PRESIDENT’S REPORT

Mun Y. Choi

Board of Curators Meeting

June 23, 2022
Congratulations, Graduates!

12,939 total degrees across the UM System during the past academic year
Leadership Update

John Middleton
Associate Vice President
Academic Affairs and Chief of Staff

Dusty Schnieders
Assistant Vice President
Government Relations

Mehrzad Boroujerdi
Dean, CASE

Cindy Nelson
Chief HR Officer

Richard Barohn
Executive Vice Chancellor
Health Affairs and
Hugh E. and Sarah D.
Stephenson Dean, School of Medicine

Drury Cooper
Dean, A&S

Mackenzie Moorefield
Executive HR Director

Cindy Thompson
Dean, Libraries

Reggie Hill
Vice Chancellor for Strategic Enrollment
$464M in State Core Appropriations

- HB 3003 allocated cores for the unique activities of UM universities:
  - Educational Core - $263M
  - First Professional Doctorate Degrees Core - $95M
    - PhD, MD, DMD, PharmD, VetMD, Law, etc.
  - Research & Development Operations Core - $75M
    - UM research expenditures ~$487M
    - All other MO publics’ research expenditures ~$20M
  - Land Grant Core - $28M (Extension & Engagement)
- UM produces 48% of all undergrad degrees in MO
- UM receives $26K in Education Core per undergraduate degrees awarded - the lowest of all MO 4-year publics
# Comparison of MO Universities

<table>
<thead>
<tr>
<th>School</th>
<th>Rank</th>
<th>Appropriations per UG Degrees</th>
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</thead>
<tbody>
<tr>
<td>MIZZOU</td>
<td>1</td>
<td>$19,552</td>
</tr>
<tr>
<td>UMKC</td>
<td>2</td>
<td>$25,254</td>
</tr>
<tr>
<td>UM (Average)</td>
<td>3</td>
<td>$25,700</td>
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<tr>
<td>SOUTHEAST MO</td>
<td>4</td>
<td>$28,156</td>
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<tr>
<td>MO STATE</td>
<td>5</td>
<td>$29,414</td>
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<tr>
<td>UMSL</td>
<td>6</td>
<td>$30,482</td>
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<tr>
<td>MO SOUTHERN</td>
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<td>$30,708</td>
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<tr>
<td>NW MO STATE</td>
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<td>MO WESTERN</td>
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<tr>
<td>S&amp;T</td>
<td>10</td>
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<td>CENTRAL MO</td>
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<td>TRUMAN</td>
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<tr>
<td>HARRIS STOWE</td>
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<td>$56,886</td>
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<tr>
<td>LINCOLN</td>
<td>14</td>
<td>$79,762</td>
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$225M in American Rescue Plan Act Funds

- **MU** Received $104M for the NextGen, Radiopharmaceuticals and Animal Science Programs
- **UMSL** received $40M to consolidate academic programming on its north campus and establish a North St. Louis County Business and Workforce District on its south campus
- **UMKC** received $40M for the construction for a Health Science District Development
- **Missouri S&T** received $41M for the construction for the Missouri Protoplex for Manufacturing Engineering
$111M in Federal Appropriations

Mizzou:
- $61M for NextGen Precision Health - DHHS-HRSA (Sen. Blunt)
- $3M for an endowment for NextGen professorships - Dept of Education (Sen. Blunt)
- $4M for Center for Agricultural Animal Genetic Engineering and Health - DHHS-HRSA (Rep. Luetkemeyer)

UMKC:
- $13M for rural medicine education – DHHS-HRSA (Sen. Blunt)
- $2.5M for healthcare workforce development – DHHS-HRSA (Sen. Blunt)

UMSL:
- $2.5M for a simulation laboratory for nursing education – DHHS-HRSA (Sen. Blunt)
## UG Admissions Update

<table>
<thead>
<tr>
<th></th>
<th>Freshmen Accepted (with deposit)</th>
<th>Transfer Accepted (with deposit)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6/20/22</strong></td>
<td><strong>2020</strong></td>
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<tr>
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<td>5,635</td>
<td>5,043</td>
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<td><strong>S&amp;T</strong></td>
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</tr>
<tr>
<td><strong>UMSL</strong></td>
<td>374</td>
<td>321</td>
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### Net New Students

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<tr>
<td><strong>MU</strong></td>
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<tr>
<td><strong>UMKC</strong></td>
<td>-112</td>
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<tr>
<td><strong>S&amp;T</strong></td>
<td>-28</td>
</tr>
<tr>
<td><strong>UMSL</strong></td>
<td>127</td>
</tr>
</tbody>
</table>
Faculty Success

Blake Meyers, Ph.D.,
Plant Science and Technology
Elected as a Member of the National Academy of Sciences.

Gary Abbott,
Modern Dance
Recipient of a Guggenheim Fellowship.

Michelle Schwartz,
Ed.D. (L) & Beth Kania-Gosche, Ph.D.,
Teacher Education & Certification
Recipients of the Educator of Excellence Awards from the Missouri Association of Colleges for Teacher Education.

Michael Cosmopoulos, Ph.D., FRSC,
The Hellenic Government-Karakas Family Foundation Professor, History
Elected to the American Academy of Arts and Sciences.
Celebrating Staff

UMKC Staff Awards Ceremony

UM System & MU Staff Recognition Awards Ceremony

S&T Staff Excellence Awards Ceremony

UMSL Faculty and Staff Work Anniversary Ceremony
Total R&D Proposal (July 1 – May 31)

MU

S&T

UM System

UMKC

UMSL
Total R&D Awards (July 1 – May 31)

MU

2016: $164M
2018: $151M
2020: $169M
2022: $227M

S&T

2016: $28M
2018: $28M
2020: $30M
2022: $38M

UM System

2016: $217M
2018: $212M
2020: $233M
2022: $302M

UMKC

2016: $16M
2018: $26M
2020: $27M
2022: $32M

UMSL

2016: $10M
2018: $8M
2020: $7M
2022: $6M
Total R&D Expenditure (July 1 – May 31)
Health Impacts of City-Wide Zero-Fare Bus Transit:
A Natural Experiment

PI: Dr. Jannette Berkley, School of Medicine
Grant Amount: $651K
Sponsor: NIH National Institute of Diabetes and Digestive
and Kidney Diseases

Objective is to increase levels of physical activity and healthy eating in low-income groups for obesity and type 2 diabetes prevention and control. This study will examine bus ridership data before and up to three years after the zero-fare bus transit policy in KCMO and in comparison cities to make informed public health policy decisions.
Groundbreaking Research at MU

Insulin-Producing Pancreas Cells Treats Type 1 Diabetes in Large Animals

- MU School of Medicine Professors Haval Shirwan and Esma Yolcu published their findings, the results of 20 years of research, to *Science Advances*
- Collaborative effort with Harvard and Georgia Tech researchers
- Next steps are to work with partners to develop clinical treatments in Missouri and worldwide
Defining and Managing *Staphylococcus chromogenes* Intramammary Infections in Primiparous Dairy Cows

**PI:** Dr. Pamela Adkins, *Veterinary Health Center*; **CO-PI:** Dr. John Middleton
*College of Veterinary Medicine*

**Grant Amount:** $790K

**Sponsor:** National Institute of Food and Agriculture - U.S. Department of Agriculture

The goal of research is to improve the udder health and productivity of dairy heifers. The research combines expertise in bovine mammary health, bacterial molecular characterization, and mammary gland challenge models.
Dr. Farouk El-Baz

- Dr. Farouk El-Baz (Ph.D. S&T) played a leading role during NASA’s Apollo space program.
- In 1967, El-Baz was appointed by NASA to select landing sites and serve as Chairman of astronaut training.
- His critical role was chronicled by Tom Hanks in the TV series From the Earth to the Moon, in a segment titled: “The Brain of Farouk El-Baz.”
- In addition, the name El-Baz was immortalized on a shuttlecraft in the TV series Star Trek: The Next Generation.
Groundbreaking Research at S&T

NASA Taps S&T for Lunar Mining Project

- $2M NASA grant to support space mining project on the moon.
- Missouri S&T is one of three universities to lead this project, with S&T focusing on developing processes for mineral extraction from the Moon

- **Dr. Leslie Gertsh**, Geological Engineering
- **Dr. Fateme Rezaei**, Chemical and Biomedical Engineering
- **Dr. David Bayless**, Mechanical and Aerospace Engineering
- **Dr. Daoru Han**, Mechanical and Aerospace Engineering
- **Dr. Jeffrey Smith**, Ceramic Engineering
- **Dr. William Schonberg**, Civil, Architectural and Environmental Engineering
Groundbreaking Research at UMSL

Increasing Food Production in Urban/Suburban Districts

- Dr. Aimee Dunlap, Assistant Professor of Biology, directs a multi-institution collaboration
- Research explores role of bee pollination in urban and suburban districts to increase food production in 50+ orchards in St. Louis region.
- Support comes from a $633K grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture
- Partners include the Saint Louis Zoo, Saint Louis University, Webster University, Maryville University, and the Missouri Botanical Garden
Developing a modified brief alcohol-infused intervention tailored for patients with alcohol use disorder in opioid agonist treatment

**PI:** Dr. Ryan Carpenter, *Psychological Sciences*  
$797K  
**Sponsor:** NIH K23: Mentored Patient-Oriented Research Career Development Award

Alcohol use increases the likelihood that patients in treatment for opioid use will dropout, relapse, or overdose. This research aims to decrease alcohol use and improve opioid treatment outcomes with minimal resources, adding an innovative way to address the ongoing opioid overdoes crisis in the United States.
### Admissions Update

#### Graduate Applicants

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<tr>
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<th>2021</th>
<th>2022</th>
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<td>4,191</td>
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<tr>
<td>UMKC</td>
<td>2,834</td>
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<tr>
<td>UMSL</td>
<td>1,581</td>
<td>2,055</td>
<td>2,705</td>
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#### Graduate Admits

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<th>2021</th>
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<td>1,767</td>
<td>1,811</td>
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<tr>
<td>UMKC</td>
<td>1,348</td>
<td>2,089</td>
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<tr>
<td>UMSL</td>
<td>907</td>
<td>1,126</td>
<td>1,141</td>
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## Admissions Update

### Freshmen Applicants

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<tr>
<td>S&amp;T</td>
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<td>5,501</td>
<td>6,296</td>
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<tr>
<td>UMSL</td>
<td>3,580</td>
<td>2,969</td>
<td>3,776</td>
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### Transfer Applicants

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<tr>
<td>MU</td>
<td>2,647</td>
<td>2,558</td>
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<tr>
<td>UMKC</td>
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<td>2,032</td>
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<tr>
<td>S&amp;T</td>
<td>521</td>
<td>532</td>
<td>636</td>
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<tr>
<td>UMSL</td>
<td>2,285</td>
<td>2,171</td>
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<td>427</td>
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<th>2022</th>
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<tr>
<td>MU</td>
<td>982</td>
<td>1,143</td>
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<tr>
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<td>983</td>
<td>913</td>
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<tr>
<td>S&amp;T</td>
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<td>214</td>
<td>196</td>
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<tr>
<td>UMSL</td>
<td>753</td>
<td>871</td>
<td>892</td>
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</table>
Highly Prestigious Awards

- The National Research Council assesses awards in the arts and humanities, social, physical, engineer and life sciences, designating which are highly prestigious.
- They include:
  - National Academy Members (Science, Medicine and Engineering)
  - Pulitzer Prize
  - Nobel Prize
  - American Council of Learned Societies Fellows
  - Guggenheim Fellowship

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<td></td>
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<td>3</td>
<td>5</td>
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Federal R&D Proposal (July 1 – May 31)
Federal R&D Awards (July 1 – May 31)
Total Counts R&D Awards (July 1 – May 31)
Counts Federal R&D Proposal (July 1 – May 31)
Counts Federal R&D Awards (July 1 – May 31)

MU

S&T

UM System

UMKC

UMSL

2016  2018  2020  2022

0  50  100  150  200

2016  2018  2020  2022

0  50  100  150  200

2016  2018  2020  2022

2016  2018  2020  2022

2016  2018  2020  2022

494  481  545  551

173  199  174  198

814  797  855  916

106  82  101  134

41  35  35  33

0  50  100  150  200
Grid-Interactive Steelmaking with Hydrogen (GISH)

**PI:** Dr. Ronald O'Malley, *Materials Science & Engineering*; **CO-PI:** Drs. Laura Bartlett, *Materials Science & Engineering* and Jeffrey Smith, *Materials Science & Engineering*

$1M

**Sponsor:** Dept. of Energy

This team proposes to advance critical path research, development, and demonstration (RD&D) in the economic viability of a steel production system by combining a direct hydrogen-reduction furnace for ironmaking (H2DR) with electric melting for steelmaking integrated into a flexible grid with energy storage.
UMKC Surgical Innovations Lab to study connection between sound and surgery

- Collaboration between Dr. Gary Sutkin, professor of surgery and UMKC, and Dr. Paul Rudy, coordinator of composition at the UMKC Conservatory
- Studies show the less hospital noise the better for patients, but surgery rooms have a lot of noise, increasing patient risk
- Rudy observed operating rooms (OR) to get a feel for extra sounds and discovered there is a lot of unnecessary noise
- This research could lead not only to increased awareness about extra noise in the OR, but possibly influence manufacturing standards so OR equipment produces less or softer sound
- The research is funded in part by a contribution from UMKC professor emerita, Dr. Elizabeth Noble
Finance & Operations Update

- FY 23 Budget Finalization
  - State Support
  - Tuition
  - Healthcare
  - Performance and Market based salary increases
- State Appropriation requests for FY 24
- Continuing administrative streamlining initiatives
- Project planning for use of State ARPA capital funds
- Execution of space reduction plans
HR Highlights June 2022

Strategic Initiatives
- Staff leave design project
- Compliance review completed (Job evaluation, market methodology, salary structure)
- Job leveling and market pricing assessment (12-16 weeks)
- Total rewards evaluation project

Mizzou Forward
- On target to hire 30 faculty this year

Executive Leadership Changes in 2022

MU Executive HR Director
Mackenzie Moorefield

S&T Chief HR Officer
Cindy Nelson
PeopleSoft

- The Human Resources ERP (i.e., PeopleSoft) replacement business case is complete
  - Next steps – project budgeting, RFP and scheduling
- Finance ERP (i.e., PeopleSoft) business case development has started. ETA-October 2022

Classroom Technology

- MU’s central classrooms/auditoriums have undergone AV upgrades and standardization
- Decentralized rooms are slated for improvements in the coming year
Information Technology Highlights

Data Management & Analytics
- Accelerated hiring of a Chief Data Officer
- In early June, Finance Administration and IT completed a proof-of-concept demonstrating the use of cloud tools to optimize data, increase the speed and scale of analytics, and unify data across silos

Information Security Improvements
- Automatic email forwarding to external addresses has been removed system-wide
Information Technology Highlights

Customer Service Improvement Initiative

- In-depth interviews have been completed with ~50% of MU’s business and academic units
- Top two common themes:
  - Not enough IT staff in the field and
  - Inadequate employee (end-user) training on the use of technology

Infrastructure

- UMKC has initiated a “network as a service” pilot for the College of Education building
  - Will evaluate total cost-of-ownership and return-on-investment over the next couple of years