

# 2014 Capital Request



UNIVERSITY OF MINNESOTA  
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## Tate Science and Teaching Renovation

*Twin Cities*

### Background

#### Historic building, historic discoveries

- The John Tate Laboratory of Physics was built in 1926 on the iconic Northrop Mall.
- A cutting-edge building in its time, Tate has been home to six Nobel Prize recipients.
- Tate's observatory is a regional draw, recently hosting over 1,000 people to view the transit of Venus.

#### Heart of science teaching

- Today, the 200,000-square-foot Tate struggles to serve more than 3,500 students taking STEM courses each year.
- On average, 50 physics demonstrations are performed daily for 2,500 students in Tate's lecture halls.

#### Serving growing science programs

- Enrollment has doubled in 2013 in entry-level courses for earth sciences majors.
- The School of Earth Sciences and the School of Physics and Astronomy have grown to occupy seven buildings.
- The physical fragmentation of these schools thwarts collaboration.
- Growth has been addressed with limited additions and renovations, which have led to accessibility challenges.



Tate Laboratory is part of the iconic Northrop Mall.

### Project Description

#### Preserve Tate's historic exterior

- Renew the classical architecture of Tate's façade.

#### Renovate Tate's interior

- Improve accessibility between floors.
- Construct three new lecture halls to provide better viewing for students.
- Modernize building systems to provide safer and more comfortable learning environments.
- Create right-sized labs to support modern research.

#### Consolidate a majority of both the School of Physics and Astronomy and the School of Earth Sciences within Tate

### Benefits

#### Bolster STEM research and teaching

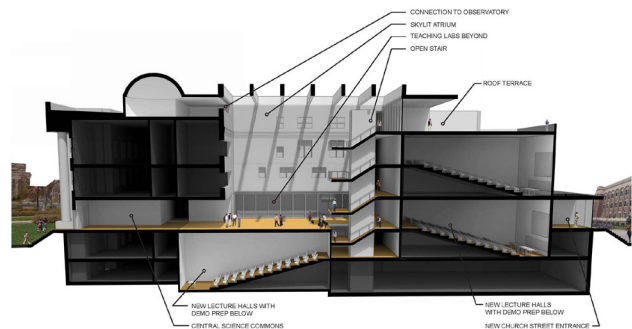
- The project supports the Minnesota Legislature's emphasis on STEM education.
- Minnesota companies are eager to hire STEM majors who are trained to be versatile problem solvers in science and engineering.
- Improved labs will expand research opportunities for students.
- Introductory earth sciences classes will be able to incorporate more demonstrations.
- The labs will support research such as improved core and metal sampling useful to Minnesota mining industries.

#### Foster learning communities

- Centrally located labs and classrooms for scientific disciplines will promote student success.
- Physical proximity will promote collaboration and lead to higher quality research and learning.



Hundreds of physics class demonstrations are prepared in this room each week.



The renovation will improve accessibility and support modern research and learning practices.

### State investment: \$56.7 million

- University funding: \$28.3 million
- Total project cost: \$85 million

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