

Research Universities in Partnership for Economic Development

Mizzou Corporate Roundtable in St. Louis
November 25, 2008



For All We Call Mizzou Campaign Success

Raised: \$1 Billion



Goal: \$1 Billion

Total as of Nov. 7, 2008

\$581 million for research and programs

\$100 million from Missouri foundations,
corporations and associations



MU is an Economic Engine



Bond Life Sciences Center

- Missouri's major public research university.
- One of six public universities nationwide with medicine, veterinary medicine, engineering, law, and agriculture all on one campus.



Research that Makes a Difference

- **Nano:** biomedical, defense, physics, engineering, and more.
- **Agro and Plant Science:** biofuel, genetics, food safety.
- **Reactor (MURR):** imaging and radiopharmaceuticals.
- **Comparative Medicine:** three national centers study swine, rats, and mice; faculty provide world class companion animal models.
- **Investment in Technology Transfer**



Economic Development at MU



- Leverage state investment
- Attract money to Missouri
- Commercialize/seek patents
- Grow entrepreneurs
- Prepare work force
- Network internationally



MU Builds Bridges Across the Region

In St. Louis

- Washington University
- National Geospatial-Intelligence Agency
- Danforth Plant Science Center
- RCGA
- Boeing, Monsanto, Pfizer, Ameren, AT&T, Nestle Purina, Covidien, and more



MU Builds Bridges Across the Region

In Kansas City

- Midwest Research Institute
- Ewing Marion Kauffman Foundation
- Cerner, Honeywell, and Garmin
- Kansas City Area Development Council (KCADC)
- Animal Health Corridor: Bayer, Fort Dodge, Boehringer Ingelheim, and many more



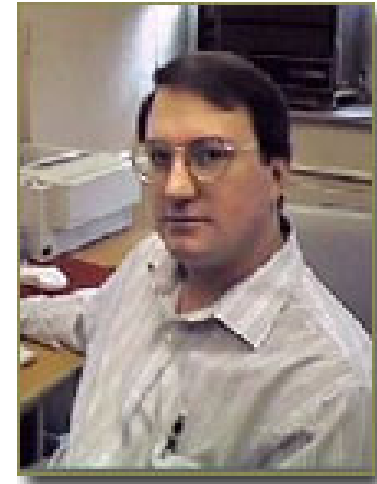
Economic Impact of MU Research

\$248 million of research



\$481 million economic impact
Supports 10,000 jobs

\$2 billion of research in last decade
equals nearly \$4 billion
economic impact



Randy Curry, associate professor,
partners with Boeing to improve
safety of soldiers.

Based on IMPLAN economic analysis: Every new external \$1 into the university
generates \$1.94 in economic impact. Every \$1M into the university creates 39.3 jobs.



Innovation and Commercialization

- 49 U.S. patents filed and \$6.2 million in licensing revenue received, 2007-08.
- Since 2005, 20 new MU faculty or student business startups, with six based on commercialization of Mizzou technology.
- In FY '08, 77 invention disclosures received from MU inventors; 26 licenses and options signed based on MU technologies.

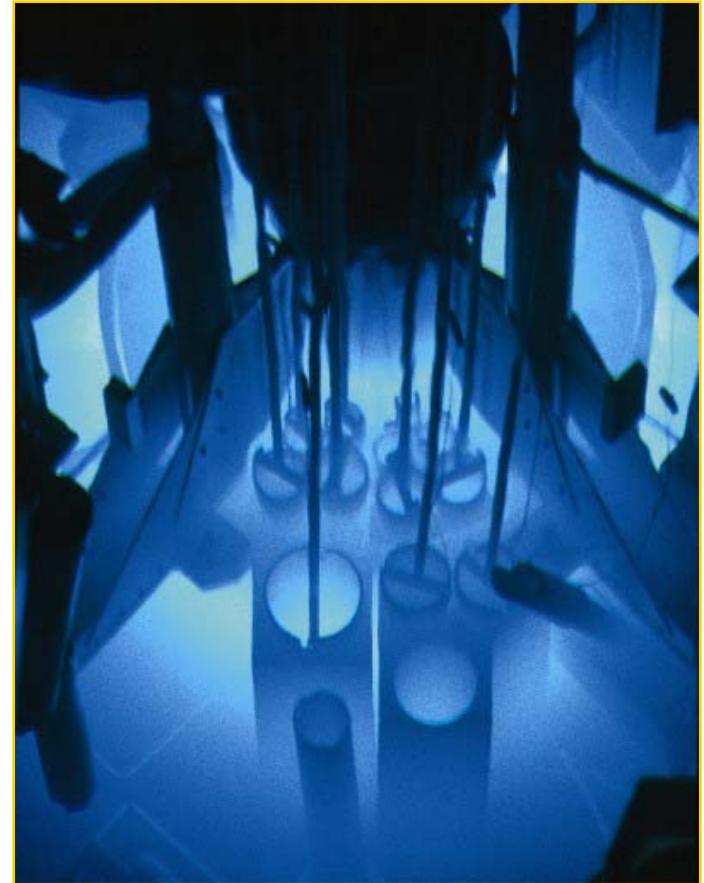


Rows of greenhouses glow as the sun sets behind Jesse Hall.

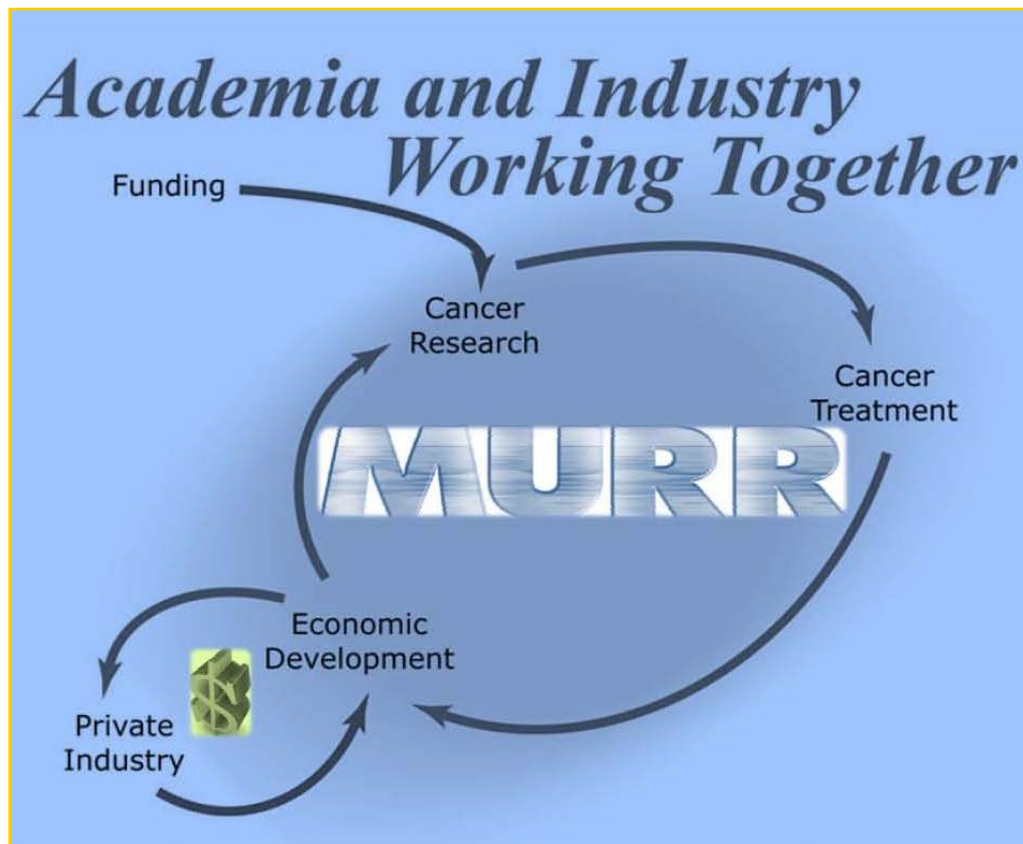


MU Research Reactor

- MU's Research Reactor is the largest university based reactor in the U.S.
- MU collaborated to bring three radiopharmaceuticals to market for cancer diagnosis and treatment.
- MURR supplies the active ingredients weekly for 1,000+ patient doses of **Quadramet**[®] (*for bone cancer pain*) and **TheraSphere**[®] (*for liver cancer*).
- New MURR cyclotron supplies fluorine-18 for diagnostic medicine.



MU Research Reactor



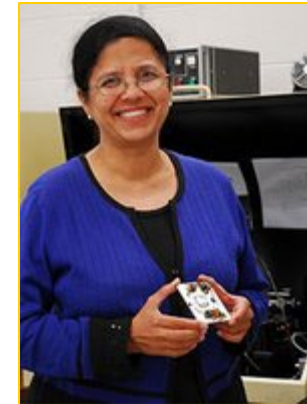
- MURR generates more than \$10 million annually through products, services and research grants.
- Nuclear power: MURR is a unique resource for this re-emergent industry.



Nano and Molecular Medicine



Dr. Fred Hawthorne, International Institute of Nano and Molecular Medicine director, will receive the American Chemical Society's 2009 Priestley Medal, second in prestige to Nobel Prize for chemists.



Dr. Shubhra Gangopadhyay,
"Nano 50" award-winning scientist.

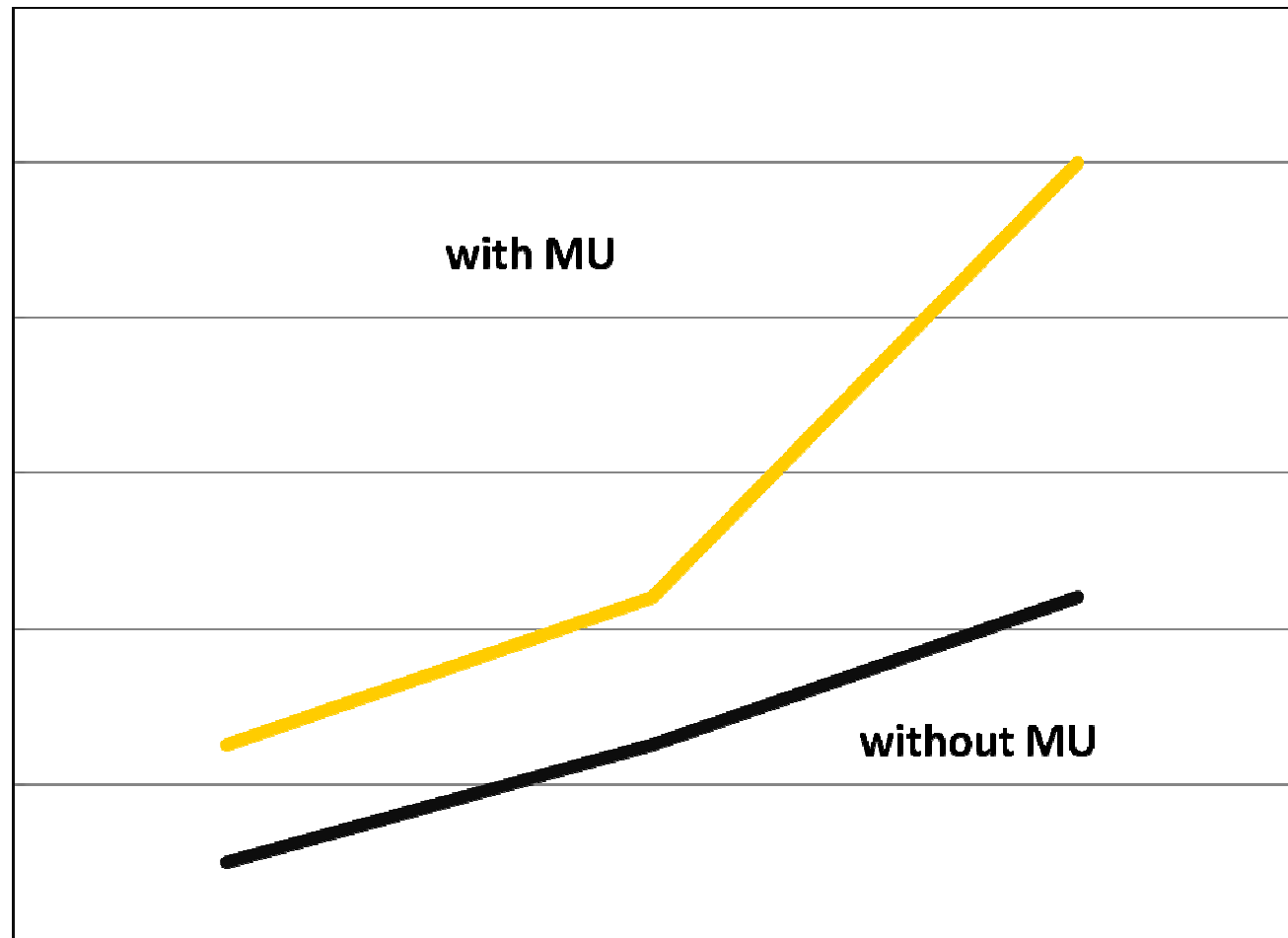


RT Image magazine recognized Dr. Kattesh Katti as one of the 25 most influential people in radiology, Sept. '08



Missouri's Economy

Output
expressed
as income



Investment in university over time



Building Human Capital



Sustained investment:

- 5,400 graduates each year.
- College graduates earn \$700k more than high school graduates during their lifetime.



Building Human Capital



MU Business students work with General Motors to market Cobalts

Impact in St. Louis and Missouri

- 2008 Enrollment of 30,000 students
- 30% of MU students come from metro St. Louis
- 41,000 Mizzou alumni live in metro St. Louis



Preparing the Work Force

Recent Graduates

69% work in Missouri

91% working in jobs related to their majors

Missouri's professionals

The majority of Missouri physicians receive their medical training from MU.

Three-fourths of Missouri veterinarians earned their veterinary degrees at MU.

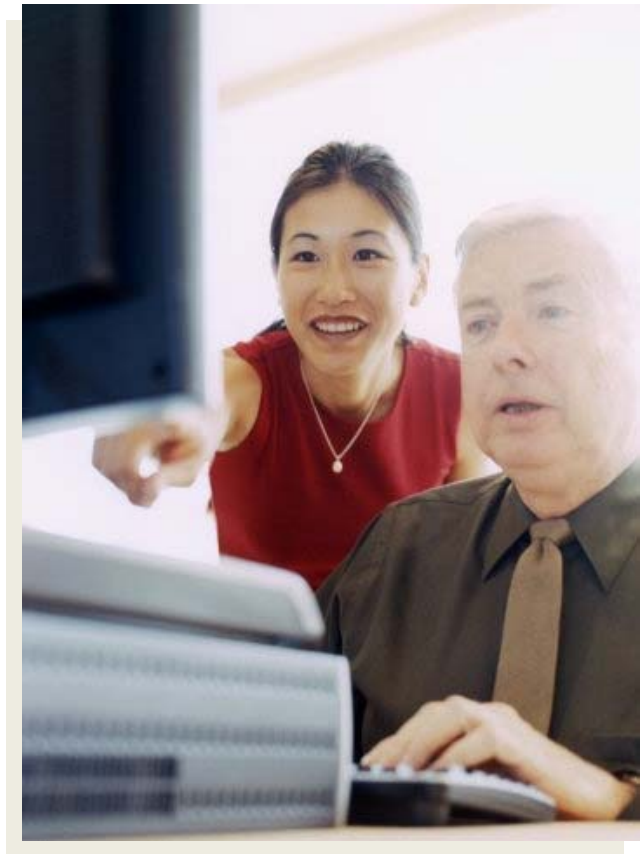
MU Law School alumni practice in every Missouri county.



Developing Small Businesses

In FY07, MU Extension's Small Business Development Centers helped businesses:

- Acquire \$77 million in new financing
- Increase sales more than \$90 million
- Create or retain 6,900 jobs
- Obtain \$252 million in government contracts



International Networking

How can we help Industry in Missouri compete globally?

Leverage MU's international ties

- Transatlantic Center
- Global Journalism offices
- Large and successful alumni network
- Established partnerships in South Korea, China, SE Asia, India, and many more countries.



Amit Midha, MU alum and
President of Dell China



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