Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

1. State the proposed Institute/Center’s name and purpose.

This is a request to change the name of a Regent’s-approved Center from the current name of “Center for Bison and Wildlife Health” to “Center for Wildlife Health and Disease Ecology.”

2. A comprehensive statement of the Institute/Center’s mission and its relationship to the University mission.

A. State the Institute/Center’s mission.

The mission of the Center is to serve as an internationally recognized center of excellence for interdisciplinary research on wildlife health and disease.

B. Identify the Institute/Center’s goals and objectives.

With this name change, we propose to repackage, reinvigorate and modernize the existing “Center for Bison and Wildlife Health” within the Department of Microbiology and Immunology (MBI) at MSU. We propose to rename the Center to “Center for Wildlife Health and Disease Ecology” to broaden the focus of the center and catalyze interest in the growing field of Disease Ecology. The original center was initiated by faculty who worked only on bison, and hence their focus was on bison health. Our focus is broader because of the broader faculty interests, covering wildlife diseases at local, national and international scales. Even on the local scale, we aim to work on a variety of species, including bighorn sheep, wolves, elk, moose, bats, and prairie dogs. Although we hope to include research on bison health within the center, singling out a specific species may give the incorrect impression that our focus too narrow.

The Center, which will have an expanded focus on wildlife health and infectious disease ecology, will have the following updated goals and objectives:

1. Become an internationally recognized center of excellence for interdisciplinary research on wildlife health and disease.
2. Procure research funding for wildlife health research initiatives.
3. Become a think-tank and innovation center for wildlife disease research.
4. Prototype and refine interdisciplinary approaches to research.
5. Attract international science leaders to Montana to think about wildlife disease issues.
7. Create a regional community for scientists with similar interests (e.g. MSU, NIH Rocky Mountain Labs, wildlife agencies, wildlife NGOs).
8. Convene workshops, speaker series and training courses.

C. What specific need is being responded to in developing the proposed Institute/Center?
This Center already exists. We are only requesting a name change. We propose to repackage, reinvigorate and modernize the existing “Center for Bison and Wildlife Health” within the Department of Microbiology and Immunology (MBI) at MSU. Given MSU’s history, unique geography and interdisciplinary expertise, we have an opportunity to update the existing Center and take it to a new institutional trajectory that promotes leadership in science, education and practice.

D. Describe how the Institute/Center benefits the department, college, or institution.

This Center will continue to bring recognition to MSU as an internationally recognized Center of excellence for interdisciplinary research on wildlife health and disease. The Center will also help procure research funding for wildlife health research initiatives. Changing the name to become more relevant to current issues in the field will help to accomplish these goals.

E. Describe the Institute/Center’s relationship to the University mission.

The state mission of Montana State University is to educate students, creates knowledge and art, and serves communities by integrating learning, discovery and engagement. This mission of this existing Center is to serve as a resource for interdisciplinary research and education on wildlife health and disease. The Center will also help procure research funding for wildlife health research initiatives. These are all consistent with the University mission.

3. Briefly describe the Institute/Center’s anticipated activities.

A. Identify faculty expertise available for participation in the Institute/Center’s activities.

MBI has established a “Research and Instructional Core” and a group of faculty studying zoonotic diseases (animal and human health) and supported by competitive research funding that probably well exceeds $100 million dollars over >20 years. This funding has led to research expertise and facility upgrades that are the building blocks of this expanded initiative. Moreover, MBI hosts the WIMU regional program in Veterinary Medicine, and has links to the Washington State University Paul G. Allen School for Global Animal Health, which complements the proposed direction for our Center.

B. Which departments on campus will be involved and how will the Institute/Center contribute to the academic programs of the institution?

This Center already exists in the Department of Microbiology and Immunology. Activities of the Center will contribute to new courses being planned in the field of Disease Ecology. Disease Ecology is highly interdisciplinary and merges concepts from microbiology, immunology, evolution, mathematics, epidemiology, medicine, veterinary medicine, ecology, and geography. Thus the discipline of Disease Ecology is positioned to addresses major global health issues such as how climate change affects pathogen transmission dynamics, or why pathogens spread in some communities but not in others. The goals of this Disease Ecology course differ from other disciplines such as epidemiology (aims to identify risk factors for disease), or parasitology (focuses on parasite taxonomy and life cycles), microbiology (focuses on studying microscopic organisms).
Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

4. Identify the organizational structure of the Institute/Center within the institution.

A. Identify all agencies, organizations and/or institutions that will be involved.

This is an existing Center in the Department of Microbiology and Immunology at Montana State University. This is only a request for a name change. In the future, we hope to engage scientists with similar interests from a variety of agencies/organizations/institutions (e.g., MSU, UM, NIH Rocky Mountain Labs, Wildlife Agencies, Wildlife NGOs).

B. Identify advisory council information.

The advisory council will include highly connected leaders in the field of Disease Dynamics, Disease Ecology, or Wildlife Health; faculty from MSU; potential patrons; people with experience starting and growing organizations; experts in interdisciplinary approaches to science; and people who are willing to work to grow the center. For example, potential board members include:

Internal:
- Mark Jutila (Head of Department MBI)
- Mark Young (Associate Vice President for Research)
- Raina Plowright (Assistant Professor and expert in this area)

External (possible members):
- Peter Hudson (Fellow of the Royal Society and Director of Huck Institute for Life Sciences at Pennsylvania State University, world leader in field of Disease Ecology)
- Gary Tabor (Executive Director Center for Large Landscape Conservation, decades of experience establishing and growing organizations)
- Michael Gorman (Professor at University of Virginia – expert in interdisciplinary approaches to science)
- Pamela Thye (New York donor with experience on board of large wildlife NGOs & access to donors for funding)
- Chris or Rebekah Bunting (business leaders and philanthropists)
- Brad Vale (former senior vice president Johnson and Johnson, DVM PhD)
- Mary Pearl (Dean of Macaulay College, CUNY, former president of Wildlife Trust)
- Jonathan Patz (Director Global Health Initiative University Wisconsin, shared Nobel Laureate)
- Megan Parker (Executive Director Working Dogs for Conservation)

5. Identify first year and continuing finances necessary to support the Center/Institute, including the sources of funding.

This is an existing Center.

A. Will additional faculty and other resources be required to implement this Center/Institute? If yes, please describe the need and indicate the plan for meeting this need.
Montana Board of Regents
RESEARCH CENTER AND INSTITUTE PROPOSAL FORM

No.

B. Are other, additional resources required to ensure the success of the proposed Center/institute? If yes, please describe the need and indicate the plan for meeting this need.

No.

6. Describe other similar Centers/Institutes or research capacities in the state and surrounding region.

A. Describe the relationship between the proposed Center/institute and any similar Centers/Institutes, programs, or research capacities within the Montana University System.

This is an existing Center. There are no similar Centers within the Montana University System. However, there are faculty interested in Disease Ecology and wildlife health scattered across institutions including at MSU, University of Montana (one faculty member), MT Fish Wildlife and Parks (at least three employees), Wildlife Conservation Society (one employee), USGS (at least three employees), NIH Rocky Mountain Labs (at least two employees) and other institutions. One of the longer term goals of our Center is to facilitate interaction of these individuals.

B. In cases of substantial duplication, explain the differences between these and the need for the proposed Center/institute at an additional institution. Describe any efforts that were made to collaborate with these Centers/Institutes, programs or research capacities. If no efforts were made explain why.

N/A

7. Assessment: How will the success of the program be measured?

We will assess growth of the Center and acquisition of new extramural funding.

8. State the internal campus review and approval process which has occurred prior to submission to the Commissioner's Office. Indicate, where appropriate, involvement by faculty, students, community members, professional constituencies, etc.

The Department Head and interested faculty met and considered new names for the Center. We then discussed the change with VP and Dean Charles Boyer, who approved of this name change. We also solicited input of interested parties and arrived at the new name.