

# The Vision for Missouri S&T & Engagement

Dr. Christopher G. Maples  
Interim Chancellor



# Vision

**Missouri S&T will be the leading public technological research university for discovery, creativity and innovation.**

We will cultivate curiosity, creativity and confidence in our graduates.

We will be the institution of choice for partners around the world ... to solve the great challenges of our time.



# Vision

*“To be a premier land-grant institution dedicated to the creation and inclusive sharing of knowledge to advance the educational, health, cultural, economic and social interests of the people of Missouri, the nation and the world”*

# Missouri Compact

- **Missouri Compact for Excellence in Student Success is to:**
  - Increase academic quality and diversity
  - **Enhance learning experiences**
  - Increase flexible paths to learning and degree completion
  - Increase professional development
  - Increase retention and graduation rates
  - **Improve career outcomes**
  - Increase affordability
  - Reduce debt at graduation and loan default rates

# Missouri S&T: History & Advantage

- 98 degree programs, 39 areas of study
- Broad range of engineering and computing degree programs (18)
- Cooperative Engineering Program with Missouri State
- Experimental Mine, named *Popular Science's* "awesome college lab"
- Missouri's first nuclear reactor
- Experiential learning
- Missouri S&T offers the nation's only Ph.D. in explosives engineering



**Dr. Catherine Johnson**  
**Explosives Engineering**



# Student Success and Outcomes

- Increase support for Pell recipients
- Increase access to open educational resources
- Increase access to distance learning curriculum
- Increase articulation agreements with Community Colleges
- **Increase experiential learning opportunities**
- **Increase job placement and matriculation for graduate & professional studies**

# S&T Experience: **genuine critical thinking**

Missouri S&T Mars Rover Design Team  
Winners of the 2017 University Rover Challenge



# Successful graduates in high demand

## Starting salary potential

**22<sup>nd</sup> in the nation** public and private

**8<sup>th</sup> in the nation** public universities

**1<sup>st</sup> in Missouri** public and private

Undergraduate  
starting salary:

**\$61,831**

Graduate  
starting salary:

**\$76,632**

**Employer  
satisfaction  
with S&T  
hires is  
100%**



# S&T students: smart, engaged, 70% Missourians

## S&T's first-year students

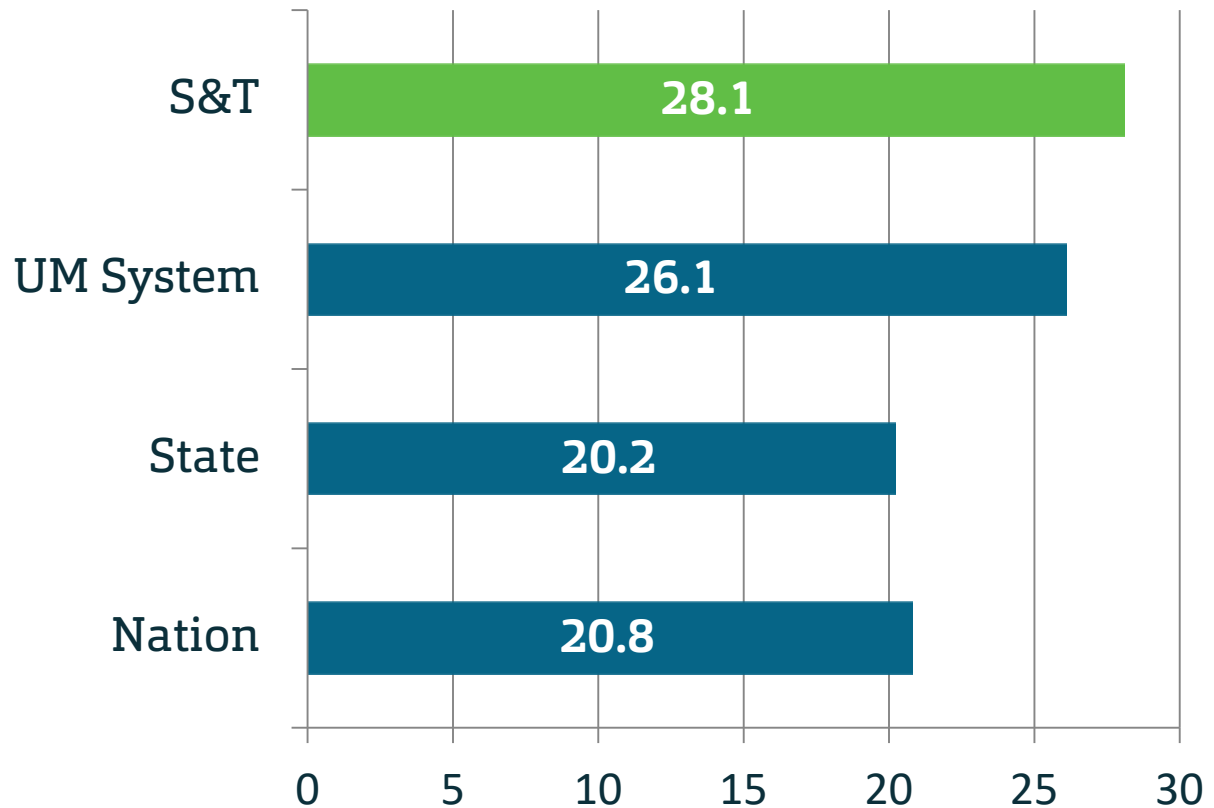
**38%** involved in  
Project Lead The  
Way

**31%** involved in  
VEX or FIRST  
Robotics

**22%** attended an  
S&T summer camp

**21%** are first  
generation

ACT averages for our first-year students

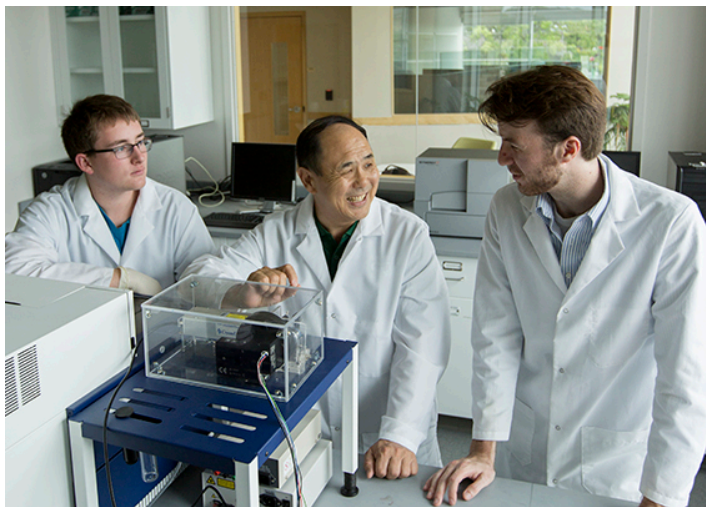




# Missouri Compact

- **Missouri Compact for Excellence in Research and Creative Works is to:**
  - Increase intellectual merit and broader impact
  - Increase extramural research
  - Increase high-quality publications and citations
  - **Increase faculty awards and recognition**
  - Increase curated exhibits and juried performances

# Missouri Compact: Faculty Awards & Recognition



Ma named American  
Chemical Society Fellow

July 2017



Xiao named Canadian Academy  
of Engineering Fellow



Ferguson named  
Royal Society of  
Arts Fellow

# Missouri Compact

- **Missouri Compact for Excellence in Community Engagement and Economic Development is to:**
  - Build a climate that values the background, experiences and perspectives of every Missourian
  - Increase effective partnerships in the areas of educational, health, cultural, economic and social issues with local, state and global communities
  - *IP, patents, start-ups, & other spin-off opportunities*

# Missouri Compact: Economic Development

FY2017 - a record-breaking year at Missouri S&T for technology transfer.

- ❖ \$540,396 received in royalty income (>2X 2013)
- ❖ \$187,998 in royalties paid to inventors and authors
- ❖ \$121,177 in royalty income returned to S&T departments (~ \$25,000 more than 2016)
- ❖ 47 new invention disclosures, including five software disclosures



# A leader in infrastructure research



Advanced Construction and Materials Laboratory

# Chemistry, Biology, & Bioengineering Complex



Phase I: James E. Bertelsmeyer Hall

**\$22.3M—100% S&T + donors**

Opened Fall 2014

Schrenk Hall upgrade (Phases II & III)

Phase II: \$18M (\$12M State;  
**\$6M University**)



Phase III: \$54M request (~57%  
total project cost)

# Thank you! Questions? Comments?



# BY THE NUMBERS

**8,838** students: **6,909** undergrads and **1,929** grads

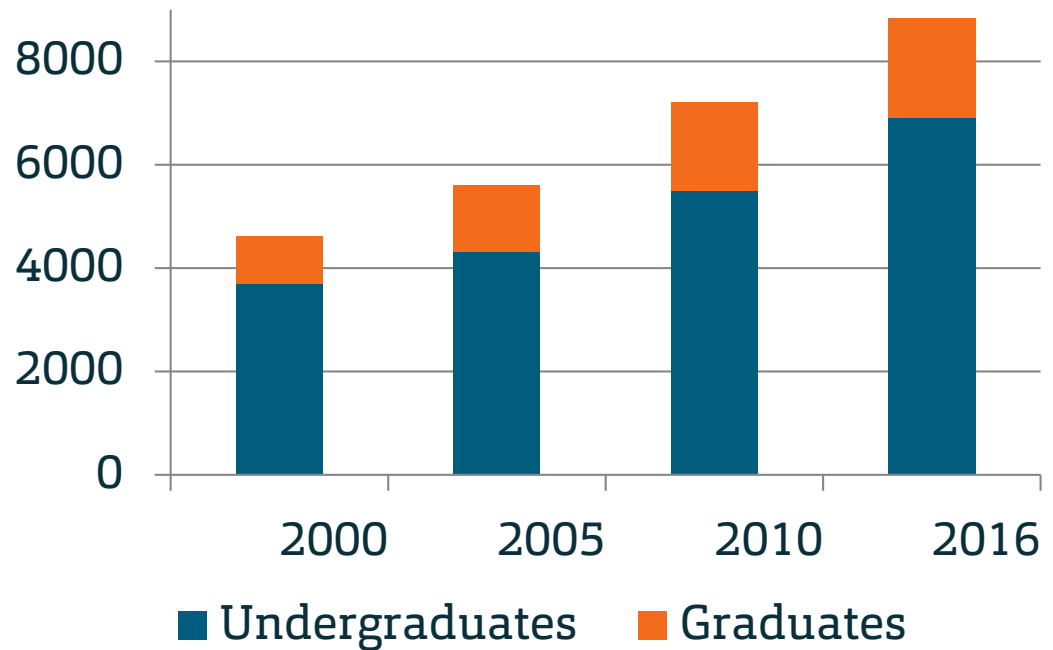
**71%** Missourians

**16%** out-of-state

**13%** international

**77%** men

**23%** women



**91% increase in enrollment since 2000**