

# MSU INVESTMENT PROPOSAL FOR INSTITUTIONAL PRIORITIES

## PROPOSAL OVERVIEW

|                   |  |                     |                    |
|-------------------|--|---------------------|--------------------|
| <b>Title</b>      | Building Capacity for External Funding Increases to Augment Statewide Impact | <b>Request Date</b> | December 16, 2011  |
| <b>Department</b> | College of Education, Health & Human Development                             | <b>Email</b>        | lbaker@montana.edu |
| <b>Requestor</b>  | Dean Larry Baker   | <b>Phone</b>        | 406-994-4936       |

## STRATEGIC ALIGNMENT

|   |   |
|---|---|
| <p><b>Core Themes and Objectives (check all that apply)</b></p> | <p><b>Educate Students</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Our graduates will have achieved mastery in their major disciplines</li> <li><input checked="" type="checkbox"/> Our graduates will become active citizens and leaders</li> <li><input type="checkbox"/> Our graduates will have a multicultural and global perspective</li> <li><input type="checkbox"/> Our graduates will understand the ways that knowledge &amp; art are created and applied in a variety of disciplines</li> <li><input type="checkbox"/> Our graduates are prepared for careers in their field</li> <li><input checked="" type="checkbox"/> We will provide increased access to our educational programs</li> <li><input checked="" type="checkbox"/> Communities and external stake holders benefit from broadly defined education partnerships with MSU</li> </ul> <p><b>Create Knowledge and Art</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Students, faculty, and staff will create knowledge and art that is communicated widely</li> </ul> <p><b>Serve Communities</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> We help meet a fundamental need of the citizens of Montana by providing degree programs for our students</li> <li><input checked="" type="checkbox"/> We help meet the educational needs of the citizens of Montana by providing a wide range of educational opportunities to a variety of students</li> <li><input checked="" type="checkbox"/> Our students, faculty, staff, and administrators reach out to engage and serve communities</li> <li><input type="checkbox"/> Our students, faculty, staff, and administrator reach in to build the university community</li> </ul> <p><b>Integrate Learning, Discovery, and Engagement</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Each graduate will have had experiences that integrate learning, discovery and engagement</li> <li><input checked="" type="checkbox"/> Outreach activities will educate students and address the needs of the communities we serve</li> <li><input checked="" type="checkbox"/> Students, faculty, and staff will create knowledge and art that addresses societal needs</li> <li><input checked="" type="checkbox"/> MSU is a community that will be characterized by synergy within and across disciplines, roles and functions.</li> </ul> <p><b>Stewardship</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The public trusts the institution to operate openly and use resources wisely</li> <li><input checked="" type="checkbox"/> The faculty and staff are well-qualified and supported</li> <li><input checked="" type="checkbox"/> MSU will support Native American students, programs, and communities</li> <li><input checked="" type="checkbox"/> MSU will be an inclusive community, supporting and encouraging diversity</li> <li><input checked="" type="checkbox"/> Our publicly provided resources are used efficiently and effectively</li> <li><input type="checkbox"/> Natural resources are used efficiently and sustainably</li> <li><input checked="" type="checkbox"/> MSU nurtures a culture of resource conservation and ecological literacy among students, faculty and staff</li> <li><input type="checkbox"/> Our physical infrastructure (e.g., building, equipment, open spaces) will be well-maintained and useful</li> </ul> |
|---|---|

**INSITUTIONAL BENEFIT**

**Campuses**  Bozeman  Billings  Havre  Great Falls  FSTS  Extension  MAES

**Cross Depts** Please List: Education, and Health and Human Development

**TIMEFRAME**

**Proposed Dates** Start: July 1, 2012 End: June 30, 2015

**COST AND REQUIREMENTS**

| Funding Type           | One-Time (\$) | Multi-Year (\$) |        |        | Base (\$) | FTE |
|------------------------|---------------|-----------------|--------|--------|-----------|-----|
|                        |               | Year 1          | Year 2 | Year 3 |           |     |
| Personnel (w/benefits) |               | 25,000          | 25,000 | 25,000 |           |     |
| Materials & Supplies   |               |                 |        |        |           |     |
| Travel                 |               | 15,000          | 15,000 | 15,000 |           |     |
| Contracted Services    |               |                 |        |        |           |     |
| Capital                |               |                 |        |        |           |     |
| Other Operations       |               |                 |        |        |           |     |
| <b>TOTAL</b>           |               | 40,000          | 40,000 | 40,000 |           |     |

The annual costs for an effective EHHD Office of Funded Research include:

Faculty Director of the Office of Funded Research salary (\$35,000 including part-time benefits)  
 Project Development and Grant Specialist salary (\$75,000 including benefits, for 100% time devoted to OFR functions and not individual projects)  
 Pre and Post-Award services with human resources, effective team functioning, and fund accounting services (\$10,000 in addition to support increments budgeted within grants)  
 Seed funds to support emerging Principal Investigators and new projects (minimum of \$15,000)

The total budget for a fully funded Office of Funded Research is \$135,000/year.  
 Our current F&A allocation from the Vice President for Research is \$75,000/year.  
 Therefore we are struggling with an annual shortage of \$60,000.

**Please comment, if necessary, regarding cost and requirements.**

Our proposal is for just \$40,000/year for three years which continues an internally generated investment of \$20,000/year over and above allocated F&A funds.  
 Of these \$40,000 in requested funds, we propose to allocate \$15,000/year to seed funds for new projects, and \$25,000 to support the OFR Director and Specialist positions.

## PROPOSAL SCOPE

### Describe the Proposal

The College of EHHD proposes to fully support its Office of Funded Research which has as its functions to:

- Provide infrastructure and a cohesive policy framework to support funded programs that enhance the College mission to serve the people of Montana and beyond in education, health and well being.
- Foster a culture that encourages competitive research and acquisition of extramural funding;
- Develop faculty and professional staff expertise in developing fundable projects and securing and managing external funds by providing resources such as funding opportunities and templates for proposal elements, direct assistance, coaching and training.
- Provide a structure for publicity and outreach about faculty projects.
- Assist faculty in building relationships and experience with extramural funders and programs.
- Provide post-award coaching and services for effective project management, including team facilitation, annual planning, reports and publications, and assistance with negotiations with funders or between inter-institutional collaborators.

Our immediate goal, set by Dean Baker in Fall 2010, is to increase the number of proposal submissions to 60 per year, and increase the dollars awarded to \$10,000,000 per year. This represents a doubling of current productivity in this area. In addition to advancing several objectives within the MSU Mission (see "Strategic Alignment" on page 1 and the Impact and Assessment sections below), achieving this goal will result in many, varied benefits to individual faculty and staff, to the college and university as a whole, and to the wider Montana community:

- The College will build its capacity to provide "seed" money for new projects that serve the state.
- Principal Investigators will benefit through career progression, potentially increased salary, labor and collaborator assistance of various kinds, travel funds, improvements in equipment, possible course buy-outs etc.
- Faculty and staff will expand the number and expertise of collaborators on their projects (creating jobs and building greater subject area and interdisciplinary strength).
- The Departments will expand and strengthen their areas of expertise, potentially drawing more students.
- Departments will expand research opportunities for students.
- The number of funded faculty will increase from the current 12 to at least 20.

Barriers to achievement of these objectives are principally the limited resources we have currently to invest in the EHHD Office of Funded Research. We have been able to sustain a full-time Grants Specialist position only by assigning her post-award service functions on various grants (currently at about 25% of her position with an additional 30% pending). Each year we face the real prospect of losing her expertise (which has built up considerably during her seven years' tenure) due to uncertain funding streams.

Over the past several years since instituting the grant Specialist position we have seen considerable overall growth in grant proposals submitted and funded within the college (proposals increasing from 26 in 2006 to 36 in 2011), despite the departure of several highly remunerative programs and highly grant-productive faculty and staff. In order to take this effort to the next level we recently increased the Specialist to 1.0 FTE, and assigned a grant-experienced faculty member to collaborate with the Specialist in augmenting the research and extramural funding orientation of our faculty and staff. As a result, in the past four years (2008-2011) we have seen 33 newly engaged Principal (or Co-Principal) Investigators (10 in 2011), half (16) from a department (Education) which historically has a very low rate of extramural funding participation. On the other hand, the total number of faculty submitting proposals in any one of these same four years has remained roughly the same (about 19 per year), and the number of proposals has remained quite steady, at about 36 per year. And with recent squeezes in federal and private foundation budgets, we have seen our total annual new extramural awards actually decline somewhat (from a 2008-2009 average of over \$7M to a 2010-2011 average of about \$3M). In order to take full advantage of the growing interest in grant funding across the college (as of 2012, 64% of our regular faculty and full-time adjuncts have applied for funds as a PI or Co-PI), we need to have the Specialist and faculty Director fully funded for proposal development, and seed funding available for development of preliminary data and partnerships.

## PROPOSAL SCOPE

### Describe the broader impacts and benefits of this proposal

Investment in the EHHD Office of Funded Research will yield substantial dividends in numbers of extramural grant proposals submitted and funded. EHHD faculty and programs provide statewide benefits. Consistent with MSU Core Themes objectives, following are examples of current and planned externally funded program impacts:

*Our graduates will become active citizens and leaders.* Most funded projects in EHHD include undergraduate and graduate research opportunities, which require research ethics training, and engage students in service learning.

*We will provide increased access to our educational programs.* Current EHHD grants are providing national leadership in conducting educational programs that reach Native American students where they live, using distance learning teaching and resources. We plan to increase the number of such highly successful programs.

*Communities and external stakeholders benefit from broadly defined educational partnerships with MSU.* Current EHHD grants provide educational partnerships with Extension and local communities on such themes as obesity prevention and grandparents raising grandchildren; "Community-Based Participatory Research" is fostered by our grant-funded Center for Native Health Partnerships. Large proportions of EHHD faculty engage with communities directly, and all are focused on meeting societal needs.

*Create knowledge and art that is communicated widely.* All EHHD externally funded projects create and communicate new knowledge that is relevant to societal issues; most offer student research and/or creative experiences. For example, projects are:

- evaluating programs that help teachers effectively integrate technological capabilities in their classrooms;
- developing curricula that more effectively and rigorously teach science and engineering while getting K-12 kids excited about science or engineering careers;
- assessing how high schools can re-orient their curricula so that students emerge from school with significant proficiencies and not merely "passing grades";
- understanding the health conditions and needs of Mexican migrants and how these needs could be served;
- helping tribal communities understand their STI rates and what to do about them;
- understanding how to communicate about disease risks in ways that encourage women and men to participate in preventive health programs;
- understanding how best to conduct and evaluate student internships and assist internship hosts to effectively supervise and evaluate their trainees;
- understanding how best to educate students to think interdisciplinarily about systemic issues, and how to evaluate such learning;
- understanding what tribal communities need in order to more effectively utilize government and foundation grant opportunities.

*Meet the educational needs of the citizens of Montana by providing a wide range of educational opportunities to a variety of students.* Already, EHHD has more doctoral students than any other MSU college. A proposed program would create new teacher capabilities and endorsements for serving Montana students (particularly Native Americans) with low formal English skills that impede their school learning.

*Our students, staff, faculty, and administrators reach out to engage and serve communities.* EHHD faculty are leading campus-wide student service-learning efforts to construct a new school in earthquake-ravaged Haiti.

*Each graduate will have had experiences that integrate learning, discovery and engagement.* A new EHHD degree program fostered by external funding requires of students such integrative experiences.

*Outreach activities will educate students and address the needs of the communities we serve.* EHHD programs are enhancing prospective teacher training by helping our students to meet Bozeman Public School needs for mentors, tutors and after-school programming.

*Students, faculty, and staff will create knowledge and art that addresses societal needs.* EHHD faculty and students are investigating strategies to improve rural and tribal food security and nutrition; and to improve heart health.

*MSU is a community that will be characterized by synergy within and across disciplines, roles and functions.* EHHD faculty are collaborating with archeologists to excite and engage children in science learning.

*MSU will support Native American students, programs, and communities.* With the highest Native American student enrollment, EHHD provides leadership in Native American educational opportunities and health programming.

*MSU nurtures a culture of resource conservation and ecological literacy among students, faculty and staff.* External funding helped launch a new EHHD major focused on sustainability of the Montana food and farm system.

## ADDITIONAL INFORMATION

### Implementation Plan *(Please describe with timelines)*

Year 1: fully fund the EHHD Office of Funded Research; assist 30 faculty and professional staff members to generate 45 proposals; provide 2-4 training sessions; disburse \$15,000 in seed funding for new project development.

Year 2: fully fund the EHHD Office of Funded Research; assist 35 faculty and professional staff members to generate 55 proposals; provide 2-4 training sessions; disburse \$15,000 in seed funding for new project development.

Year 3: fully fund the EHHD Office of Funded Research; assist 40 faculty and professional staff members to generate 60 proposals; provide 2-4 training sessions; disburse \$15,000 in seed funding for new project development.

### Assessment Plan *(Please describe with indicators)*

The College of EHHD has its own indicators for success, namely annual submission of 60 proposals/year and annual income of \$10M/year in external funding. In addition, in accordance with the above-checked objectives indicating strategic alignment between the EHHD/OFR mission and MSU institutional priorities, we propose to track the following indicators of MSU strategic success as they relate directly to an increase in extramurally funded EHHD programs (through expansion of existing programs or creation of currently envisioned or wholly new programs):

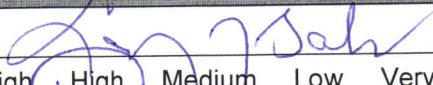
- Magnitude of externally funded research expenditures.
- Proportion of students:
  - completing ethics training (or courses) for research or professional practice.
  - participating in internship and co-operative educational opportunities.
  - enrolled from underserved populations.
  - completing service learning courses and engagement experiences.
  - taking courses identified as offering engagement opportunities.
- Number of student research and/or creative experiences; and undergraduate research projects.
- Number of degree programs available via distance delivery; number of curricula developed and distributed.
- Number of students, faculty and staff participating in identified programs focused on providing educational opportunities and/or meeting societal needs.
- Number of programs offered in underserved communities.
- Number of community partnerships, Extension programs offered, and Extension publications and workshops.
- Number of faculty outreach activities to Montana communities; faculty, staff, and administrators participating in community outreach activities.
- Number of grant proposals focused on improving K-12 education; number of partnerships with K-12 institutions and K-12 educators participating in MSU educational programs; and number of MSU programs taken off-campus to K-12 students or bringing K-12 students to campus.
- Number of programs requiring courses that include engagement activities; faculty and staff offering service learning courses; & courses updated to include engagement opportunities.
- Number of faculty and staff assisting student groups focused on meeting societal needs.

The EHHD Office of Funded Research will create a database and gather baseline data on these indicators for EHHD at the beginning of the grant period, and collect or collate data in each of the three funded years in order to report change in all of the above measures.

### **If assessed objectives are not met in the timeframe outlined, what is the plan to sunset this proposal?**

Our intention is to increase funding streams to the College of Education, Health and Human Development to a level that may qualify for annual F&A distributions equal to or greater than the costs of fully supporting the EHHD Office of Funded Research. If we do not meet that level (or F&A distribution principles don't enable it), we propose to return to direct project funding of portions of our OFR personnel FTE (for post-award support). Meanwhile we will have significantly increased research and project funding, and accomplishments for the university and the state.

**SIGNATURES**

| Department Head <i>(please print)</i>  | Signature <i>(required)</i>  | Date     |
|--|--|----------|
|  |  |          |
| Dept Head Priority <i>(please circle one)</i> :    Very High    High    Medium    Low    Very Low      |  |          |
| Dean/Director <i>(please print)</i>  | Signature <i>(required)</i>  | Date     |
| Larry S. Baker   |  | 12-29-11 |
| Dean/Director Priority <i>(please circle one)</i> :    Very High <u>High</u> Medium    Low    Very Low |  |          |
| Executive/VP <i>(please print)</i>   | Signatures <i>(required)</i>   | Date     |
|  |  |          |
| Executive/VP Priority <i>(please circle one)</i> :    Very High    High    Medium    Low    Very Low   |  |          |