2014 Capital Request



Microbial Sciences Research Building

Twin Cities

Background

The invisible force of microbes

- Microbes support plant, animal, and human life functions such as digestion and decomposition. In fact, researchers can "put microbes to work" to aid many functions.
- Microbes can also harm life. Eradicating diseases requires understanding microbes such as pathogenic bacteria.
- It's believed that only 1% of bacteria on earth have been identified by past research.
- New microbial research requires high performance laboratories to ensure safety and accuracy.

Potential strength

- U microbial sciences faculty are scattered in eight departments in five colleges across the St. Paul and Minneapolis campuses.
- Recent, independent analysis determined the U has unparalleled potential in microbial research.
- Realizing this potential requires a single, state-ofthe-art facility to support microbial research.

Antiquated laboratories

- Research is limited in St. Paul by a predominance of 50-year-old buildings.
- High performance microbial laboratories are scarce in Minnesota, and most are dedicated to medical sciences.



Project Description

Build a 55,000-square-foot laboratory to house 180 researchers

- The new lab space will support interdisplinary microbial research.
- The space will be flexible to encourage collaborative work.

Consolidate microbial science programs of the College of Biological Science; the College of Food, Agricultural, and Natural Resources Sciences; and the College of Veterinary Medicine

Decommission one obsolete building

Benefits

Become a leader in microbial sciences

- Collaboration across microbial research disciplines will up the opportunities for breakthrough discoveries.
- The new building will position the U to be awarded more microbial research grants.
- The new building will support various MnDRIVE initiatives to solve Minnesota industry problems.

Partner with Minnesota businesses

- Businesses such as Ecolab and Cargill, and start-up companies such as Segetis, BioAmber, and Reluceo, have high stakes in advancing microbial sciences in areas like food production and safety, infectious diseases, and bioremediation of water contamination and production of chemicals from bio-based feedstock.
- Students will gain valuable connections and experiences through research partnerships with these businesses.



The University is poised to become a leader in microbial sciences.

State investment: \$30 million

- University funding: \$15 million
- Total project cost: \$45 million

For More Information http://z.umn.edu/6stepsforward