

*State of Missouri  
&  
University of Missouri Partnership*

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# *Economic Engine...*

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*“The University of Missouri ought to be the growth engine of the state in developing the economy.”*

-- UM President Gary Forsee



## *Economic Development in the Past...*

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- ❑ Manufacturing industry – main source of job creation
- ❑ *Current reality*--Missouri has lost 51,000 manufacturing jobs since 2000



# *Next Economy...*

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- ❑ U.S. economy has been undergoing a dramatic transformation
- ❑ Critical element in a technology-based economy is the strength of its research and development institutions
- ❑ Numerous studies have shown that technology-oriented economies have major research universities interacting with a robust technology oriented private sector



# *Next Economy...*

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## 2030 Economic Development

Higher education institutions to be key drivers of economic growth

Facilities  
Access to Capital  
Research & Technology Development  
Entrepreneurial Expertise  
Culture

Deal Flow

Jobs  
Increasing Average Income  
Need for Graduates  
Reduce brain drain  
Allows for increasing H.E. funds  
Diversified Economy  
Highly Trained Workforce



# *What is Deal Flow...*

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- **To accelerate investment activity and the growth of a self-sustaining entrepreneurial culture...**

**--State Science & Technology Institute (SSTI)**



# *Culture is Key ...*

- ❑ Entrepreneurial Culture
- ❑ Social Culture
- ❑ University Culture



Boston



Charlotte



Austin



# *Competitive Benchmarking of Missouri's Economy...*

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## Economic Performance

### Job Creation

- Employment grew yearly at 0.66% between 1996 to 2006, compared to the US average of 1.22%

### Unemployment

- Unemployment rate in August 2006 was 5.10% compared to the US rate of 4.90%

### Average Wages

- Average Wage (Private employees) was \$36,198 in 2005, contrasted to the US average of \$40,499
- Growth rate for average wages (private employees) was 3.36% from 1997 to 2005, measured against the US rate of 3.79%

### Merchandise Exports

- Merchandise exports per worker was \$4,551, against the US average of \$8,099, in 2005
- Growth rate per worker for Merchandise exports was 9.58% from 1999 to 2005, while the US rate per worker was 4.07%

### Gross State Product

- In 2005, GSP per worker was \$93,992, compared to the US average of \$111,078 per worker
- From 1997 to 2005, the annual growth per worker was 3.56%, while the US rate was 4.21%



# *Competitive Benchmarking of Missouri's Economy...*

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## Innovation Output

### Patents

- Patents per 10,000 workers of 3.18 was 43.05% of the US average of 7.40 in 2005

### Patent Growth

- Growth rate per worker for patents was -1.10% from 1996 to 2005, while the US growth rate per worker was 0.73%

### Establishment Formation

- Number of total establishments grew at 1.08% per year from 1997 to 2005 as compared to the US growth of 1.93% per year
- Number of private establishments grew at 1.16% per year from 1997 to 2005 as compared to the US growth of 1.95% per year

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# *Success Stories...*

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- ❑ The Life Sciences Trust Fund
- ❑ Governor Blunt's Lewis & Clark Discovery Initiative
- ❑ Fort Leonard Wood Technology Park
- ❑ MU Life Sciences Incubator at Monsanto Place
- ❑ MoFAST
- ❑ The Incubation Factory



# *Interdisciplinary Collaboration...*

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Medical ▪ Engineering ▪ Veterinary  
Agriculture ▪ Business ▪ Journalism

- ❑ MU Biodesign and Innovation Program
- ❑ ABC Laboratories and RADIL
- ❑ International Institute for Nano and Molecular Medicine
- ❑ Media Convergence Group



# *The Future Requires...*

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- ❑ Collaborative partnerships between higher education and business
- ❑ Further development of research and commercialization
- ❑ Enhance technology transfer and commercialization potential
- ❑ Enhanced interaction with Alumni networks
- ❑ Increase in deal flow



# *What has happened...*



Discovery Ridge



Express Scripts



RADIL



ABC Labs





# *What has happened...*

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## Lewis and Clark Discovery Initiative

□	UM-Columbia	
	Ellis Fischel Cancer Center,	\$31,182,000
	Plant Science Research, Mexico	\$5,000,000
	Gateway Fund	<u>\$16,036,000</u>
		MU Total: \$52,218,000
□	UM-Kansas City	
	Pharmacy & Nursing Building	\$15,000,000
	School of Dentistry Equipment Replacement	\$3,400,000
		UMKC Total: <u>\$18,400,000</u>
□	MS & T	
	Toomey Hall	\$15,000,000
□	UM-St. Louis	
	Benton/Stadler Halls	\$28,500,000

**Grand Total: \$114,118,000**

# *Life Sciences Research Trust Fund...*

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- The University of Missouri is involved in 10 of the 14 projects awarded funding by the Life Science Research Board for FY2008.
- Total funding for the 10 projects equals **\$8.3 million.**





# *MTC Lewis and Clark Projects*

## *University of Missouri Partnerships ...*

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❑ Missouri Technology Incentive Program (MoTIP)	\$1,250,000
❑ Intellectual Property Management Fund	\$1,100,000
❑ Missouri Venture Partners	\$3,000,000
❑ Missouri Open Innovation Network	\$150,000
❑ MO SourceLink	\$100,000
❑ Emerging Firms Mapping Project	\$50,000
❑ St. Louis Information Technology Initiatives	\$850,000
❑ Missouri Power Resource Center	\$200,000
❑ Medical Device Innovation Program	\$300,000
❑ Opportunity Fund for Bioenergy Research Center	\$3,250,000
❑ Collaboration and Interdisciplinary Degree Program	\$250,000
❑ Animal Health and Nutrition Center	\$200,000

**Grand Total:                   \$10,218,000**



## *Looking Back...April 2007*

# *Our Strategies Will Require Commitment*

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- \$1M patent/IP fund for technology transfer
- New ways to deal with risk
- Better managing (not avoiding) conflicts of interest
- UM Venture Foundation, external development company to stimulate start-ups
- Incubators/park clusters at each campus and elsewhere opportunities exist

**Taken from April 2007 Presentation to the Board of Curators**



# *Moving Forward...*

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- **Discovery Ridge Expansion**
- **Public Private Partnerships**
  - **Incubators**
  - **Accelerators**
  - **Innovation Centers**
  - **Tech Commercialization Corporation**
- **Downtown Revitalization**
- **Missouri Venture Partners Contribution**
- **Funding for Economic Development/Tech Transfer Efforts**
- **Streamline pathways to commercialization**

