

**The University of Michigan Flint**  
**FY 2010 Capital Outlay Project Request**  
**Murchie Science Laboratory Building (MSLB)**  
**Priority #1**  
**Total Project Cost \$21,840, 000**

<b>Is The Project A Renovation or New Construction?</b>	<b>Renovation</b>
<b>Is a 5-year Master Plan Available?</b>	<b>YES</b>
<b>Are Match Resources Currently Available?</b>	<b>YES</b>
<b>Has the University Identified Available Operating Funds?</b>	<b>YES</b>

**A. Project Description Narrative**

Since opening in 1988, the Murchie Science Building (MSLB) has provided excellent space for the laboratory science programs at UM-Flint. Approximately one-half the building features wet labs. Our laboratory science programs are flourishing, with excellent accomplishments by our faculty and students. MSLB, however, was designed for much smaller scientific programs than we have today and for a different generation of scientific equipment. The condition and design of the current laboratories impedes critical goals of the University. Specifically, the University of Michigan-Flint has made expansion of its programs to train future scientists and science educators a top priority. Further, the University is committed to working with K-12 students and educators throughout our region to meet State of Michigan goals to increase the supply of citizens in STEM careers. The University is expanding its offering of science and math camps and other STEM promotion activities. The University is also the lead higher education partner with the Genesee Intermediate School District in an early/middle health professions college program which opened its doors this past fall. Our programs in Biology and Chemistry are experiencing a substantial increase in demand, spurred by the needs of employers. The increased demand and the concomitant increased utilization of the laboratories have created an academic bottleneck for students in the sciences and related health fields. We need to reconfigure space to add several additional instructional labs for chemistry and biology plus attendant equipment storage space. Our Chemistry Department cannot admit additional students in organic chemistry because of the lack of laboratory space. The Biology Department, which has recently added a Master of Science program, requires an additional 24-student lab to accommodate student demand at the undergraduate and graduate levels. Existing labs require extensive renovation, such as replacement of fume hoods and hood controls, and addition of Internet connectivity. Deferred maintenance items that require attention include replacing the roof, disabling operable windows, renovating for disability accessibility, and upgrading the MSB elevators.

As the University of Michigan Flint campus continues to plan for the future, in addition to providing state-of-the-art classrooms, we envision a state-of-the-art environmentally "green" designed science laboratory building (renovated and ideally enlarged MSLB). Such a state-of-the-art science/education building would create ideal space for future science teachers to learn how to teach science, would provide aspiring undergraduate students the facilities they will find in industry and in research universities, would provide our scientists research labs in which to involve undergraduate and graduate students, and would enable us to bring thousands of K-12 students from throughout the region to experience the thrill of science with hands on activities on Super

Science Saturdays and at Summer Science camps. In short, a science laboratory building that will enable UM-Flint to help better prepare K-12 science teachers, excite younger students about becoming scientists and teachers of science, and better prepare our students for Science/Technology/Engineering/Mathematics (STEM) careers. Such a building will be particularly important as we embark on establishing an early/middle health professions college on our campus in partnership with the Genesee Intermediate School District and as we join with Ann Arbor in developing cooperative programs in engineering.

## **B. Other Alternatives Considered**

The University has three basic alternatives regarding the Murchie Science Laboratory Building. They are: a) the status quo: Leave the buildings as is; b) renovation; and c) expansion of the existing footprint or replacement at a different location on campus. Given the buildings' age and general condition, the most logical alternative is renovation, although we are exploring the feasibility of expansion of the existing footprint, or replacement of this building north of the river. The status quo is unacceptable; expansion of the existing footprint or replacement is out of the question until we have a thorough review of this alternative. Renovation holds the promise of breathing new life into the building and of allowing the University to make all of its classrooms state-of-the-art.

## **C. Programmatic Benefit to State Taxpayers and Specific Clientele or Constituencies**

This project will allow the University to meet the educational needs of future students and graduates in an environment that they will find both technologically sophisticated, as well as collegial and oriented toward interactive, experiential learning.

The ultimate beneficiaries of all the renovations, upgrades, and initiatives described here will be the students who choose to attend the University of Michigan-Flint. We must not forget Governor Granholm's emphatic invocation of a technologically-sophisticated workforce as an important part of the answer to the state's economic concerns. As David Hollister, director of the Michigan Department of Labor & Economic Growth wrote a few years back, Michigan's economic base "is shifting from manufacturing to information and services," a shift that requires us to prepare the work for more technologically challenging jobs."

Governor Granholm has pointed out that it is "clear that our state's path to a robust economy with good paying 21<sup>st</sup> century jobs requires all our residents to complete their education beyond high school." Bringing increasing numbers of students from the Flint area—one particularly hard-hit by the transition from an industrial to an information economy—is a critical function of the University of Michigan – Flint that this renovation project will facilitate.

As we focus on the state's and the region's economic situation, and on the University's desire and obligation to help improve it, we shall remember that education at the University of Michigan-Flint not only equips students to assume responsible positions in the careers of their choice; it also helps equip them with a broader and deeper understanding of what it means to live a full life whose riches transcend material concerns; and helps them better grasp what it means to live in creative, constructive rapport with their fellow citizens. These considerations, too, are always part of the University of Michigan educational experience.

#### **D. Funding Resources**

The funding for the University's share of the total project cost will be made available from fundraising activities and Central Administration sources.