## ITEM 155-1002-R0512 Interdisciplinary Science Building Finish Out; The University of Montana–Missoula

## THAT

Consistent with MCA 18-2-102 (2b) and Board of Regents Policy 1003.7 the Board of Regents of the Montana University System authorizes The University of Montana–Missoula to implement steps to complete unfinished space in the basement, second, and third floors of the Interdisciplinary Science Building.

## **EXPLANATION**

The Interdisciplinary Science Building (ISB) was designed to be a catalyst for stimulating high levels of research in the natural sciences on the Missoula campus. Due to limited funding, the initial construction included three and a half floors of shelled out space. As funding became available, the intent was that unfinished floors would be completed to house faculty laboratories and state-of-the-art core facilities, for answering pressing questions within and between disciplines.

The Board granted approval for The University of Montana - Missoula to complete the unfinished areas of the Interdisciplinary Science Building (ISB) under Board Item 142-1016-R0309 at the March, 2009 Board meeting. The construction was dependent on the award of a federal grant proposal submitted to the National Institute of Health NCRR CO6 Award which was part of the federal stimulus package. The University was not awarded the grant so the project was put on hold and much of the building remains unfinished.

The current request to finish out much of the building will provide "core facilities" on the basement level. Modules to serve these multi-user facilities will include: an electron microscopic laboratory with several types of scopes for visualizing small-scale biological and geochemical structures, a collection of mass spectrometers with various capabilities, an X-ray diffraction lab where high resolution molecular modeling can be performed, and a physics laboratory for calibration of sophisticated solar observing instruments.

The second floor of the ISB will house research space for faculty, research staff and students associated with the Center for Bimolecular Structure and Dynamics (CBSD). The CBSD has been granted a highly competitive award of nearly \$10M from the National Institutes of Health IDeA Program as a Center of Biomedical Research Excellence (CoBRE). An interdepartmental center that promotes collaboration and training across disciplines, the CBSD includes faculty from the Department of Chemistry and Biochemistry, the Division of Biology, the Department of Biomedical and Pharmaceutical Sciences and the Departments of Computer Sciences and Mathematics. Presently, the 2<sup>nd</sup> floor of the ISB houses the laboratory for two CBSD faculty. Proposed renovations will complete the build-out of the 2<sup>nd</sup> floor, and provide laboratory, office and equipment space for new CBSD faculty. Space will also be provided for common instruments and utilities that will be used by associated departmental faculty and students. Laboratory design is state-of-the-art, using modular laboratory bench work and cabinetry and easily reconfigurable work spaces, to meet evolving research needs at minimal cost.

The third floor space will house an interdisciplinary research cluster investigating glaciers, polar ice sheets, and Montana's seasonal snow. Two faculty members from different departments (Geosciences and Computer Science) and their research groups will be united in space accommodating 7-10 graduate students,

1-2 undergraduate research assistants, and up to 2 postdoctoral research associates. The space will include computational facilities enabling high end numerical modeling with cross-talk between researchers from computer sciences and geosciences. The space will include an instrumentation development lab used to build and test custom ice drilling equipment, and to build instruments for deployment in snow and ice. A cold environmental chamber will be used to test instruments in cold conditions, and to conduct laboratory experiments on ice mechanics.

The current inventory of space assignable to funded research to execute the research described above has been exhausted. Completion of this space is vital to growing UM's research, graduate programs and to attracting prominent faculty researchers and students to campus.

Cost of the project is estimated to be \$3,625,000 and will be financed with an InterCap Loan over 15 years. Currently, the InterCap rate is 1.25% computing to an annual payment of \$266,534. At 5% the annual payment would be \$349,241. Facilities and Administrative (F&A) revenue generated from research grant/contract awards utilizing this space will service the annual debt. The current projection for F&A return on the CoBRE grant alone is more than \$500k over the next 5 years.

## **ATTACHMENTS**

**Project Overview**