, for the office and the campus. Counterparts at other research universities should be engaged to identify commonly used electronic tools that would benefit ORSP staff and campus constituencies.

NCURA Standard II.A.ii. Staffing and Resources

- **Notable Practice:** The Reviewers noted that the staff in ORSP are widely viewed as overworked and overburdened. Despite that concern, many participants complimented the Director for her work in bringing about a more cohesive and open approach to managing research. In addition, the ORSP staff as individuals were regarded as helpful and conscientious. The Office as a whole, however, was seen as emphasizing its role as enforcers rather than facilitators.

- **Recommendation:** The VPRD should empower ORSP to immediately recruit and hire assistant directors to manage the primary functional areas of the office. Typically, those assistant directors would be for the pre-award and post-award areas.

- **Recommendation:** Job descriptions and responsibilities should be critically evaluated and necessary skills for the performance of those responsibilities clearly defined *after* definition of the roles and responsibilities.

- **Recommendation:** The VPRD should aggressively support the efforts of the Director of ORSP in working with UM's HR office to investigate research administrator career path opportunities.

- **Recommendation:** VPRD should consider sending all current staff to external basic training for research administration (such as the NCURA Fundamentals and the NCURA Sponsored Projects Administration II workshops) and utilize this training program for new hires.

- **Recommendation:** ORSP should evaluate its current arrangement with central IT to determine if that arrangement is cost effective and efficient.

NCURA Standard II.B.i. Communication and Outreach

- **Recommendation:** The VPRD should serve as a regular member of the Provost's Council and should engage with deans on a regular basis.

- **Recommendation: ORSP should generate monthly reports of proposal and award activity in a user-friendly, easy-to-read format that provide the VPRD and each Dean with details of activity campus-wide and within the Colleges, as well as a snapshot of activity over time.**

- **Recommendation: The Director of ORSP should consult with College and departmental research administrators to determine some effective approach to networking and information exchange. Part of the success of this effort may depend upon the understanding that ORSP has important information to convey and has expertise that others will want to gain.**

- **Recommendation: The VPRD should look into establishing an advisory committee of key research administrators and faculty to meet regularly with the leadership of ORSP in order to find common points of interest, to identify needs for training, to suggest ways to improve service, and to share ideas back and forth.**

NCURA Standard II.B.ii. Education

- **Recommendation: To help promote and facilitate a supportive and compliant research infrastructure, ORSP should develop and implement several training and educational programs for research partners.**

NCURA Standard II.C.i. Compliance and Risk Assessment

- **Recommendation: The VPRD and Director should consider establishing a regular review cycle for ORSP.**

- **Recommendation: ORSP should implement a regular review cycle of all policies and procedures.**

NCURA Standard II.D.i. Electronic Research Administration

- **Covered in each functional area.**

Proposal Services

NCURA Standards 1.A.i Collection and Dissemination of Funding Information

- **Recommendation: The VPRD and ORSP should explore a subscription to a vendor funding opportunities database.**

NCURA Standards 1.A.ii Proposal Development and Assistance

- **Recommendation: UM should continue the use of a circuit rider but should work with the Deans and PIs to assess their needs and expectations in order to implement a mutually agreeable job description.**

NCURA Standards 1.A.iii - Proposal Review and Submission

- **Recommendation: UM needs to build or purchase an electronic routing and approval system for proposal submission.**

- **Recommendation: ORSP needs to develop and disseminate clear information as to the use of the routing checklist and its purpose.**

- **Recommendation: ORSP should post guidance that alerts PIs and all staff about the expected lead time for receipt of a proposal and the actions taken when proposals are received after this time.**

- **Recommendation: The VPRD should establish uniform guidelines for submission of proposals and F&A recovery through a center/institute and through a department.**

- **Recommendation: ORSP should formalize the connection to regulatory committees at the proposal and the award stage.**

- **Recommendation: The VPRD and his compliance staff should hold basic training sessions for ORSP staff to inform them about the range of research integrity oversight areas.**

- **Recommendation: ORSP should review the budget templates and supporting information available to UM faculty and work to establish two or three variations that will mirror the common requirements of major funding agencies**.

NCURA Standards 1.A.iv Collaborative Project Development

- **Recommendation: None**

NCURA Standard 1.A.v. Agency Liaison

- **Recommendation: ORSP staff should regularly participate in professional organization regional and/or national conferences.**

Award Acceptance and Initiation

NCURA Standards 1.B.i. Review and Negotiation of Terms and Conditions

- **Recommendation: None**

NCURA Standards 1.B.ii. Ancillary Agreements Associated with Research Grants and Contracts

- **Recommendation: None**

NCURA Standards 1.B.iii. Subawards

- **Recommendation: None**

NCURA Standard 1.B.iv. Award Acceptance Process

- **Recommendation: None**

NCURA Standard 1.B.v. Award Activation and Notification

- **Recommendation: None**

Award Management

NCURA Standards I.C.i. Fiscal Management

- **Notable Practice: The plethora of policies and business practices required by a research university are in place at UM. There has been considerable diligence and attentiveness in developing policies that are specific to Montana but based in sponsor, particularly Federal, policy and regulation.**

- **Recommendation: The Director of ORSP should select one or two key policies to use as a basis for discussion with faculty and departmental research administrators to determine what questions are still unanswered and what concerns are unaddressed.**

- **Recommendation: The VPRD and the Provost should immediately direct the preparation of policies and procedures to articulate the University's approach to F&A waivers, F&A distribution, and access to cost matching funding.**

- **Recommendation: The Director of ORSP should use the report of the A-21 Task Force as the basis for a thorough evaluation of effort reporting at UM.**

- **Recommendation: ORSP should begin to work with the campus to establish an electronic tool for routing and approving cost transfers.**

NCURA Standards I. C.ii Administrative Management

- **Recommendation: ORSP should work with its IT professional, ORSP accounting staff, and campus research administrators to prioritize a set of reports that would provide useful information about sponsored programs management.**

Research Ethics

NCURA Standards I.D.i. Project Integrity

- **Recommendation: Conflict of Interest management plans should be distributed to the Dean and Department Chair in which the faculty member resides**

- **Recommendation: UM should designate a staff member to have oversight over COI management plans and export controls or hire a new coordinator to fulfill this function.**

- **Recommendation: ORSP should invest in commercially available electronic systems for the routing, processing, and management of research related compliance committees, such as IRB, IACUC, IBC, and COI.**

NCURA Standards I.D.ii. Human and Animal Use

- **Recommendation: Training requirements necessary for IACUC approval and COI approval and to meet NIH RCR requirements should be certified at a minimum by the Coordinators in those areas.**

- **Recommendation: The Director of EHRM, Associate Legal Counsel, and ORSP should create appropriate information linkages to insure that awards accepted by UM have appropriate training documentation for the research being conducted.**

- **Recommendation: The IRB should coordinate with the Dean of Graduate Studies to document that all theses and dissertations using human subjects have an approved IRB protocol on file.**

NCURA Standards I.D.iii. Biohazards, Radiation Safety, Bioterrorism

- **Recommendation: None**

NCURA Standards Export Controls/Deemed Export Regulations

- **Recommendation: UM should develop and implement policies and procedures for export controls, taking into account the level of risk that is acceptable for the university and the nature of its research programs.**

- **Recommendation: The UM should plan to regularly inform and provide basic training on export controls to faculty and staff at high risk of encountering export issues.**

BACKGROUND, CHARGE, AND APPROACH

The National Council of University Research Administrators (NCURA) Peer Review Team would like to commend the University of Montana for undertaking an open and comprehensive review of the research administration infrastructure. The strong support for research is evident with the decision of University leadership and the University community to engage in a process that allows all members to participate and contribute.

The NCURA Review Team especially believes it is a critical part of this review process to include experienced research administrators who have a national presence. This external validation allows Montana to incorporate best practices and models into their final action plans.

An evaluation of the sponsored projects administration at the University of Montana was conducted at the request of Vice President for Research and Development (VPRD) Dan Dwyer. The NCURA Peer Reviewers consisted of two individuals with the assistance of the NCURA Peer Review Program Coordinator, who brought experience with sponsored programs operations (see Appendix B for bios of the peer reviewers). All Reviewers brought national-level experience on pre-award, post-award, departmental, and compliance operations, as well as a broad view of the academic environment and the interface of academic needs with research administration processes.

The Charge and Scope of Work given to the reviewers appears in Appendix C. Prior to the two and one-half-day site visit (itinerary appears in Appendix D) the Peer Reviewers received descriptive materials from the University covering policies, forms, and other information. The review was performed in October 2011 (site visit on October 10-12, 2011).

The evaluation covered the Institutional Infrastructure and Core Operations of the National Standards for research administration. The review assessed the following broad areas:

1) **Institutional Infrastructure**, consisting of Organizational Structure; Communication, Outreach, and Education; Compliance and Risk Assessment; and Electronic Research Administration

2) **Core Operations**, consisting of Proposal Services; Award Acceptance and Initiation; Award Management; and Research Ethics

Acronyms Used:
- F&A: Facilities & Administrative Costs or Indirect Costs or Overhead Costs

- IBC: Institutional Biosafety Committee

- IRB: Institutional Review Board

- IACUC: Institutional Animal Care and Use Committee

- NCURA: National Council of University Research Administrators

- NIH: National Institutes of Health

- ORSP: Office of Research Sponsored Programs

- PI: Principal Investigator

- UM: The University of Montana

NATIONAL STANDARDS FOR SPONSORED PROJECTS OPERATIONS

The NCURA Peer Reviewers utilized the National Standards for Sponsored Project Operations, developed by NCURA, as guidelines to conduct this assessment. The Standards appear as Appendix A. The application of those Standards to the University of Montana is described in the following sections of the report.

NCURA Standards for Institutional Infrastructure
The NCURA Standards for the Institutional Infrastructure are based on two key points. (1) The structure for sponsored programs should support all the needs of those activities at both central and departmental levels. Communications and coordination must be clear, and the lines of authority should be specified for each function. (2) Institutional resources, including staff, should be sufficient to support the core functions of sponsored programs in a manner consistent with the institutional mission.

NCURA Standards for Core Operations
Proposal Services: The NCURA Standards for Proposal Services focus on support of faculty and staff in the general areas of providing funding information, assistance in proposal development, review of proposals prior to submission, and monitoring sponsors for changes in process and policy. These Standards outline the importance of a thorough understanding of federal and non-federal policies, as well as the importance of disseminating a wide variety of information to differing audiences, routinely, clearly and with relevance.

Award Acceptance and Initiation: The NCURA Standards for Award Acceptance and Initiation focus on the areas of reviewing and negotiating award terms and conditions, subawards, formal acceptance of awards, and award activation and notification to appropriate parties.

Award Management: The NCURA Standards for Award Management focus on the areas of fiscal and administrative management. These Standards outline the importance of a thorough understanding of federal and non-federal policies, appropriate accounting mechanisms and internal controls. They cover such areas as F&A rates, cost sharing, re-budgeting, time and effort, fiscal controls, cost accounting standards, cost transfers, cash management, program income, recharge centers, procurement, closeout, prior approval, reporting, record retention, data retention, subrecipient monitoring, intellectual property, and property control.

Research Ethics: The NCURA Standards for Research Ethics cover institutional systems for meeting federal, state and university regulations for the oversight and protection of certain populations involved in research, most notably the use and protection of humans and animals in

research. These Standards also cover expectations for institutional systems for the oversight and protections involved in the use of radioactive materials, bioterrorism, conflicts of interest, and export controls. The Standards define expectations for linkages between the management of sponsored programs and the assurance of project integrity. The Standards also include a broader expectation for an institutional program on responsible conduct of research.

CURRENT ENVIRONMENT FOR SPONSORED PROGRAMS OPERATIONS

Any institution that is focused on developing a more research-intensive program faces a number of challenges. On one front is the challenge to change the culture of the institution to integrate a heightened focus on research. On another front is the challenge to build an infrastructure that can nurture, facilitate, and support a growing research enterprise.

A growing research enterprise brings a measure of risk, accountability, and oversight to the institution that has not been previously apparent. Those measures are in response to a parallel growth in attention by the federal government that is evidenced by escalating policies, regulations, and oversight. This increased involvement of the federal government in research oversight has resulted in the need for higher degrees of specialization and education on the part of institutional research and sponsored programs staff. Institutions now maintain a delicate balancing act between developing the infrastructure for facilitating and moving forward the research activities of their faculty while also providing sufficient oversight and internal controls to demonstrate accountability and to mitigate risk.

In the last five years, institutions have been especially impacted by the external environment. Reduced funding, increasingly large-scale and multi-disciplinary research, and collaborations with foreign scientists and business have all contributed to complex relationships and issues of ownership. The recent federal attention on institutional operations through audits, whistleblowers, and investigations has not only exposed our institutions to the public's criticism but has brought increasing levels of Congressional attention. The resulting attention on how institutions manage their relationships and the use of the public funds often results in tighter institutional controls and more restrictive policies imposed on both the university and faculty.

Many of our institutions are now recognizing that the growth of infrastructure and specialized expertise has not kept pace with the complexity of the current-day research relationships and the attention to government regulations and policies that are inextricably intertwined with the external funding.

Institutions that are transitioning into a greater focus on research will find that external funding is a double-edged sword. At even a relatively low level of funding, the federal awards carry all the rules, regulations, oversight, and accountability found at the top universities whose research enterprise is in excess of $1 billion dollars. It is critical that an institution have adequate staff, with appropriate training and resources, in place to handle the administrative burden imposed by accepting external funding. Mistakes in this area can be damaging to both individual and institutional reputations. In addition, sponsored programs offices are responding to deadlines not of their own making. Decisions and administrative actions must often be undertaken with virtually no advanced notice. Sponsored programs offices, pre- and post-award,

must have staff in the office every day. Shutting down these offices for even short periods of time due to inadequate staffing can have both considerable short- and long-term consequences for the institution's research enterprise.

The infrastructure supporting sponsored programs is always complex, and it requires a periodic review to determine if it efficiently supports the efforts of investigators while also offering an adequate compliance posture with the regulations that underlie federal funding. There are trends in the approach to supporting faculty and to the direction an institution may establish in order to demonstrate its stewardship of sponsor funds.

This general discussion of the current national environment within which all sponsored programs operations exist and the special challenges for transitioning institutions will serve as a foundation for the more specific discussion of the pre- and post-award functions, project integrity, and institutional infrastructure issues for sponsored programs staffing, communication, and educational programs.

INSTITUTIONAL INFRASTRUCTURE

Many integral aspects of an institution's infrastructure provide the framework for supporting the extramural funding of faculty and provide the necessary protections and accountability associated with that funding. The institution needs to attend to the organizational structure of sponsored programs and the lines of authority and responsibility that support research. Within the organizational structure, the institution must provide attention to appropriate levels of staffing, necessary expertise of those staff, and salary and promotional lines for staff. The Reviewers recognize that the task of differing salary and promotional lines for staff may be difficult and will need to comply with union, university, and state regulations. Currently, all 16 employees in ORSP report to a single director. There are no assistant or associate director positions. Most institutions of this size have at least an assistant director of pre-award and an assistant director of post-award.

Institutions must ensure that faculty and staff understand the requirements and expectations of the funding sponsors with whom they work, as well as key institutional policies and procedures and risk areas. Institutions must ensure that faculty and departmental/college staff have ready access to the body of knowledge needed to effectively oversee their sponsored projects. Key roles and responsibilities for those involved in the research enterprise need to be articulated to all participants and accepted, understood, and promoted (enforced). The institution must establish mechanisms to communicate key regulatory, policy or procedural changes to stakeholders, recognizing the varied roles of the participants. Appendix E provides examples of some NCURA resources that are utilized by institutions in their educational and professional development activities.

Organizational Structure

NCURA Standard II.A.i. Operational Structure

The University of Montana is a Ph.D. degree granting university in the State of Montana. During the past ten years there has been rapid growth in the level of research activity, but there have also been major changes in key leadership positions at the University.

- The President is new within the last year.

- The Provost is new within the last two years.

- The Vice President for Research is retiring in 2012, and a search is underway for a new Vice President for Research and Development.

Within the sponsored programs operations there have been similar changes to leadership as well as organization.

- The Director of ORSP has been in the position for less than two years.

- This Director is the fourth in ten years, and the changes in ORSP leadership have created uncertainty and lack of continuity among staff as well as a fragmented approach to sponsored programs management.

- Pre-award and post-award personnel have been merged into the single office of ORSP.

Clearly the impact of the numerous leadership and organizational changes at UM will continue to have an impact on faculty and staff over the next several years.

Another key element in the University's commitment to research is the release of the Research Strategic Plan – an issue document based upon the needs of faculty who seek to be empowered to perform research. The Strategic Plan clearly addresses significant growth in research volume as a priority for UM. It is also a critical document that reflects the need for transparency and inclusiveness in determining the course of future creative endeavors at Montana. There was a recurring theme that the goals of research are not clear, even in the University mission statement and in the strategic plan. While people were aware of the President's goal of doubling the research volume, they do not understand what steps will be taken to achieve that kind of growth. In addition, the programs of distinction and the priorities for research investment have not been stated in a way that resonates with the faculty.

- **Recommendation: University leadership needs to construct a communications plan with goals and clearly articulated priorities to engage University researchers and the people who support them. There must be a dialogue with the academic community to listen to their ideas and concerns as part of the process of developing research priorities.**

- **Recommendation: The Research Strategic Plan demands a response from administration. The VPRD and the Provost should initiate conversations with faculty, staff, and deans about the issues raised in the Plan.   A true strategic plan, not just an issues document, should emerge from the ideas in this Plan and the conversations with the research community as well as from the articulation of institutional priorities.**

The Office of the Vice President for Research and Development includes areas of policy, strategic partnerships, sponsored projects, research integrity, centers and institutes, innovation, and internal funding. The research administration services at UM are supported through F&A recovery on external funding. The Director of ORSP reports to the VPRD.

A vice president for research is necessarily focused on creating the vision and developing strategic alliances for the research enterprise. In many models for the office, there are two primary functions managed by senior leadership:

1) One function deals with faculty, governance, centers and institutes, interdisciplinary research, and academic issues.

2) The other function deals with operational and strategic decisions in overseeing the research administration and management areas.   This latter function requires a significant level of experience and a solid foundation in communications, policy formation and implementation, as well as the basic areas of intellectual property, pre-award, post-award, compliance and regulatory committees and how those pieces must be integrated within a university setting. Prioritizing activities will be a crucial first step.

- **Recommendation: The VPRD should consider the current structure of the office of the VPRD as it supports those two primary functions.** In many institutions there is an Associate Vice President who monitors research and scientific activities and another who directs the administrative activities of sponsored programs and compliance. Many institutions, especially at research-intensive universities, also utilize the title of Associate Vice President and Director, thus signaling the key role of the sponsored programs functions in supporting the research mission.

- **Notable Practice**: **The merger of pre- and post-award activities appeared to the Reviewers to be a strong move towards developing and implementing an infrastructure that will support research administration functions as the University continues to grow.** The combined model of research administration integrates the broad functions supporting faculty research in a single office. This model is widely used across the country because it provides a single point of contact for the resolution of issues in managing sponsored programs. Such a model lends itself to a consistent leadership approach throughout the continuum of sponsored programs functions, a shared philosophy on service, and a recognition of the interconnectivity of the functions that constitute the administration of extramural funding. The ORSP staff were co-located in the

same office, and this physical proximity supports this combined operational model. There remain some issues to be addressed. See additional Reviewer comments and recommendations under NCURA Standard II.A.ii. Staffing and Resources.

In addition to considering a senior research position, there is a fundamental structural question for UM to answer: Will researchers be supported by placing administrators at the department level or through enhancement of central services? Currently, there is something of a mix, but discussions with the Reviewers revealed some problems with the distribution of services. In research centers and in a few large departments, there are local research administrators who work directly with faculty in supporting their pre- and post-award needs. They provide assistance with proposal development and submission and with monitoring project accounts and providing customized reports throughout the grant life cycle. However, in smaller or growing departments, those services are generally not available in any consistent and systematic manner. Instead, researchers rely on ORSP for those services, and ORSP is not currently staffed to manage this combination of departmental and central responsibilities.

While the University should consider the long-term goal of developing a strong cadre of local departmental administrators, the cost is likely prohibitive at this point. As the research volume continues to grow, there is tremendous need for the hands-on abilities of research administrators who can work directly with faculty. The most economical model at this point in time would be the addition of two positions within ORSP that are specifically devoted to the pre-award needs of campus researchers – assistance with proposal preparation, especially budgets, completion of sponsor forms, and the steps necessary for submission of timely proposals. Post-award needs of the research community are more easily handled with technology support (see later recommendations) and improved levels of service from ORSP.

- **Recommendation: ORSP should recruit and hire two pre-award research administrators who will focus specifically on providing assistance to faculty who are developing, preparing and submitting proposals.** The Director of ORSP should work with campus units to create regular "office hour" arrangements that place these pre-award administrators in departmental locations on some revolving basis so that they are immediately accessible to faculty and departmental or college staff and can provide hand-on assistance in areas of the greatest need

The implementation of this recommendation will fill the immediate need for support of faculty who want to develop more sponsored programs. It is a stop-gap measure intended to give the VPRD time to evaluate the actual growth rate of research and to work with campus leadership to determine the most efficient use of University funds to support the faculty. Faculty at research universities prefer to have administrators geographically proximate to them, the model currently in place with the research centers. However, without some critical mass of research volume, that model may not suit all departments at the University. With a substantial growth in volume, chairs and deans, as well as central leadership, may be more willing to invest in a local infrastructure for grants. Until then, the gap must be filled centrally.

The appropriate level of department/college-level support for investigators is a key consideration to organizations. For many organizations the department-level support grows naturally as the research activities increase within a given area. While such unit-level positions may be funded centrally, these positions commonly evolve through investments by the College (or department) from their portion of F&A return. While some institutions (such as the University of Texas, San Antonio) may choose to centrally fund the department-level support, many institutions rely on their Colleges to support some of their faculty proposal and award needs..

How UM decides to organize or invest in the department/college-level positions is a significant piece of the future organizational structure. If centrally funded departmental support positions is a model under consideration, there are some aspects to consider during the assessment of this part of the organization.

- Distinguishing between immediate critical needs in a particular area and a broad view of the system and future needs; how best to integrate department and central resources to assist faculty short-term and longer-term as research, and faculty needs, grow.

- Balancing departmental responsibilities with ORSP responsibilities so there is minimal overlap and duplication.

- Strategic placement of centrally funded departmental positions while acknowledging existing department positions funded by the College, including such factors for placement of centrally funded positions as flexibility as opportunities or challenges emerge, changing levels of complexity of activities, and changing volume of activity.

- Assessing sustainability of a centrally funded departmental support structure that will need to grow as research continues to grow.

- Exploring models in place at other institutions. The Review Team especially recommends looking at whether a hybrid approach might be suitable as the enterprise grows. A hybrid approach would provide a consistent service offered to all faculty, but that service would be offered through those Colleges with higher levels of activity their own support positions and would be offered centrally for other, less active areas.

- Collecting data to continually assess decisions and directions.

  - **Recommendation: The VPRD should plan to evaluate campus research growth and the placement of support for the research enterprise over the next three years.** The Reviewers recommend giving a centralized model for proposal support a reasonable period to stabilize and then assess its strengths and weaknesses with the knowledge of sponsored growth over time. The evaluation should focus on two key elements: (1) the appropriate placement of responsibilities for research

administration and (2) the appropriate balance of departmental/College-level support for investigators.

In the context of the significant changes occurring in the last five years and the rapid growth in extramural funding, the Review Team found a theme of some uncertainty about roles and responsibilities. This confusion was expressed by all of the major stakeholder groups -- PIs, departmental staff, central staff. This uncertainty has led to frustration, duplication, and processes that are more cumbersome than they need to be. While a portion of this theme was discussed previously as it relates to the departmental support system, the need for clarity in roles and responsibilities extends beyond the allocation of central and department staff. The creation and placement of roles and responsibilities are significant undertakings, and many stakeholders need to be engaged in the process of definition. More than defining and listing responsibilities in a matrix, there needs to be a significant culture shift across the organization to align training, resources, and understanding so each individual can assume and correctly manage their roles. As responsibilities shift, there may need to be accompanying shifts in resources.

- **<u>Recommendation</u>: The VPRD and the Director of ORSP should lead a campus-wide effort to assess where responsibilities for research management currently lie and to recommend optimal reallocation of roles and responsibilities. This evaluation team must include faculty, associate deans, and staff at various campus levels.** The results of the assessment should be discussed with the University community so that confusion about individual roles and responsibilities can be reduced. The lack of clarity has led to uneven support for faculty and frustration by many of the participants. An assessment will provide an excellent opportunity to explore faculty needs, current placement of responsibilities, and where to place resources strategically. Ultimately, a clearer understanding of process and resources should emerge for the administration of sponsored programs.

  - o VPRD might consider the value of a retreat with a core of the primary stakeholder groups and with a shared agenda. Use of a facilitator, even an outside facilitator, may provide benefits. Different from a strategic planning process, the retreat may prove valuable to explore the research vision for the University and the changing needs of constituents. Such a retreat may provide opportunities for stakeholders to step away from their own particular roles and to view the larger continuum of research administration and how that continuum can move forward UM.

- **<u>Recommendation</u>: Resources and staffing need to be allocated to support the research enterprise as defined through the roles and responsibilities.** Staffing, resources, and knowledge should be assigned in proportion to the research responsibilities. If significant functions are placed within the department/college, this will require sufficient trained staff to support faculty in those functions. Specific training recommendations are made elsewhere in this report.

The Office of the VPRD also includes a research integrity function. Under the VPRD is an Associate Legal Counsel who has dual reporting to UM Legal Affairs and VPRD. She provides oversight of RCR, Conflict of Interest, Misconduct in Science, and Export Controls. In addition, under the VPRD is the Environmental Health & Risk Manager who is also chair of the IACUC and IRB. The Environmental Health & Risk area provides regulatory oversight for research activities including use of human and animal subjects, biosafety, chemical safety, and radiation and laser safety.

A number of faculty oversight committees in the previously identified regulatory oversight areas are in place and are appointed by and report to the VPRD. The VPRD serves as the Institutional Official (IO) for the human subject research, animal use in research, and biosafety and, as such, serves as the individual who commits the institution to federal assurances on the conduct of those activities at UM. Although the VPRD is the IO of the regulatory committees he does not meet with them on a regular basis. During the site visit, the Review Team identified that the role of the IO was not clear to many individuals. Undoubtedly, this has become somewhat confused due to the significant changes in organization and people.

- **Recommendation: The VPRD as the Institutional Official should meet at least on an annual basis with each of the regulatory committee chairs.** Furthermore, these committees must have direct access to the institution's IO as defined by federal regulations. While other individuals within the institution may serve as a resource to the committees, the reporting lines should be clearly linked between the committees and the IO.

In looking beyond research administration, the organization of other institutional offices that support research activities is a critical element. As the research activities grow, there is a corresponding need for related institutional business functions to become more nimble and responsive to the time-sensitive nature of the research activities and needs that should be addressed. For investigators, the clock begins the day the award is received at the institution and success is heavily dependent upon getting people, equipment, and other resources in place as quickly as possible in order to begin their research.

Impediments from several areas were particularly highlighted during the site visit.

- Faculty identified Human Resources (HR) as an office that created significant road blocks to investigators who need to quickly recruit and fill positions. One specific comment by various faculty was that HR is very slow and lacks an understanding of different positions and often cannot distinguish the difference between recruiting and hiring of a research technician versus a clerical employee.

- Faculty reported a disconnect when a multiple year award was transitioning to the next year's funding cycle. There were several examples of confusion between the UM fiscal year end and the formal ending of an award and the end of the first year of a multi-year award. Within the last few years several examples were provided of research disruptions associated with a multiple year award being internally terminated at the end of the University's fiscal year. There needs to be clarity within electronic and human systems on the difference between fiscal year and grant year. Both concepts are critical to managing sponsored projects.

- Growth in research results in higher levels of interdisciplinary and collaborative activities. As a result, a number of areas need to be addressed, including: department credit when activities cut across different colleges or appropriate sharing of F&A between Colleges and between Centers/Institutes and Colleges.

  - **Recommendation: The VPRD in concert with the Director of ORSP should begin discussions with their counterparts about UM business operations. The goal is ultimately to streamline and simplify business policies and procedures in order to meet the needs of research and to efficiently utilize scarce resources.**

One final area must be discussed in connection with the organizational infrastructure. ORSP is struggling to manage proposal and awards in part because of seriously deficient electronic systems. The implementation of the Banner Billing module increased the need for associated electronic systems, because the capacities of current manual or individually-owned shadow systems have been taxed. Beyond the inefficiencies that inevitably result with multiple shadow systems, there is a clear perception from the faculty and campus staff that UM is behind the times and unaware of possibilities for improved administration of research. The creation of user-friendly tools to support the work of ORSP is essential, as is the development of campus interfaces so that faculty and staff have access to timely and accurate information.

The needs of an office of research administration are unique, and the electronic applications they use for financial management are typically not the same as those needed for other parts of a university. There is an urgent need for software development to support the specific activities of research administration. The program developer must be placed in close proximity to the central office of research administration in order to work with the staff to understand the nature of their business and to be responsive to the priorities of the office. The developer should continue to coordinate with other University IT staff in order to be aware of developments that could affect ORSP.

All existing ORSP forms should be updated over time to become web-based if possible but interactive forms at a minimum, Word or fillable .pdf forms. Forms should be regularly checked to insure they are working as expected. As attention is directed towards electronic systems, web forms should be integrated. This is a sizeable undertaking and will certainly require setting some priorities, in conjunction with campus, and a dedicated developer to undertake the work.

  - **Recommendation: ORSP should physically relocate the dedicated IT support person from the office of Administration and Finance into its own offices.** Given the increasing dependence on electronic tools and systems as well as accurate data reports for academic units, this position must be able to work with the needs of sponsored programs to create system integrations and to assist with the development of tools to streamline operations for ORSP staff and for campus.

  - **Recommendation: ORSP should work with the VPRD and central IT to develop a plan for electronic research administration priorities, both new software development and improvements to current systems, for the office**

and the campus. Counterparts at other research universities should be engaged to identify commonly used electronic tools that would benefit ORSP staff and campus constituencies.

NCURA Standard II.A.ii. Staffing and Resources

The merging of the sponsored programs functions into a single operation, an institution-wide commitment to growing research, and a number of infrastructure areas that require attention (discussed in earlier sections of this report) suggest the need for immediate assistance in the research administration and management area. While a combined office is in place at UM, there is still the need to establish highly technical skills in analysis, problem-solving, negotiation, policy development and financial accounting. In research administration, those skills sets underlie the functions necessary to support research: proposal review, budgeting, contract negotiation, application of policy and regulation, financial compliance, sponsored accounting, billing, revenue management and financial reporting. Even in a combined office, there must be a superior knowledge of those pre- and post-award activities. A single individual can certainly master the technical knowledge, but the responsibilities of attention to researchers and protection of the institution from audit necessitate close and daily supervision of staff.

The employees of ORSP demonstrated their commitment to the University and to the office in their conversation with the Reviewers. The good intentions and dedicated efforts were recognized across the campus. However, the staff need skilled managers close at hand to assist them with problem-resolution and distribution of workload. The Director currently cannot adequately serve this role due to the large number of direct staff reports and the numerous responsibilities she is meeting. The addition of skilled managers can support ORSP staff as \well as offer a higher level of assistance for faculty and departmental staff.

- **Notable Practice**: The Reviewers noted that the staff in ORSP are widely viewed as overworked and overburdened. Despite that concern, many participants complimented the Director for her work in bringing about a more cohesive and open approach to managing research. In addition, the ORSP staff as individuals were regarded as helpful and conscientious. The Office as a whole, however, was seen as emphasizing its role as enforcers rather than facilitators.

- **Recommendation: The VPRD should empower ORSP to immediately recruit and hire assistant directors to manage the primary functional areas of the office. Typically, those assistant directors would be for the pre-award and post-award areas.** This recommendation supports two primary needs of the office: (1) providing a higher level of expertise and assistance to the research community and (2) providing oversight and management for ORSP staff.

ORSP currently has defined staff into pre-award, post-award, and financial services functions, but the Director might re-evaluate the categorization of those functions into the broader ranks of pre- and post-award. Staff who perform cradle-to-grave functions can be equitably divided between the recommended two assistant directors, depending upon their needs and specialties, and the breadth of their activities.

Position management is a critical component of a growing research enterprise. ORSP has all employees as classified staff utilizing the same job classification and level. In order to build a vibrant research administration office, the VPRD needs to support the Director of ORSP in working with HR to build job families with appropriate titles and functions. ORSP is at an opportune time to assess staff positions in relation to the initiative in defining roles and responsibilities for both central and departmental positions. A key component to position management is defining the necessary skills that come with the positions and are essential to the appropriate execution of responsibilities. Once necessary skills are defined, the skill set of all staff in the central positions needs to be critically assessed, and tools or education provided to develop those skills that are not at the level needed. As part of the staff assessment process, clear career ladders should be developed that reflect increased decision-making and autonomy. The Review Team understands that a process for reviewing position descriptions is underway. While some level of position assessment may be important at this point in time, it will become more critical after the roles and responsibilities have been better defined.

- **Recommendation: Job descriptions and responsibilities should be critically evaluated and necessary skills for the performance of those responsibilities clearly defined *after* definition of the roles and responsibilities.**

A critical concern from campus and from the Review Team regards the ability of ORSP to compete for the most qualified applicants to create a reward structure that supports retention of excellent staff. The very flat structure results in a lack of expertise and a lack of a career ladder that would help to differentiate staff levels of knowledge and to acknowledge individuals with higher skill sets. In the current structure, if faculty and departmental staff have a problem that requires greater experience or problem-solving skills, they go to the Director. There is simply no person, and no positions, between staff and the Director. That situation encourages faculty to believe there is no expertise in ORSP, except the Director, and to conclude there is little creative thinking. Given the lack of management staff to help them, the staff too often fall back on "No" as their response to questions. ORSP must develop layers of expertise and leaders beyond the Director if the staff is to grow and to improve their ability to find flexibilities and to offer assistance.

In addition, ORSP staff see themselves as lacking the time necessary to avail themselves of resources available to them as they try to acquire knowledge of extensive, complex regulatory and policy material.

- **Recommendation: The VPRD should aggressively support the efforts of the Director of ORSP in working with UM's HR office to investigate research administrator career path opportunities.** In addition, there must be an examination of improved job titles, salary levels, and position classifications to support the need for highly professional staff to manage faculty research.

The Communications, Outreach, and Education section of this report discusses programs of education for the University's constituents. This section will specifically discuss the training and professional development of the ORSP staff.

Much of the training of new staff in ORSP is done by "on-the-job" training and is thus dependent on the expertise and knowledge of the individual doing the training. This training is

done on an as-needed basis, without a reference manual, procedural manual, or training guide to ensure that training is comprehensive or consistent from individual to individual. While staff are to be applauded for self-initiatives to share information and expertise, a written training program that covers the basics of sponsored project administration as well as specific skills needed to perform particular functions, needs to be developed and implemented and applied to new staff as well as reviewed by all existing staff. The Director has made some steps to address this need, and a continuation of the development of training programs for ORSP staff should be encouraged.

The existing staff have a number of years of experience and are offering a critical level of service to the institution. However, the prior approach to training has likely left some "gaps" in their knowledge that needs to be addressed quickly. While attendance at professional meetings provides important on-going exposure to issues and practices, a "training" workshop that covers the foundation of sponsored programs would fill any existing gaps. UM could also work with other universities to see what kinds of training programs exist for incoming staff. While there will be specific UM processes that require customized training, there should be considerable overlap in the topics all universities address.

- **Recommendation: VPRD should consider sending all current staff to external basic training for research administration (such as the NCURA Fundamentals and the NCURA Sponsored Projects Administration II workshops) and utilize this training program for new hires.** Because these workshops are offered monthly, over a few months each of the staff could attend one of the basic workshops and then collectively have a foundation from which to build.

Existing staff need a consistent foundation of information. Limited professional development opportunities for the ORSP staff are available and extend from attendance at national or regional professional organizations for research administration, to webinars or subscriptions for specific focus workshops. Under the new organizational structure it will be important that professional development opportunities are monitored and extended to staff to insure there is ongoing access to best practices, trends, and new developments with research administration issues.

In terms of staff resources, there is a critical need for improved desktop support and for a regular re-investment into computer hardware for staff. Desktop support is purchased from central IT in the amount of .25 FTE. With that contract is some level of assurance that staff needs will be resolved by IT within a short period of time. However, that arrangement has not consistently worked in support of staff. As one employee in ORSP stated, "Our desktop support is provided by the Director." There was a recent situation with a much needed printer being inoperable for an extended period of time because an IT person was not available. These examples clearly illustrate how simple equipment needs can stress an already overloaded operation.

Beyond the basic and critical needs for computers and peripherals that are maintained properly, there is a need for some ongoing appraisal of existing computers. Most universities have a regular schedule for replacing office computers, generally every 3-4 years, in order to

maintain support from the manufacturer and integration with new programs. A fairly minimal investment could yield important gains for staff.

- **Recommendation: ORSP should evaluate its current arrangement with central IT to determine if that arrangement is cost effective and efficient.** If not, there should be consideration of hiring a part-time desktop support person housed within ORSP and charged with managing ORSP's computer equipment and peripherals. Some operations find adequate and consistent IT support available through graduate students.

NCURA Standard II.B.i. Communication and Outreach

There is a need for enhanced communications across campus. Even the senior administrators at UM currently receive limited communications about sponsored project activity. The Vice President for Research has not been a regular member of the Provost's Council which often serves as a conduit for some updates and information on research activities and initiatives. This critical link to academic leadership and exposure for research activities needs to be addressed. In addition, the relationships among deans and with the VPRD will lead to efficiencies in developing cross-disciplinary research thrusts and in advocating institutional investments in promising research areas. Without regular and continuing dialogues among these key figures in UM's leadership, there is a significant gap in information–sharing, policy development, and collaborations that are essential to the health of the research enterprise.

- **Recommendation: The VPRD should serve as a regular member of the Provost's Council and should engage with deans on a regular basis.** These ongoing interactions will serve to support the growth in research and the communications needed for coherent and collegial management of research interests.

In addition, the Deans reported to the Reviewers that they do not receive periodic or annual basic data on proposals submissions and awards received. At the very minimum the Deans need to know this information. Although each College could utilize local staff to generate such a report, extracting Banner data into an accurate and consistent report requires a high skill and understanding of both Banner and the data elements. Without the knowledge of the different data elements in Banner, reporting can be inaccurate and misleading. The existing data resides in databases that can be manipulated by ORSP once a standard report parameter is defined. This type of report would provide the appropriate level of detail for each College. The ORSP IT program developer can design standard report formats and assure data quality.

- **Recommendation: ORSP should generate monthly reports of proposal and award activity in a user-friendly, easy-to-read format that provide the VPRD and each Dean with details of activity campus-wide and within the Colleges, as well as a snapshot of activity over time.**

ORSP needs to solidify its relationships with other campus research administrators, including departmental staff. Departmental staff spoke about their time constraints and their unwillingness to spend more time in meetings if the meetings do not address their current needs. In the past the

Director held focus group meetings and UM might consider doing this again on a regular basis. The areas of discussion for the focus group meeting should flow from college and departmental staff needs.

- **Recommendation: The Director of ORSP should consult with College and departmental research administrators to determine some effective approach to networking and information exchange. Part of the success of this effort may depend upon the understanding that ORSP has important information to convey and has expertise that others will want to gain.** The Director could try focus group meetings, with a posted agenda in advance.

- **Recommendation: The VPRD should look into establishing an advisory committee of key research administrators and faculty to meet regularly with the leadership of ORSP in order to find common points of interest, to identify needs for training, to suggest ways to improve service, and to share ideas back and forth.**

NCURA Standard II.B.ii. Education

In today's rapidly changing environment, it is a major challenge for research administrators to stay current on regulatory changes and best practices.   UM, particularly as it continues to grow its research enterprise, will be well served by having expert research administrators at all levels of the institution who have institutional support to continuously update their skills and learn about best practices at other institutions. External training, professional development, and sharing of emerging issues and best practices all exist nationally in a variety of formats, including on-line options and on-site alternatives. Appendix E provides a summary list of educational offerings through NCURA.

The Review Team observed that training and education was a topic addressed in many of its meetings with staff at all levels and locations. The Reviewers noted that both departmental staff, center/institute staff, and central sponsored projects staff were not regularly participating in external training related to research administration, although some opportunities have been extended, such as videos on current critical research administration issues. Without recurring exposure to external discussions, it is more challenging for staff to keep current with the latest regulatory changes and limits their exposure to best practices, hot issues, and solution alternatives.

A cohesive communication strategy with regard to key regulatory and procedural changes does not appear to be currently in place. Faculty and staff must, at minimum, be apprised of key changes that impact them personally (i.e., NIH-funded researchers being alerted to the recent NIH public access policy) while other changes that are more administrative or process-oriented may safely have departmental or central administrators as their primary audience.

ORSP should look towards offering a rigorous and complete series of classes and informational materials to provide a solid foundation of knowledge for those responsible for handling research administration. At some universities, this direction has grown into a university led research administration certification program. Educational topics in a series such as this

could include proposal budget expertise, time and effort reporting, working with subcontractors, specific agency policy education, interpreting award terms and closeout procedures. As the University continues their commitment to increasing their research activities, College and department administrators are the critical key to increasing capacity to enable faculty to compete for funds and to provide proper stewardship for awards.

- **Recommendation: To help promote and facilitate a supportive and compliant research infrastructure, ORSP should develop and implement several training and educational programs for research partners.**
  - Scheduled training sessions should be offered for active research-oriented departmental administrators and central administrators, regardless of title or level of effort. This training should support and flow from clarifying roles and responsibilities. Educational topics in a series such as this could include proposal budget expertise, time and effort reporting, working with subcontractors, specific agency policy education, interpreting award terms and closeout procedures.

  - UM should consider requiring a minimal level of training for administrators responsible for a sizable portfolio of sponsored projects. Access to a skilled administrator should be made available to other administrators who have more minimal involvement. A wide variety of models for on-line and in-person training programs and training opportunities exist and could be deployed for this purpose. It is critical that the tone of this training is collegial and professional, and that trainers are seen as knowledge experts who are dedicated to helping the constituency.

    Examples of training programs in research administration offered by other institutions can be found at:
    University of Pennsylvania Compliance Certification Program (http://www.upenn.edu/researchservices/SPCCP/)

    Emory University certification program in research administration
    http://www.osp.emory.edu/comUMnication/training/index.cfm

    University of Michigan RAIN and related training programs (http://www.drda.umich.edu/training/)

    Stanford's "Cardinal Curriculum" (http://ora.stanford.edu/cardinal/)

    U of Minnesota's "Certified Approver" program for post-award departmental research administrators (http://www.oar.umn.edu/CA/CAE_Themes.cfm and http://www.oar.umn.edu/CA/CAE_Gen_Info.cfm)

UC Santa Barbara's "STAR" Certificate in Research Administration program (http://www.research.ucsb.edu/s_p/sp_class_schedule.shtml)

Florida University's "The Compliance and Research Administration Training and Education program, known as CReATE" (http://www.research.fsu.edu/contractsgrants/workshops.html)

- o Certifications, recognition, and other mechanisms for valuing participation might be employed as a means to encourage attendance.

Some universities have extensive, even mandatory, training for principal investigators. Both the University of Washington and the University of Rochester, among others, require training on basic concepts in grants administration before awards are set up for spending. Other institutions require training in certain key topics. Some of those, for example training in the protection of human research subjects, is mandated by the Federal government. Other topics, such as effort reporting, are mandated by the institution, in recognition of the possibility of audit exposure on that topic.

In every university, there is a certain tension associated with the idea that faculty members require some education beyond their advanced degrees. The University of Montana has mandatory training programs for principal investigators, but it may be time to re-evaluate the effectiveness of the training. Some of the faculty members who spoke to the committee were struggling with issues related to administrative requirements on sponsored programs. That is not unusual, but the Review Team suggests another look at what kind of training, on what topics, and using what approach would be helpful in assisting faculty..

NCURA Standard II.C.i. Compliance and Risk Assessment

At many institutions, there is increasing attention on critical administrative operations and the need for a regularly occurring review cycle, as is found in academic program reviews. While the form for such review can be varied (internal or external), the process establishes an expectation for attention on operational effectiveness, how well that operation succeeds in a fluid environment, and a venue for faculty to comment on process.

There are a number of techniques used by institutions of higher education to periodically review the effectiveness of sponsored programs, to assess operations for areas of improvement and currency, and to review for compliance or risk. Techniques may include:

- Self assessment

- Institutional defined program of review for administrative units

- Assessment of programs following internal or external audit or investigation findings

- Scheduled reviews of program components by Internal Audit

- External program review

  - **Recommendation: The VPRD and Director should consider establishing a regular review cycle for ORSP.** A review of the program that occurs regularly will enable continued attention on operational effectiveness and serve as a source of information for future decision-making. Such a review enables stakeholders to provide input.

A tool that can be helpful in the management of risk is the use of periodic quality assurance assessments. These assessments, which are less formal than an internal audit review, can also provide valuable information about specific and targeted areas that the University wishes to review. Examples of such assessments might include reviewing a sample of grants for appropriate administrative and clerical charges in real time or reviews of animal and human subject protocols to assure that the research is being conducted in accordance with the approved protocol.

As part of risk management and compliance, an operation should routinely and periodically review policies and practices. This should be a formal process of review and engage key stakeholders in identifying accuracy and currency on practices. Discussions with the Review Team indicate that many policies are currently being revised but no formal cycle of policy review is in place.

  - **Recommendation: ORSP should implement a regular review cycle of all policies and procedures.**

Creating and implementing a compliance matrix is a tool used by many institutions. The matrix identifies the compliance areas throughout the university and the unit that is responsible for ensuring compliance. A compliance matrix could be as simple as a chart that includes some of the following elements:

- Compliance area (e.g. use of humans, monitoring of expenditures, proposals reviewed for university commitments, Federal or policies referenced in proposal/award terms and conditions and as such is committed to being in place by the institution—i.e. Drug Free Workplace)

- Responsible university office and individual

- Monitoring process (e.g. committee, individual, or other)

- Location of university policies/procedures

- Guiding principles (e.g. applicable Federal or regulation, OMB, ethical codes)

- Reporting requirements (e.g. filing of assurance/certification/non-compliance/other); frequency of reporting; recipient of reports

- Fines, findings, audit results

- Training requirements (who, frequency, oversight)

The matrix would enable various offices to come together to discuss and understand the compliance areas and their role in mitigating risk. Information from a compliance matrix may additionally be useful to ensure compliance risks are addressed during proposal development, award set-up, and management. There are numerous varieties and approaches that can be used for such a matrix with some focused on identifying responsible units for an area and others focused on providing a "risk assessment" of the area. Below are some examples of compliance matrixes:

http://researchadmin.uchicago.edu/about/announcement_roles.shtml
http://www.princeton.edu/compliance/officers.html
http://www.stanford.edu/dept/Internal-Audit/compliance/initiative/matrix.html
http://www.stanford.edu/dept/Internal-Audit/compliance/initiative/matrix2.html
http://universityrisk.taUM.edu/AssessmentTool.aspx
www.fms.iu.edu/avpfms/FODSpresent08_09/Internal%20Controls%20Presentation.ppt

The following NCURA publications could serve as additional references and best practices:

- *Regulation and Compliance: A Compendium of Regulations and Certifications Applicable to Sponsored Programs*, 2007 Edition (NCURA, 2007)

- *Establishing and Managing an Office of Sponsored Programs at Non-Research Intensive Colleges and Universities*, 2nd ed., (NCURA, 2008).

NCURA Standard II.D.i. Electronic Research Administration

This area is discussed throughout the report.

CORE OPERATIONS

Research administration begins with the receipt, review and submission of proposals to funding sponsors. Institutional offices and services need to be in place to aid faculty in the development of proposals into successful applications for funding. The NCURA Standards for Proposal Development and Assistance outline the need for staff who are knowledgeable in sponsor regulations and procedures and in the use of sponsor electronic systems for proposal submission.

Submission of successful applications hinges on a university's ability to keep up-to-date with sponsor policy and procedures, proposal solicitations, adherence to federal, state, and local laws as they relate to compliance, and with the consistent application of university policy. These aspects of successful submission are realized only through a staff with regular access to changes in sponsor policy, electronic systems, and university policy.

In addition, institutional policies and sponsoring agency procedures have a significant impact on the conduct of research. Communications about these policies and any changes in them must be brought to the attention of senior management. The need for ongoing communications about compliance risks is critical to success in a dynamic research environment.

Proposal Services

Proposal Services in sponsored program operations includes collection and dissemination of funding information, proposal development and assistance, proposal review and submission, collaborative project development and providing faculty and other staff with information and interpretation on current sponsor policies, procedures and processes. These services should be within the scope of support provided by staff in school/departmental and centralized levels of research administration, with responsibilities shared as fit the institution. Proposal services are core to the undertaking of research and central to proposal success and awarding of extramural funding. Without efficient and reliable proposal services the research enterprise may falter or in some cases may fail.

Obtaining funding is critical and without funding the other elements of research administration would not exist. It is important to have strong support staff that are knowledgeable about proposal preparation, including allowable, allocable, and consistent costing. It is also important that pre-award research administrators can articulate to faculty and staff up-to-date information on sponsor policies, procedures and processes, are knowledgeable about electronic proposal submission, and can advise faculty and other staff on preparation of compliant proposals.

NCURA Standards 1.A.i Collection and Dissemination of Funding Information

Faculty at UM utilize the library or grants.gov to find funding information. Some faculty also utilize sponsor-specific funding systems (NSF, NIH). UM subscribes to *The Grant Advisor Plus*. This is a monthly update that is forwarded to faculty through the ORSP-Gen-Info-L list serv. Currently, the Director of ORSP disseminates the NSF Daily Digest and weekly NIH Funding Opportunities, plus other sponsored generated information. It is not clear that faculty find these materials particularly helpful, given their need for information that is directed specifically to their own narrow disciplinary areas.

In the past ORSP subscribed to the on-line system called Community of Science. This subscription system was dropped due to lack of use. It might be appropriate to discuss with faculty if they would want ORSP to subscribe to this system again or if the current method of receiving funding opportunities is meeting their needs. Many vendors allow for a trial period to enable faculty and others to assess value of the information. If faculty want ORSP to subscribe to an electronic system for identification of funding opportunities, then ORSP needs to be prepared to disseminate the information about the system to the academic community and to work closely with faculty in putting their profile and funding identification needs into the system. ORSP might create simple tools to help faculty identify federal and non-federal funding opportunities from a vendor subscription service.

- **Recommendation: The VPRD and ORSP should explore a subscription to a vendor funding opportunities database.** There are several products commonly

used by universities. ORSP could serve an important role in assisting faculty and staff in using simple tools to access the information.

NCURA Standards 1.A.ii Proposal Development and Assistance

The Provost has recently established a Faculty Development Office. This Office, as reported by the Deans, is designed to facilitate scholarship and proposal writing and provide faculty mentoring faculty services. It would be appropriate for ORSP to look into how it can interact with this new office. Currently ORSP is operating under a mixed model of service in the area of proposal writing, with no clear focus on whether central administration, departmental administration or centers/institutes are responsible for proposal writing and assistance.

In addition, under this mixed model of service it is unclear as to the role and level of expertise of central administration versus departmental versus center/institute. The Reviewers were able to obtain some insight as to the expertise and level of understanding, as listed below:

- ORSP staff expertise in electronic proposal submission, sponsor requirements, and appropriate sponsor forms.

- For some Colleges that same level of expertise in electronic proposal submission, sponsor requirements, and appropriate sponsor forms is in place. For other Colleges it is not.

- For Centers and Institutes it appears that that level of expertise is in place.

- ORSP funded a circuit rider that the Deans and others expressed that the type of service provided was not the type of service they needed.

An area of clear frustration for faculty centered around lack of assistance in some of the fundamental areas of proposal development. In particular, examples included such areas as proposal budgets, completion of appropriate sponsor forms, and compilation of biosketches. Faculty understood their role and responsibility with research design and articulated that lack of assistance with these other routine areas of the proposal drew their time away from applying for funding and conducting research.

ORSP in April of 2011, implemented a pilot project to assist faculty with the preparation of proposals. A member of ORSP staff and was selected to function as a "circuit rider" as their duty was to float between selected departments that had little or no departmental research assistance. There was confusion between the PIs and ORSP as to what level of duties this person was to perform. The PIs wanted hands-on proposal development assistance (in the areas listed earlier) but the "circuit rider" provided only guidance. There are many institutional models for providing basic proposal development support, some models locate assistance at the central level, other models at the unit level, and some models utilize a hybrid approach.

- **Recommendation: UM should continue the use of a circuit rider but should work with the Deans and PIs to assess their needs and expectations in order to implement a mutually agreeable job description.** UM should consider expanding this approach as successes and activities warrant.

Only one electronic system is utilized in sponsored projects administration and that is the Banner Financial System. UM does not have an electronic proposal routing and submission system. In the routing of proposals campus constituents utilize email with PDF files.

- **Recommendation: UM needs to build or purchase an electronic routing and approval system for proposal submission.** Since the government requires most proposals to be submitted electronically it is important to implement systems that can meet the anticipated growth of proposal submissions at UM.

Proposals are routed for approval utilizing a checklist. Faculty found the checklist to have little value and did not understand why they needed to use it. Faculty and staff reported that sometimes the checklist accompanied a proposal and sometimes it was routed without the proposal or after the proposal was submitted. A clear understanding of the need for the routing checklist and the reasons for utilizing it need to be articulated to faculty and staff. In addition, there should be a process review to assure faculty and staff that all approvals are necessary. Procedures for the use of the checklist need to formulated and disseminated.

- **Recommendation: ORSP needs to develop and disseminate clear information as to the use of the routing checklist and its purpose.** It would be relatively simple to add the routing checklist as a part of an electronic routing and approval system for proposals.

As with all universities, some proposals come in at the last minute. These proposals are submitted, regardless of when they arrive. The practice is to let the PI know that a post-submission review that identifies problems may result in withdrawal of the proposal. Staff attempt to do this in writing but this information may be conveyed to faculty verbally. While the majority of institutions follow this process, there does need to be clear guidance to faculty on institutional expectations that will allow sufficient time for a proper review of the commitments that are being made by UM. Exceptions happen and are understandable.

- **Recommendation: ORSP should post guidance that alerts PIs and all staff about the expected lead time for receipt of a proposal and the actions taken when proposals are received after this time.** Staff should convey in writing the actions to be taken when a proposal is received after the expected lead time period.

At UM the roles of centers/institutes verses departments in proposal submissions should be revisited Currently UM does not distinguish between these roles which has led to dissention between departments and center/institutes. Many institutions have remedied this situation by allowing multi-disciplinary proposals to be submitted through a center/institute and proposals that are not multi-disciplinary to be submitted through a department. To further support these roles many institutions provide F&A recovery to centers/institutes and to departments so that they are not competing with one another for F&A recovery dollars.

- **<u>Recommendation</u>: The VPRD should establish uniform guidelines for submission of proposals and F&A recovery through a center/institute and through a department.**

There is insufficient interface between the regulatory committees and ORSP. The institution makes certain commitments when a proposal is submitted and an award is accepted. Some of those commitments relate to oversight areas found within research integrity. Staff expressed some concern that the award process may not be as systematic as it should be and that some awards may be slipping through without appropriate compliance approvals in place. There has not been any basic training with the ORSP staff concerning the range of research integrity oversight areas and the indicators that may help the staff identify an oversight area.

- **<u>Recommendation</u>: ORSP should formalize the connection to regulatory committees at the proposal and the award stage.** At the proposal stage, the appropriate committee coordinator should be made aware of proposals that are being submitted that may contain activities that require separate oversight and approval (such as use of humans or animals in research). In particular, on proposals to some federal agencies (such as NSF, PHS) the institution is making a commitment that potential financial conflicts of interest are identified). At the award stage, appropriate approvals should be in place, or in process. For some federal agencies there is a commitment that any financial conflicts of interest are managed. Sponsored programs should document such interface areas.

- **<u>Recommendation</u>: The VPRD and his compliance staff should hold basic training sessions for ORSP staff to inform them about the range of research integrity oversight areas.**

There is minimal information available via the web about budget preparation, guidelines on content, and budget templates to assist the PI or the departmental research administrator. There were a number of references to the difficulty faculty have developing budgets for their grant proposals. Faculty reported to the Reviewers that ORSP has been trying to address this issue and has made improvements but that the ORSP budget template needs to be updated and reflect current costs. Some departmental administrators stated that they have created their own budget templates for use within their units. Generally, there appears to be confusion about the templates that ORSP has created and concern that key information will be left out of the proposals. This situation is not unexpected in a university that is encouraging more of its faculty to submit proposals with limited support staff.

In addition, these are basic tools that can assist everybody involved in preparing a proposal and can help to streamline the review of proposals through ORSP. While a budget template is available from ORSP, some individuals reported that it is not routinely updated. Most institutions make a budget template easily accessible via the web, along with general information that will assist the investigator in costing their activity. Setting up spreadsheets with appropriate formulas will provide automatic calculations and provide sufficient detail for review for accuracy (such as percentage of effort and base salary rate). It would be valuable to provide basic web information

about budgets, rates, and various templates to assist the academic community as they begin to formulate costs. Some examples are:

http://www.ospra.uiuc.edu/proposalprep.html

spo.usu.edu/files/uploads/Proposal_Budget_Template.xls

- **Recommendation: ORSP should review the budget templates and supporting information available to UM faculty and work to establish two or three variations that will mirror the common requirements of major funding agencies**. ORSP should also consult with major centers about the materials they have developed for their own investigators to determine the efficacy of modeling those for the entire campus.

NCURA Standards 1.A.iv Collaborative Project Development

ORSP works with the PI to include collaborative projects in proposals. If an award is then made to UM, a staff member responsible for issuing subawards creates the subaward document. At time a single staff member has been able to manage the workload and to make requests or address questions to the Associate Legal Counsel as necessary.

- **Recommendation:** None

NCURA Standard 1.A.v. Agency Liaison

*It would be expected tha*t pre-award central staff, at minimum, would be knowledgeable about federal regulations, agency policies, agency systems, and would take proactive measures to remain current on regulatory or agency policy changes. This is typically done via a combination of connecting on electronic lists and publications, and via attendance at national and professional conferences and training sessions. The staff are connected to national listservs. They do not, however, regularly participate in professional conferences due to lack of resources at UM.

- **Recommendation: ORSP staff should regularly participate in professional organization regional and/or national conferences.** Participation in one of the professional organizations that provide professional development and other services to research administrators would serve to greatly enhance the knowledge and expertise of ORSP staff.

Award Acceptance and Initiation
Award acceptance and initiation includes review and negotiation of incoming awards for acceptability to the institution and to the investigators involved, formal classification and acceptance of the award by the institution, establishment of the award in the institution's financial system, notification of the terms and conditions of the award to all relevant parties, and issuance of any subawards associated with an award. Award acceptance and initiation processes are core to the success of the research enterprise since it is at this stage that the institution and investigators commit to the terms and conditions that will govern how each award is handled. The institution must have staff trained and authorized: 1) to review and negotiate award terms and conditions and ensure that investigators or others materially impacted by the terms have an

opportunity to provide input prior to their acceptance and have a process to remain informed during the award negotiation process; 2) to deploy staff knowledgeable about sponsor regulations and requirements and the institution's research policies and practices; 3) to be able to properly discern among various types of agreements (e.g., grants, contracts, cooperative agreements, material transfer agreements, gifts, confidentiality agreements, etc.); and 4) to ensure that key provisions and requirements of awards are translated into useful guidance for faculty and other staff.

Electronic Systems

UM uses the Banner Research Accounting and Grants Billing Modules. ORSP has only recently begun using the Grants Module of Banner Finance for proposals.

 The post award and the combined pre- and post-award ORSP staff review award terms and conditions and establish awards in Banner. The Banner system, other than billing, is not utilized for pre-award functions. It was unclear to the Reviewers if UM purchased the full grant and contract module of Banner. If it did not purchase this module, then it is the recommendation of the Reviewers that this module be evaluated to determine what options it might hold for supporting sponsored programs.

NCURA Standards 1.B.i. Review and Negotiation of Terms and Conditions

Contract negotiations are conducted by ORSP staff. All staff, except those clearly identified as post award only negotiate and develop contracts. However, the Reviewers were unclear as to the extent of services that are provided by analysts not specifically dedicated to contract negotiation. The sub-recipient analyst completes the FFATA reporting of subrecipient data to the federal government.

The Reviewers believe that relevant compliance requirements (IRB, IACUC, COI, and IBC) are satisfied.

- **Recommendation:** None

NCURA Standards 1.B.ii. Ancillary Agreements Associated with Research Grants and Contracts

As UM grows and industry contracts increase, UM may need to pay more attention to the development and implementation of Material Transfer Agreements. If UM research continues to expand into the biomedical area, staff expertise in these types of agreements would be needed.

- **Recommendation:** None

NCURA Standards 1.B.iii. Subawards

At UM subawards are handled for the most part, in an appropriate manner. Subawards and subcontracts are reviewed by the one sub-recipient specialist for monitoring and compliance with FFATA and other federal regulations. If questions arise regarding sub recipient agreements they

are referred to Associate General Counsel who advised the sub-recipient specialist on appropriate action and in some cases negotiates the agreements.

- **<u>Recommendation:</u>** None

NCURA Standard 1.B.iv. Award Acceptance Process

Once an award is received by ORSP the award is matched with the proposal and an ORSP sponsored program specialist accepts the award and sets up the account. If there are changes in budget or scope requested by the sponsor, the PI and sometimes ORSP negotiates these changes with the funding agency and submits the revised budget and/or change of scope of work to the award specialist who then submits the revised information to the sponsor for approval. If pre-award spending is necessary, the PI requests that an account be set up and the Director of ORSP approves. The sponsored program specialist then establishes the pre-award account. These processes appear to be working well.

- **<u>Recommendation:</u>** None

NCURA Standard 1.B.v. Award Activation and Notification

Account activation and compliance is done by the ORSP staff, either the post award or the pre-post award sponsored programs specialist. The sponsored programs specialist sends out to the department or center/institute a new award notification, enters the budget into the accounting system, performs cost analysis, provides budget management assistance to PIs and DRAs, closes out awards and provides financial management and reporting. The sub-recipient sponsored program specialist provides subcontract monitoring and works with other staff in sub-recipient close-outs.

- **<u>Recommendation:</u>** None

Award Management
Extramural policies are often broad and written in a manner that leaves room for interpretation. Sponsors expect their funds to be treated in a manner that recognizes specific terms and conditions; however, sponsors also recognize that institutions are able to accomplish their research in a variety of methods under a range of administrative structures. In many areas, both federal and non-federal sponsors rely on the recipient's own policies and procedures. Within this framework, an institution has the ability to establish its operations, including policies and procedures, to optimize its research enterprise and appropriately allocate resources. These standards need to be balanced against the needs of the researchers to conduct their projects.

NCURA Standards I.C.i. Fiscal Management

At UM, there is concern that ORSP staff spend all their time acting as police officers, that is, they concentrate on regulation rather than facilitation. There is evidence that suggests that typically researchers at institutions find post-award staff to be too rigid and too mindful of the rules, and that is true at UM as well. Particularly on the accounting and financial side of research administration, there is conflict between the goals of the researcher and the responsibilities of the institution. There is insistence from faculty that UM creates more inflexibilities than the

sponsoring agencies. Changing that perception will require significant investment in education about customer service, but it can be assisted by thoughtful, consistent messages to the faculty.

- **Notable Practice: The plethora of policies and business practices required by a research university are in place at UM. There has been considerable diligence and attentiveness in developing policies that are specific to Montana but based in sponsor, particularly Federal, policy and regulation.** These policies are a requirement if an institution is to forestall some level of audit exposure, but they are also necessary as an educational tool for the research community.

Each institution has the responsibility to enact policies that support sponsor requirements, but the level of risk associated with policy is totally discretionary. For example, the UM policy on purchases not typically allowed under Federal costing rules, could simply say that no purchases of laptop computers will be allowed. That establishes a zero tolerance and zero risk in that narrow area. Instead, the UM policy creates a set of criteria that make it possible to sometimes justify the purchase of a laptop with Federal funds. That policy gives some degree of flexibility and discretion to the faculty who are trying to identify funding for the basic tools necessary for research.

While the policies are in place at UM, it is possible to use them as the basis for conversations with researchers and the people who support them. With those conversations there may also evolve a softening in approach to policy development. The Reviewers note that the policies are short and to the point but not accompanied by guidelines that provide consistent information about how specific decisions will be made.

- **Recommendation: The Director of ORSP should select one or two key policies to use as a basis for discussion with faculty and departmental research administrators to determine what questions are still unanswered and what concerns are unaddressed.** Those discussions can lead to better understanding of the reasons for the policy, the application to gray areas, and the creation of additional materials to provide consistent guidance for researchers.

In every group of individuals who met with the Review Team there were questions about the waivers of F&A funds as well as distributions of F&A return to the University and access to cost matching funds. The Reviewers heard various levels of resentment and anger about what was perceived to be inequities in distribution, side deals about funds available for PI usage, and decisions about F&A waivers. In such distressing economic times, any perception of favoritism or unfairness tends to be magnified. Given the lack of clear processes, research faculty tend to believe that the best negotiator wins the day and that the University has no comprehensive approach to the distribution of flexible funds. Those perceptions are mirrored in department staff, who believe it is futile to expect institutional support for their work.

In some cases the perceptions can be addressed by establishing and publishing clear standards for waivers and access to cost matching funds as well as the practices in place for distribution of F&A return.

- **Recommendation: The VPRD and the Provost should immediately direct the preparation of policies and procedures to articulate the University's approach to F&A waivers, F&A distribution, and access to cost matching funding.** With written materials available, there can be a more consistent but still flexible approach to leveraging institutional funding that supports research.

Effort reporting (time and effort reporting) is a continual source of irritation to faculty and to the people who support the process at UM. There are few universities that still require monthly effort reporting, though that frequency is certainly allowable. A few institutions have gone to annual effort reporting, but the more common approach is on a twice-a-year basis or a semester cycle. Of all the policies and practices in place at UM, this is one of concern to the Review Team. Federal audits have been harsh and punitive about relatively minor deficiencies in effort reporting procedures. A repeated theme has been the need for training of all certifiers on the principles of effort reporting and the particular practices in place at the university. There is reason to doubt the level of faculty understanding about the underlying principles of effort at UM.

However, at this point in time, the A-21 Task Force, constituted by the White House Office of Science and Technology Policy, is looking closely at effort reporting and recognizing the extent of the burden it places on faculty. The very concept of reducing faculty effort to a string of accounting codes is cause for concern. It is anticipated that some changes in the requirements for effort reporting, perhaps slight or perhaps significant, will be coming in the next 18 months.

- **Recommendation: The Director of ORSP should use the report of the A-21 Task Force as the basis for a thorough evaluation of effort reporting at UM.** This would be an ideal time to examine and revise policy, guidelines, and practices so that the University is less exposed to audit consequences in this highly visible area.

When auditors arrive, there are many options for their attention, but two of the most visible are cost-sharing and cost transfers. Electronic systems make it easy for auditors to track the commitments for cost sharing and to measure the commitments against the documentation of actual expenses. Cost transfers stand out in every ledger as examples of instances in which a charge was made to the "wrong" account, for whatever reason. In addition, many systems are slow to record and post corrective transactions. At UM, the cost-sharing system for salary commitments is the effort reporting system, and the accuracy of all that data depends on timely cost transfers supported by reasonable justification for the need to transfer funds.

- **Recommendation: ORSP should begin to work with the campus to establish an electronic tool for routing and approving cost transfers.** The same tool can be used for sponsored and non-sponsored transfers, and the level of programming is substantial but not impossible. An electronic tool could be a clear signal to campus that ORSP is taking action to become more up-to-date with its systems, providing an easy way to submit and track transfers, and demonstrating the needed transparency in its business practices. Consideration of a cost-sharing tool should be made in the same period as a reassessment of the effort reporting process.

NCURA Standards I.C.ii Administrative Management

Here, as with the Financial Management Standards, UM is on solid ground. There are policies and practices in place to support the basic requirements of management, and ORSP has made reasonable decisions about setting priorities for future development. The Reviewers did not have sufficient information to assess the property control standards. While there are clearly policies in place, it will be important for Internal Audit to test the equipment control practices on some regular basis lest any weaknesses be unveiled during an A-133 audit.

On the post-award side of sponsored programs, there are numerous responsibilities for billing and invoicing, for revenue collection and application of payments to accounts, for debt collection, for financial reporting to sponsors, for closing out projects so that more expenditures cannot be made, for continually balancing the number of accounts across accountants. These tasks are often deadline driven and complicated by the specific peculiarities of the funding agency and the award obligations. Failure to meet any of these requirements can have consequences for the institution and the faculty, including withholding of future year commitments while reports are being completed.

The most efficient method of providing the level of oversight necessary on post-award functions starts with performance metrics, such as;

- simple reports on aging accounts,

- projects in overdraft,

- percentage of late financial reports, and

- including metrics such as those that reflect which accountants are meeting the deadlines with what frequency and which accountants are trying to manage too many projects with reporting requirements in the same time frame.

Performance metrics allow ORSP leadership to determine where problems exist and to reallocate resources either temporarily or permanently to address the problems. The IT professional identified earlier is essential to extracting data from university systems and creating reports based on time and completion rather than just transactional data. Without some set of these reports, the Director and the proposed Assistant Director for Post-Award Services cannot know what reports are due on what date or which of the accountants may need help completing sponsor materials. These are basic tools for managing research administration both within ORSP and for campus, who complained that they have no way of knowing if a financial report has been submitted.

- **Recommendation: ORSP should work with its IT professional , ORSP accounting staff, and campus research administrators to prioritize a set of reports that would provide useful information about sponsored programs management.** While some of these reports would be used only within ORSP, others could be shared in whole or in part with campus.

Research Ethics

Sponsored program activities come with a variety of ethical responsibilities that are shared by investigators and the institution. While institutions are expected to have appropriate policies and oversight committees in place, the principal investigators and the institution share the ultimate responsibility that the conduct, and those of their colleagues and students, are within acceptable practices.

The commitment to an effective research ethics program is a visible demonstration of the University's willingness to maintain the trust of its major constituencies. Effective research ethics programs are based on some guiding principles such as:

- Stewardship of sponsor and donor funds

- Ethical conduct of research to assure the objectivity of the research and the integrity of the data

- Protection of human and animal subjects

- Safety of the employees participating in the research enterprise

- Protection of the environment for both University employees and students and the community they serve

Research ethics programs are constantly challenged with ever increasing regulations, guidance and policies. Each institution should have in place a process to monitor these changes, assess their impact on the specific institutional programs, identify and manage the risk for their specific institution and research portfolio and respond appropriately with policies, procedures, auditing and monitoring programs, educational initiatives and the ability to receive and respond to allegations of wrong doing.

NCURA Standard I.D.i. Project Integrity

UM has a variety of policies and procedures in place regarding the Project Integrity set of Standards. The Associate Legal Counsel serves as the Compliance Officer. Sponsored projects involving potential conflicts of interest are not submitted to a funding sponsor until the conflict has been disclosed and resolved. The Associate Legal Counsel will not provide approval of an the internal routing checklist if a conflict of interest disclosure has not been made by the PI. If a Conflict of Interest exists and cannot be managed, the Associate Legal Counsel, in consultation with the Responsible Vice President (or the President), the employee, and any others the Associate Legal Counsel may deem helpful in assessing the situation, determine if any restrictions should be imposed on the faculty member or other employee in order to manage, reduce, or eliminate the conflict of interest. These conditions and restrictions are then put into a in a Conflict Management Plan.

The Reviewers found that Deans and Department Chairs are not notified if a COI plan is implemented. The Deans and Department Chairs felt that they should be notified if a conflict is determined and a COI plan is put into place.

- **Recommendation**: **Conflict of Interest management plans should be distributed to the Dean and Department Chair in which the faculty member resides**

- **Recommendation: UM should designate a staff member to have oversight over COI management plans and export controls or hire a new coordinator to fulfill this function.**

The Reviewers are concerned that UM does not have fully functional electronic systems to support the regulatory committees and to transmit information from the committee to the PIs and ORSP. The Reviewers are also concerned that UM does not have a conflict of interest committee and relies up the Associate General Counsel position to review all COI disclosures. It was reported to the Reviewers that this single person deals with 2,200 disclosures and with 60-70 positive disclosures (requiring review for potential management plans). There are 20-25 management plans in place and these are developed between the faculty and their department chair. There is no monitoring of these plans, no notification given to ORSP or the IRB concerning these plans, and no central database documenting the plans and COI submissions. The lack of electronic compliance systems in the regulatory areas may hinder the submission and processing of protocols submitted by PIs and associated with these major committees. This may cause delays in conducting research and reporting research results to sponsors.

- **Recommendation: ORSP should invest in commercially available electronic systems for the routing, processing, and management of research related compliance committees, such as IRB, IACUC, IBC, and COI.** There are many commercially available electronic products on the market to assist in the management of compliance related protocols and compliance committees. As an example, Huron Consulting Group, through its Click Commerce division, has commercially available software system modules for IRB, IACUC, IBC, and IACUC. One can purchase one or all of their compliance modules. Electronic tools to assist research integrity areas may also be part of the larger electronic system selected for sponsored programs and have the added value of immediate integration of functions. The Reviewers also recommend that the faculty be provided the opportunity to be involved in the selection of any compliance electronic system or module.

NCURA Standards I.D.ii Human and Animal Use

The Director of Environmental Health & Risk Management (EHRM) serves as chair of the IRB and IACUC. Although it is unusual to have the Director of EHRM serve as IRB and IACUC chair, this process appears to the Reviewers to be working well at UM. In addition the IRB coordinator reports to him. Training requirements for the high risk areas such as IRB and IACUC are in place. However, the Reviewers found that training to meet NIH RCR requirements is certified by the PI, per UM process. At UM training provided in this area is part of a four hour training that covers a multitude of subjects and no hands on training as required by NIH for certain programs is provided.

- **Recommendation: Training requirements necessary for IACUC approval and COI approval and to meet NIH RCR requirements should be certified at a minimum by the Coordinators in those areas. In addition, UM should closely monitor the NIH RCR requirements for university compliance. For certain programs and awards, NIH requires eight hours of hands-on training as the standard of compliance.**

It is unclear as to whether ORSP prior to award acceptance receives notification that training has occurred. The acceptance of the award signifies that the institution has made commitments that all research activities are in compliance with federal regulations and sponsor policies.

- **Recommendation: The Director of EHRM, Associate Legal Counsel, and ORSP should create appropriate information linkages to insure that awards accepted by UM have appropriate training documentation for the research being conducted.**

UM has an accredited animal facility and meets the Standards of NCURA. There is a Director of Laboratory Animal Resources who reports to the VPRD. Under him is the IACUC coordinator.

The IRB is the most active of all of the committees and has recently undergone a review. This review was conducted by a highly regarded external consultant in the field. Furthermore, the IRB has a reciprocal agreement in place with St. Patrick Hospital to review all biomedical protocols. The Reviewers found only one concern and that was a need for the IRB to coordinate with the Dean of Graduate studies to verify that no theses or dissertations using human subjects is approved unless there is an IRB approval on file.

- **Recommendation: The IRB should coordinate with the Dean of Graduate Studies to document that all theses and dissertations using human subjects have an approved IRB protocol on file**

NCURA Standards I.D.iii Biohazards, Radiation Safety, Bioterrorism

The Institutional BioSafety Committee reports to the Executive Director of EHRM. The BioSafety Committee has a faculty member who serves as committee chair. UM also has an Institutional BioSafety officer who facilitates the needs of the Committee and EHRM. If research involves the use of recombinant DNA or RNA, infectious agents or toxins, or human tissues or fluids, approval of the IBC is needed. If research involves the use of radioactive materials, hazardous chemicals or hazardous waste, the Office of Environmental Health and Safety approval is needed. On the Checklist for Proposal Activity, if a box is marked yes, that radioactive materials, recombinant DNA, or select agents are to be used in the research, ORSP requests that an appropriate Committee or EHS approval number be provided to them. If the request for approval is pending, the PI indicates pending on the Checklist. If a proposal comes to ORSP as pending, follow-up is provided by the pre-award specialist to make ensure that the activity is approved before the research commences. These areas appear to the Reviewers to be functioning well and no recommendations are offered.

- **Recommendation:** None

Export Controls

The Reviewers found a lack of policies and procedures regarding export controls and visiting foreign scholars. The lack of policies and procedures in export controls can result in fines and imprisonment of faculty and administrators who violate these policies. However, each institution must decide what level of risk to accept in this area. There should be an evaluation of the faculty who are doing research typically covered by export controls regulations, of the nature and number of foreign visiting scholars, and the kinds of materials exported by the university.

- **Recommendation: UM should develop and implement policies and procedures for export controls, taking into account the level of risk that is acceptable for the university and the nature of its research programs.** UM should also consider creating a very short checklist that researchers can use to get an initial determination of the likelihood of export issues on their particular projects. A number of universities utilize similar checklists to help in the determination.

- **Recommendation: The UM should plan to regularly inform and provide basic training on export controls to faculty and staff at high risk of encountering export issues.**

Appendices

- **Appendix A**: NCURA Standards

- **Appendix B**: NCURA Peer Review Team Bios

- **Appendix C**: Charge to the NCURA Peer Review Team

- **Appendix D**: Site Visit Itinerary

- **Appendix E**: NCURA Resources

National Council of University Research Administrators

Scope and Standards for Peer Reviewed Sponsored Projects Organizations

This definition of "Scope and Standards" represents a document of the extent of an NCURA Sponsored Peer Review. While recognizing that institutions are organized differently with various kinds of pre- and post- award services, this definition of "Scope" reflects the core operations of Research Administration. The "Standards" outlined below come primarily from the Council of Governmental Relations, "Managing Externally Funded Research Programs: A Guide to Effective Management Practices" (June 2005).

I. CORE OPERATIONS
A. Proposal Services
i. Collection and Dissemination of Funding Information
The institution has procedures in place to identify various opportunities (Federal, state, local, private foundations, etc.) to which faculty can apply for funding. A system is in place to disseminate to faculty information on current funding opportunities in an efficient, timely and easily accessible manner.

> *STANDARD: The institution has access to information on prospective sponsors and their requirements.*
> *STANDARD: The institution provides faculty with information on sources of support for research and other scholarly activities.*

ii. Proposal Development and Assistance
The institution has a process in place to assist faculty with responding to funding opportunities, including proposal writing, understanding and complying with rules, regulations and administrative requirements and help with electronic application processes.

> *STANDARD: The institution has trained personnel who are knowledgeable about sponsor regulations, requirements and procedures.*
> *STANDARD: The institution has trained staff who advises investigators in preparation of compliant proposals.*
> *STANDARD: The institution has appropriate procedures in place to allow it to access and utilize the electronic proposal, award, administrative, and financial management systems of the federal government or other sponsors.*
> *STANDARD: The institution stays current with respect to the electronic research initiatives of sponsored projects sponsors.*
> *STANDARD: The institution provides assistance for proposal writing and for proposal preparation.*

iii. Proposal Review and Submission
The institution follows standard processes and procedures for review of the business, administrative, and financial aspects of proposals developed by their faculty and submits the proposal to the sponsor on behalf of the institution. Where necessary, the

administrative official who submits the proposal on behalf of the proposing organization also makes certifications and assurances to the sponsor. They commit the organization to the conduct of the project that the sponsor is being asked to support as well as ensure the institution will adhere to the sponsor's various policies and grant requirements.

> *STANDARD: The institution advises investigators in preparation of compliant proposals.*
> *STANDARD: The institution has a comprehensive system in place that is designed to ensure compliance with federal, state, and local laws.*
> STANDARD: The institution processes proposals in compliance with institutional and sponsor policies and procedures
> STANDARD: The institution has procedures in place to coordinate internal competitions that limit the number of submissions per institution.

iv. Collaborative Project Development

The institution assists its faculty who wish to collaborate, either with other colleagues at their own institution or at other organizations, on a unified project.

> *STANDARD: The institution reviews the collaborative arrangements and determines if the proposed activity is appropriately and administratively manageable.*

v. Agency Liaison

Institution staff are involved with proposal development, review and submission and have established methods of keeping up-to-date on changes to sponsor's policies, procedures and processes. Such methods may include, for example, subscription to electronic mailing lists, newsletters or attendance at outreach events, conferences and/or webcasts.

> *STANDARD: Staff have knowledge of the organizational structure of the sponsor and are able to contact the appropriate individual or office when they have questions.*
> *STANDARD: The institution has trained personnel who are knowledgeable about sponsor regulations, requirements and procedures.*

B. Award Acceptance and Initiation
i. Review and Negotiation of Terms and Conditions

Grants and agreements that provide sponsored funding require review by the institution of the terms and conditions that are part of the award. While many grants come with standard terms and conditions, many agreements have language that necessitates scrutiny prior to acceptance. All awards require an institutional evaluation for sponsor restrictions on such items as the use of funds, appropriate project personnel, publication rights, intellectual property, etc. to assure compliance with institutional policies that govern the research activities of the campus.

> *STANDARD: The institution has staff trained to review and negotiate agreement terms and conditions.*

STANDARD: The Institutional staff is cognizant of institutional policies and practices with respect to ownership of intellectual property rights, publication, and acceptance of classified material, etc.
STANDARD: The staff is authorized to negotiate changes in award terms and conditions and has access to legal assistance, either institutional or external counsel, when required during complex negotiations.
STANDARD: Investigators and other concerned individuals are consulted/informed during the negotiation.
STANDARD: The institution has policies and procedures to assure compliance with national policy requirements, e.g. Export Controls, Nondiscrimination, etc.

ii. **Ancillary Agreements Associated with Research Grants and Contracts**
Prior to acceptance, the institution evaluates any sponsor restrictions in light of campus policies and other existing projects. The review includes all agreements commonly associated with research, including material transfer agreements, clinical trial agreements, confidentiality, agreements, and others.
STANDARD: The institution has procedures for the review and negotiation of research and other agreements that meet all institutional policies and practices.
STANDARD: The institution takes advantage, when appropriate, of standard agreements, e.g., the Uniform Biological Material Transfer Agreement or the National Institutes of Health Simple Letter Agreement.

iii. **Subawards**
Incoming subawards are agreements that provide flow-through funding for a sponsored project. With incoming subawards the terms and conditions of the agreement require review as well as any restrictions that pass through from the original funding agency. An outgoing subaward is one in which the institution provides sponsored funding to a third party through the issuance of an agreement. Outgoing subawards are typically issued by a central office with the approval of the PI, and they may require negotiation with the recipient individual or organization.
STANDARD: The institution has policies and procedures for issuing subrecipient agreements and for monitoring the performance of subrecipients.
STANDARD: Policies and procedures are in place to determine whether subrecipients have established adequate management and financial systems prior to issuing subrecipient agreements.
STANDARD: Adequate documentation for the selection and approval if necessary, of the subrecipient when not named in the proposal, is prepared and maintained.

iv. **Award Acceptance Process**
The institution has a process in place that allows the formal acceptance of a sponsored award by designated individuals or offices. In some cases that may be the negotiation and signing of a bilateral agreement. In others, acceptance occurs when the institution begins to spend the funds provided.

STANDARD: The institution has a system to review proposed award terms and conditions and to negotiate those terms in accordance with institutional standards prior to award acceptance.
STANDARD: The institution has written procedures for review of award documents prior to acceptance.
STANDARD: Award budgets are compared to proposal budgets and amended budgets or scopes of work are submitted when awards have been significantly reduced from requested amounts.
STANDARD: The institution does not make funds available until compliance requirements are satisfied (e.g., human subjects committee approvals, conflicts of interest disclosures, etc.).

v. Award Activation and Notification

Activation is the process by which a sponsored award is placed in the accounting system and made available to the principal investigator for expenditures. The notification process delineates the steps followed to make all appropriate parties, such as PI and departmental staff, aware that the award has been accepted and activated by the institution.

STANDARD: The institution has developed procedures to establish awards in its accounting system in a timely manner, including receipt of electronic awards.
STANDARD: Terms and conditions of awards are distributed to principal investigators and made available to other institutional personnel, as required.

C. Award Management
i. Fiscal Management

The institution has established policies for F& A rates, cost sharing, re-budgeting, time and effort, fiscal controls, cost accounting standards, cost transfers, cash management, program income, recharge centers, procurement, and closeout.

STANDARD: The institution has policies and procedures for:
- *proposal costing and budget administration*
- *the review and submission of budget changes*
- *assessing F&A costs on external projects*
- *the review and approval of exceptions and waivers of F&A cost collection*
- *financial management systems*
- *depositing all monies on a timely basis and invest them in accordance with institutional and Federal policies and to record the receipt of revenue, to disburse cash, and to bill agencies in a timely manner*
- *establishing service and recharge centers and for reviewing rates charged by centers*
- *notifying of upcoming termination dates to appropriate offices and to ensure timely closeout of programs including submission of all sponsor required financial reports, invoices, and deliverables*
- *defining allowability of costs that are consistent with federal cost principles and other applicable standards of other sponsors*
- *justifying adequately cost transfers in a reasonable period of time*

- *applying consistently compensation costs in proposing, accumulating, and reporting those costs*
- *assuring that sponsor-imposed salary caps are in place.*
- *governing fringe benefits and the method used to account for these costs*
- *reporting payroll and effort certification*
- *purchase of goods and services*
- *procurement systems*
- *the identification, recording, managing, and reporting program income in accordance with regulations*
- *expedited purchases*

STANDARD: Staff are knowledgeable and responsible for initiation of direct charges and staff are knowledgeable and responsible for approval and payment of those charges.

STANDARD: Systems exist for:
- *distinguishing between acquisition of goods and services and subrecipient agreements*
- *providing timely close out of purchases*
- *identifying mandatory and voluntary cost sharing*
- *proposing, accumulating, and reporting of cost sharing*
- *incorporating cost sharing if required in subawards*

ii. Administrative Management

The institution has established management systems for administering awards and that encompasses prior approval, reporting, record retention, data retention, subrecipient monitoring, intellectual property, and property control.

STANDARD: There is clear communication of Intellectual Property policies and procedures for ownership and management of research data.

STANDARD: The accounting system identifies all external funded projects and the system provides appropriate review and internal controls.

STANDARD: The institution has procedures for seeking required sponsor prior approvals and for implementing federal expanded authorities.

STANDARD: The institution has policies and procedures that ensure compliance with mandated cost accounting standards, demonstrate on-going compliance with the CAS standards whether a DS-2 disclosure document is filed or not, and ensure revisions to DS-2 are filed as required.

STANDARD: Property control policies and procedures exist for acquisition, use, and disposition of equipment, for equipment inventory, and for reporting equipment to external sponsors.

STANDARD: The institution has policies regarding responsibilities for report preparation and has procedures for submission of required reports and other deliverables.

STANDARD: Record retention policies and procedures exist for the retention and access of financial and administrative data and for responding to requests for data under relevant open records requests.

STANDARD: The institution has data retention policies regarding the retention of research records and data and has policies for responding to requests for data under Federal Freedom of Information Act.

STANDARD: Subrecipient monitoring policies and procedures for monitoring performance of subrecipients include reviewing annual A-133 audit reports from subrecipients as required.

D. Research Ethics

i. Project Integrity

The institution has policies and procedures that govern responsible conduct of research, conflict of interests, and research integrity (misconduct) and appropriate assurances of compliance.

STANDARD: The institution has a written policy that:

- *addresses treatment of allegations of research misconduct and that meets sponsor requirements*
- *assists faculty, staff, and students in determining whether and to what extent outside financial relationships and interests may conflict with their primary research and academic activities or other institutional responsibilities*

STANDARD: The institution has written procedures to:

- *manage individual financial conflicts of interest*
- *recognize the concern regarding conflict of interest in research involving human subjects identify potential financial conflicts of interest of the institution and has mechanisms in place for managing them*

ii. Human and Animal Use

The institution has systems that comply with federal and regulations and that provide ethical protection of human subjects and for the humane care and use of animals.

STANDARD: The institution's compliance systems accommodate Multiple and integrated compliance obligations and are coordinated so that oversight and approval responsibilities are linked in an effective and timely manner.

STANDARD: The institution has a written Federal-Wide Assurance with the DHHS and received approval in accordance with federal regulations.

STANDARD: The institution has access to at least one Institutional Review Board in accordance with federal regulations to review, approve, require modifications in, or disapprove, suspend or terminate research activities involving human as research subjects.

STANDARD: The institution has a system of coordination between its IRB and sponsored projects administration.

STANDARD: The institution has filed a written assurance with the DHHS and received approval thereof, and has also secured USDA registration.

STANDARD: The institution has established at least one Institutional Animal Care and Use Committee in accordance with federal regulations to review, approve, require modifications to, or disapprove, suspend or terminate activities involving animals used in research.

STANDARD: The institution has a system of coordination between its IACUC and sponsored projects administration.

STANDARD: Adequate systems are in place to track, report, and maintain compliance with the Animal Welfare Act, the Public Health Service Policy on Humane Care and Use of Laboratory Animals, and applicable occupational health regulations.

iii. Biohazards, Radiation Safety, Bioterrorism

The institution has appropriate biohazards and radiation safety, and public health security and bioterrorism systems in place.

STANDARD: The institution has adopted an environmental, health, and safety policy that meets environmental, health and safety regulatory standards in sponsored projects activities.

STANDARD: The institution has devoted adequate staffing, funding, and other resources to implement, manage and oversee its EHS system and performance.

STANDARD: The institution has created a functional organization with clear roles, responsibilities and accountabilities for regulatory compliance and over oversight.

STANDARD: The institution has established an EHS management system and written policies and procedures for the scope and complexity of activities at the institution.

II. INSTITUTIONAL INFRASTRUCTURE

A. Organizational Structure

i. Operational Structure

The institution has identified offices and structures that support the sponsored programs function at both the central and departmental levels.

STANDARD: The relationships of institutional offices at both the central and departmental levels are compatible and supportive of one another.

STANDARD: Alignment is strong both between central offices and schools and departments as well as sponsors.

STANDARD: Operational relationships among other related functions is positive, such as development, human resources, travel, purchasing and procurements, information technology, and compliance functions.

STANDARD: Lines of authority and coordination of functions are clearly delineated. Roles and responsibilities are specified, particularly for key sponsor requirements, including final authority, decision-making,

ii. Staffing and Resources

The staff and financial resources necessary to support the core functions of the sponsored programs function are sufficient and consistent with its research volume and the complexity of the organization.

STANDARD: Staffing and resources are sufficient to meet the service requirements of constituents and compliance requirements of sponsors, including financial and administrative requirements.

STANDARD: Resources are sufficient to identify funding opportunities for faculty, and to provide education and training for faculty and staff, IT support, etc.

STANDARD: Sufficient formal and informal opportunities exist for the professional development of staff, in terms of continuing education, professional meetings, etc. in order to be current with sponsor requirements, effective practices, and appropriate oversight procedures.

B. Communication, Outreach, and Education

i. Communication and Outreach

The institution has established mechanisms for regular communication between faculty, central offices, and departmental staff about sponsored programs policies and procedures, expectations, roles and responsibilities, changes in policies, and risk areas.

STANDARD: There are routine and predictable means utilized to communicate institutional policies and procedures to faculty and appropriate staff. For example, sponsored programs policies may be incorporated within a body of formal organizational policy, the policies may be distributed in writing, updated on a web site, and special notices distributed by email, etc.

STANDARD: There are periodic communications to senior management and academic deans and department heads, regarding significant issues, implementation of new requirements, risk areas, assessment of staff resources, etc.

ii. Education

The institution has established programs of education for faculty including teaching and research faculty, postdocs, and graduate and undergraduate students, as appropriate, about institutional and sponsor expectations in the conduct of sponsored programs.

STANDARD: There are programs of education as appropriate for faculty, students, and staff on institutional policies and procedures, compliance issues, special risk areas, resources, points of contact, etc.

STANDARD: There are programs of education, as mandated for specific compliance requirements, such as the protection of humans and animals, bio-safety and other substantive policy requirements.

C. Compliance and Risk Assessment

i. Compliance and Risk Assessment

The institution periodically assesses sponsored programs policies and practices, and assessment of emerging risk areas.

STANDARD: There is a thorough, periodic review of the effectiveness of sponsored programs policies and procedures and the communication of the results of the reviews to institutional senior management. These programs may be conducted as internal controls, quality improvement, compliance programs, etc.

STANDARD: There is a system for monitoring new sponsor requirements, external trends in audit and compliance, and risk areas at the national level. New requirements or risk areas are addressed within institutional policies, education and outreach programs, and compliance reviews, as appropriate.

D. Electronic Research Administration

   i. Systems

     The institution has in place appropriate electronic information systems, and the integration of systems for proposals, financial management, human resources, education programs, and compliance reviews

        STANDARD: Electronic systems are well integrated to process transactions, review and track activities, and provide required reports.

        STANDARD: Systems are sufficient to integrate with Federal-wide or agency specific processes for proposal and report submission.

        STANDARD: There is a sufficient level of understanding among central and departmental staff and a level of proficiency, support, and training to ensure the effective operations of the systems.

NCURA Peer Review Program

The National Council of University Research Administrators has developed a formal system of assessment for university offices of sponsored programs, in part, from its purpose as a professional development organization. The mission of professional development organizations, like NCURA, is to provide education and training to its members as well as others within the research community. Many educational efforts implicitly, if not explicitly, provide information on effective practices, techniques for success, and models of excellence. Setting standards and identifying quality of organizational performance, therefore, are expected functions of professional development organizations. In fact, no other activity of a professional development organization may be as important as the articulation of the standards and core practices of the profession. The NCURA system of peer review was developed for this purpose.

NCURA Peer Review Team
for University of Montana

Kim Moreland **TEAM LEADER**

   Kim Moreland is the Associate Vice Chancellor for Research Administration and Director of the Office of Research and Sponsored Programs at the University of Wisconsin - Madison.

   Kim has been at the University of Wisconsin six years. The UW-Madison received over $1.0 Billion in grant and contract awards in FY 10, and it consistently ranks in the top five in research expenditures in the NSF's Survey of R&D Expenditures. Total active awards are in excess of $4.0 Billion.

   During the last three years, she has been responsible for the implementation of three major systems supporting research efforts at UW: the Cayuse system to system product for managing grants.gov submissions, the Huron ECRT system for certifying and reporting effort on sponsored projects, and the PeopleSoft system for grants management. In addition, she serves on a number of university committees, including the Research Policy Advisory Committee, Administrative Council, and PI Committee. She is also the representative to the Federal Demonstration Partnership and on the Board of Directors of the Council on Governmental Relations.

   Kim is a former president of the National Council of University Research Administrators, and she has served as a member of the NCURA national faculty, teaching the Fundamentals of Research Administration and Sponsored Projects Administration II across the country. She is a contributor to the NCURA newsletter, the Research Management Review, and *Sponsored Research Administration: A Guide to Effective Strategies and Recommended Practices.* She is a recipient of NCURA's national Award for Distinguished Service in research administration and the Award for Outstanding Achievement in Research Administration.

Number of Years in Research Administration: 27
Current and Prior Institutions: University of Kansas, Fred Hutchinson Cancer Research Center, University of Wisconsin – Madison
NCURA Standards Review Expertise Areas: Award Acceptance and Initiation, Award Management, Institutional Infrastructure

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Marianne Woods

   Marianne Rinaldo Woods, Ph.D., J.D., is the Senior Associate Vice President for Research Administration at the University of Texas at San Antonio and teaches in the College of Public Policy. In her current position she oversees all aspects of the Office of the Senior Associate Vice President for Research

Administration which the Office for Grants, Contracts and Industrial Agreements, Office of Post Award Administration, Office for Research Integrity and Compliance, Office for Laboratory Animal Research, Office for Research Advancement, Office for the Management of BSL3 Facilities, and the Office of Commercialization Alliances and Innovation. She is the Research Integrity Officer for the University and is IO for various research compliance committees.

Formerly Associate Vice President of Research at The University of Alabama, she had oversight of all aspects of research administration, including IRB, IACUC, COI, MIS compliance, pre-award, post-award and accounting research administration, technology transfer and the university incubator facility. She has experience developing and negotiating F&A, development of recharge centers and specialized research units, and chemical inventory systems.

Dr. Woods has served as Chair of the IRB, Chair of Intellectual Property Committee, and Chair of the IACUC at various universities.

Dr. Woods is a Board Member on the Council on Governmental Relations (COGR) and serves as a member of the COGR Contract and Intellectual Property Committee. She is a Board member of The University/Industry Demonstration Partnership. She is also past board member of the Biotechnology Association of Alabama; the Texas Society for Biomedical Research; and, the Alabama State EPSCoR Steering Committee. She is Past President of the Texas Technology Transfer Association,

Dr. Woods has served on the National Council of University Research Administrator's (NCURA) Board of Directors. She was currently elected by NCURA region V to serve on the 2012 NCURA Board of Directors. She is immediate past chair of NCURA Region V. Dr. Woods is past co-editor of the NCURA Newsletter, and the former lead faculty on the NCURA Export Controls Seminar Series and the NCURA Fundamentals Program. She is currently lead faculty on Departmental Research Administration Fundamentals.

Number of Years in Research Administration: 30
Current and Prior Institutions: University of Texas at San Antonio, University of Alabama, University of Texas at Arlington, University of Texas at Dallas, California State University, Long Beach, California State University, Fullerton
NCURA Standards Review Expertise Areas: Proposal Development, Award Acceptance and Initiation, Award Management, Research Ethics, Institutional Infrastructure

Assisting the Review Team On-Site and Reader for Review Report

Peggy S. Lowry, NCURA Peer Review Program Coordinator

Peggy serves as the Program Coordinator for the NCURA Peer Review Program and has been involved in over 30 peer reviews of research administration offices, received evaluations of her offices, and taught national workshops on sponsored program assessment. Peggy has prepared self-study documents and participated in institutional accreditation self-studies. She authored the chapter: "Assessing the Sponsored Research Office" (NCURA/AIS *Sponsored Research Administration—A Guide to Effective Strategies and Recommended Practices*) and published: "But the Emperor Has No Clothes On! Or Assessing Your Operation with Fresh Eyes" (NCURA Newsletter).

Peggy served until her retirement in 2007 as Director of Sponsored Programs and Research Compliance at Oregon State University where she oversaw sponsored programs ($250+ million in awards), non-financial research compliance areas, and served as Conflict of Interest Officer. She returned from retirement to assist by leading the University's new Office of Research Integrity, until 2011 when she retired again. Her career includes 21 years at the University of Illinois--Urbana-Champaign as Assistant Vice Chancellor for Research/Director, with 10 years as a College-level administrator, seven years in predominantly undergraduate universities: Ball State University and Murray State University in Director and Associate Director positions. At Ball State and Murray State she additionally focused on faculty development and institutional incentives for research. She served on numerous university/faculty committees, created/implemented university-wide policies, and engaged in department-central research administrator networking groups.

Peggy has given over 200 national, regional and local presentations and workshops. She has served on numerous national NCURA committees and twice served on their Board of Directors. She served as a NCURA national workshop faculty for Fundamentals of Research Administration and Sponsored Projects Administration Level II, Chair of the Nominating and Leadership Committee and co-Chair of the NCURA newsletter. Peggy received NCURA's national Award for Distinguished Service in Research Administration in

2006. She served several terms on the Board of Directors of the International Society of Research Administrators and received several national awards from that organization. She has been a member of the Council on Governmental Relations.

Number of Years in Research Administration: 38

Current and Prior Institutions: University of Illinois at Urbana-Champaign, Oregon State University, Ball State University, Murray State University

NCURA Standard Review Expertise Areas: Proposal Development, Award Acceptance and Initiation, Research Ethics, Institutional Infrastructure

The University of Montana

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Missoula, MT 59812-4104
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FAX: (406) 243-5739

August 17, 2011

Peggy Lowry, Coordinator
NCURA Peer Review
National Council of University Research Administrators
1225 19th Street NW, Suite 850
Washington, DC 20036

Dear Ms. Lowry:

Last year, the Provost – who is now the President – and I constituted a Research Strategic Planning Task Force with the charge to provide a comprehensive assessment of research and creative scholarship at The University of Montana. This review was completed in February and is included in your Briefing Book following the Research Office Organizational Chart. Many of the concerns cited were of historical nature, and an NCURA Peer Review based upon National Standards will help identify current areas of strengths and weakness.

In 1999, following a business processes reengineering effort involving numerous campus stakeholders, a former vice president co-located pre- and post-award and created the ORSP as it is known today. As anticipated, the one-stop shop model has provided efficient research support during a time of growth in sponsored funding.

The last decade has also been one of limited leadership for ORSP as there have been three directors and two interim placements. The staff continued business as usual, but ORSP experienced difficulty in uniformity and consistency without stable leadership. Staff morale was low; turnover was high. I am pleased to report that great strides have been made in the last few years in leadership, team building, communication, transparency, and customer service.

I anticipate the NCURA Peer Review will validate many of our current processes and operations, as well as provide insight into areas requiring additional enhancement. Such information will help UM better invest resources and energy to enhance and grow the research enterprise. As a result, I ask that your review and report include as much input and information as possible regarding areas of improvement.

I look forward to and very much welcome your observations and suggestions, and thank you in advance for your willingness to undertake this activity. Please do not hesitate to contact me or Judy Fredenberg, director of research and sponsored programs, at judy.fredenberg@umontana.edu.

Sincerely,

Daniel J. Dwyer
Vice President for Research

NCURA Peer Review
October 10-12, 2011

October 9 (Sunday)

Afternoon: NCURA Peer Review Team arrive MSO; complimentary hotel shuttle from airport to hotel

Evening: Executive Session @ hotel – NCURA Peer Review Team

October 10 (Monday)

Transportation pick-up details: Fredenberg will transport to/from campus

All meetings in Todd 205

8:00 – 8:45 a.m.	**Working Breakfast** (at hotel) with Judy Fredenberg, Director, Research and Sponsored Programs
9:00 – 9:30 a.m.	**Entrance Interview:** Vice President for Research and Development Dan Dwyer, and Sheila Hoffland, Director, VPRD Budgets and Operations
9:30 – 10:00 a.m.	Internal Audit: Kathy Burgmeier, Director
10:00 – 10:30 a.m.	*Executive Session – NCURA Peer Review Team*
10:30 – 11:00 a.m.	IACUC: M.A. McCrackin, Director, Laboratory Animal Resources, Dan Corti, IACUC Chair, and Kathy Mariucci, IACUC Coordinator
11:00 – 11:30 a.m.	IBC: Scott Samuels, IBC Chair, and Kathy Mariucci, IBC Coordinator
11:30 – 12 noon	IRB: Dan Corti, IRB Chair and Director, Environmental Health & Risk Management (EHRM handles all hazardous materials), and Paula Baker, IRB Coordinator
12 noon – 1:00 p.m.	**Working Lunch and Executive Session – NCURA Peer Review Team**
1:00 – 1:30 p.m.	UM Foundation: Ric Thomas, VP Development; Beth Hammock, VP Strategic Communications and Marketing
1:30 – 2:15 p.m.	Compliance (RCR, COI, Misconduct, Export Control): Claudia Denker, Associate Legal Counsel
2:15 – 2:45 p.m.	*Executive Session – NCURA Peer Review Team*
2:45 – 3:30 p.m.	Chairs/Directors: Richard Bridges, Chair, Biomedical & Pharmaceutical Sciences; Mark Cracolice, Chair, Chemistry; Sara Halvorson, Chair, Geography; William Marcus, Director, Broadcast Media; Mike Mitchell, Director, Montana Cooperative Wildlife Research Unit; Johnnie Moore, Chair, Geosciences; Andrew Ware, Chair, Physics & Astronomy
3:30 – 3:45 p.m.	*Executive Session – NCURA Peer Review Team*
3:45 – 4:45 p.m.	Research Faculty: Pat Barkey, Director, Bureau of Business and Economic Research; Bruce Bowler, Chemistry; Kari Harris, Public & Community Health Sciences; Andrii Holian, Biomedical/ Pharmaceutical Sciences; Anna Prentiss, Anthropology; LLoyd Queen, Forestry & Conservation; Brent Ruby, Health & Human Performance; Tom Seekins, Rural Institute on Disabilities

October 11 (Tuesday)
Transportation pick-up details: Fredenberg will transport to/from campus

All meetings in Todd 205

8:30 – 9:00 a.m.	Administration & Finance: Bob Duringer, Vice President, and Rosi Keller, Associate Vice President
9:00 –9:45 a.m.	Business Services: Mark Pullium, Director, John McCormick, Associate Director, and Dan Jenko, Assistant Director
9:45 – 10:00 a.m.	Executive Session – NCURA Peer Review Team
10:00 – 11:00 a.m.	PI Open Forum – Open call, attendee list to be provided
11:00 – 11:30 a.m.	Interim Provost and Vice President for Academic Affairs Perry Brown
11:30 – 12 noon	Executive Session – NCURA Peer Review Team
12 noon – 1:00 p.m.	**Working Lunch – Departmental research support staff:** Teri Daniels, Division of Biological Sciences; Christine Foster, Geosciences; Leona Hastings, Institute for Education Research & Service; Paulette Jones, Center for Environmental Health Sciences; Kate Pennacchio, Biomedical /Pharmaceutical Sciences; Jodi Todd, College of Forestry and Conservation
1:00 – 1:15 p.m.	Executive Session – NCURA Peer Review Team
1:15 – 3:45 p.m.	ORSP Team: Terri Coslet (pre), Patty Haisch (pre/post), Catherine Hogan (pre); Colleen Hunter (post), Kathy Lundman (subaward); Ann Martin (post), Laura Plute (pre/post); Maureen Price (post), Joe Rasmussen (pre/post), Peggy Roberts (pre/post); Indy Singh (post), Joni Waldrup (admin/cashier); Mona Weer (fiscal services); John Wills (pre/post)
3:45 – 4:00 p.m.	Executive Session – NCURA Peer Review Team
4:00 – 4:30 p.m.	Information Technology: Loey Knapp, Interim CIO, Lorrie Deyott, Computer Support Specialist

October 12 (Wednesday)
Transportation pick-up details: Fredenberg will transport to/from campus

All meetings in Todd 205

8:30 – 9:00 a.m.	President Royce Engstrom
9:00 – 10:00 a.m.	Deans: Chris Comer, Dean, College of Arts and Sciences; Jim Burchfield, Dean, College of Forestry & Conservation; Bobbie Evans, Dean, College of Education & Human Sciences; Dave Forbes, Dean, College of Biomedical & Pharmaceutical Sciences; Larry Gianchetta, Dean, School of Business Administration; Vernon Grund, Associate Dean, College of Biomedical & Pharmaceutical Sciences; Charles Janson, Associate Dean, Division of Biological Sciences; Stephen Kalm, Visual & Performing Arts; Jenny McNulty, Associate Dean, College of Arts and Sciences
10:00 – 11:00 a.m.	Executive Session – NCURA Peer Review Team
11:00 – 12:00 noon	**Exit Interview:** Dan Dwyer, Vice President for Research, Sheila Hoffland, Director, VPRD Budgets and Operations, and Judy Fredenberg, Director, ORSP
12:00 noon	**Conclude**

Peer Review Team depart MSO; complimentary hotel shuttle from hotel to airport OR Fredenberg will transport to airport

A number of NCURA resources are valuable to the institution and serve to enhance professional development of departmental, college, and central research administrators. All of the NCURA educational offerings go through a rigorous evaluation process to insure the quality of the program. Presenters are carefully selected and represent experienced research administrators with extensive understanding of the profession. The following list provides a selection of professional development resources that may be referenced in this Review Report and may be valuable for the institution to consider.

NCURA Traveling Workshops
NCURA'S four traveling workshops are scheduled at locations around the country or can be hosted by your own institution. They serve as an excellent foundation for new staff, or as a refresher for more experienced staff. When hosted by your own institution, they serve to offer a broad-based and consistent knowledge sharing across the institution. To bring this resource to your institution, you need to have a minimum of 60 participants (central, departmental, center/college) and can include research administrators from neighboring institutions. These workshops are taught by experienced research administrators and the curriculum reflects the critical issues for training and professional development. Our four national workshop topics are: Departmental Research administration Workshop, Financial Research Administration Workshop, Fundamentals of Sponsored Project Administration, and Sponsored Project Administration II.
http://www.ncura.edu/content/educational_programs/workshops/

NCURA TV
Each year, NCURA offers a series of TV broadcasts on critical issues of importance to sponsored program operations. Recent years have included such topics as audits, cost sharing, subrecipient monitoring, issues for the department administrator, and non-financial research compliance. These TV broadcasts, which can be viewed live or purchased as a DVD, provides excellent training opportunities within the institution.
http://www.ncura.edu/content/educational_programs/ncura_tv_2009/index2009.php

Online Tutorials
NCURA offers several multi-week online tutorials. These tutorials provided interactive learning activities as well as knowledge reviews for each lesson. Current tutorials are primers offered in the areas of clinical trials, federal contracting, and subawards.
http://www.ncura.edu/content/educational_programs/

Webinars
A number of webinars are offered on special focus topics that are of importance to research administration. Recent topics have included export controls, contract law, and procurement cards.

Other educational resources are located at: http://www.ncura.edu/content/educational_programs/