

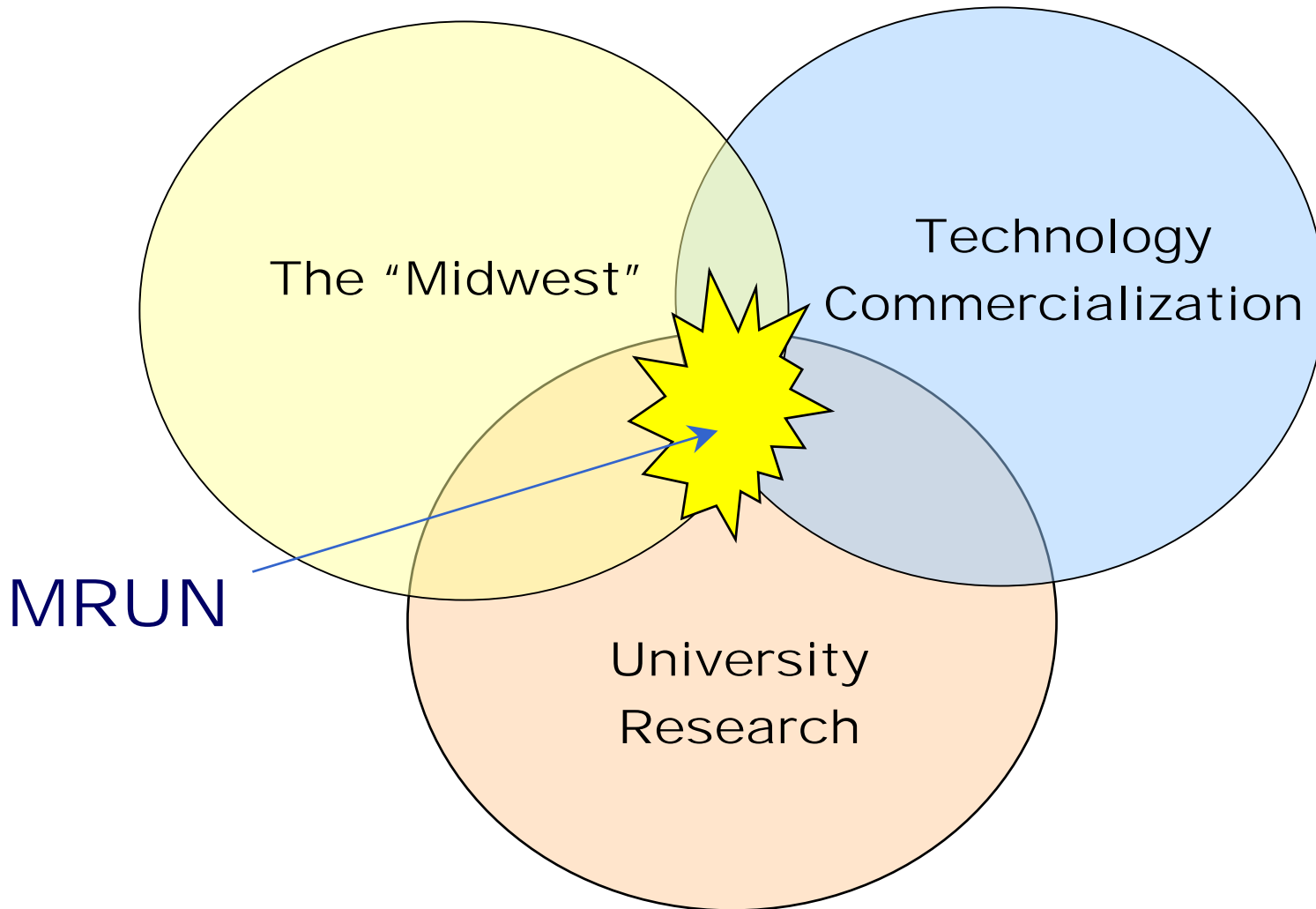


The Innovation Pipeline of Midwest Research Universities

Midwest Research University Network (MRUN)



Regional Cooperation to Catalyze Local Startup Development



Midwest Research University Network

MRUN began in 2002.

Today there are more than 20 members, each with over \$100m annual research and a dedicated start-up business development focus.

Argonne National Lab

Case Western Reserve

Cincinnati Children's Hospital
Medical Center

Cleveland Clinic Foundation

Iowa State University Research
Foundation

Mayo Clinic

Medical College of Wisconsin

Michigan State University

Northwestern University

Purdue University

The Ohio State University

University of Chicago

University of Illinois at Chicago

University of Illinois at Urbana-
Champaign

University of Iowa

University of Michigan

University of Minnesota

University of Missouri System

University of Wisconsin-Madison

Washington University

Wayne State University

MRUN, Inc.

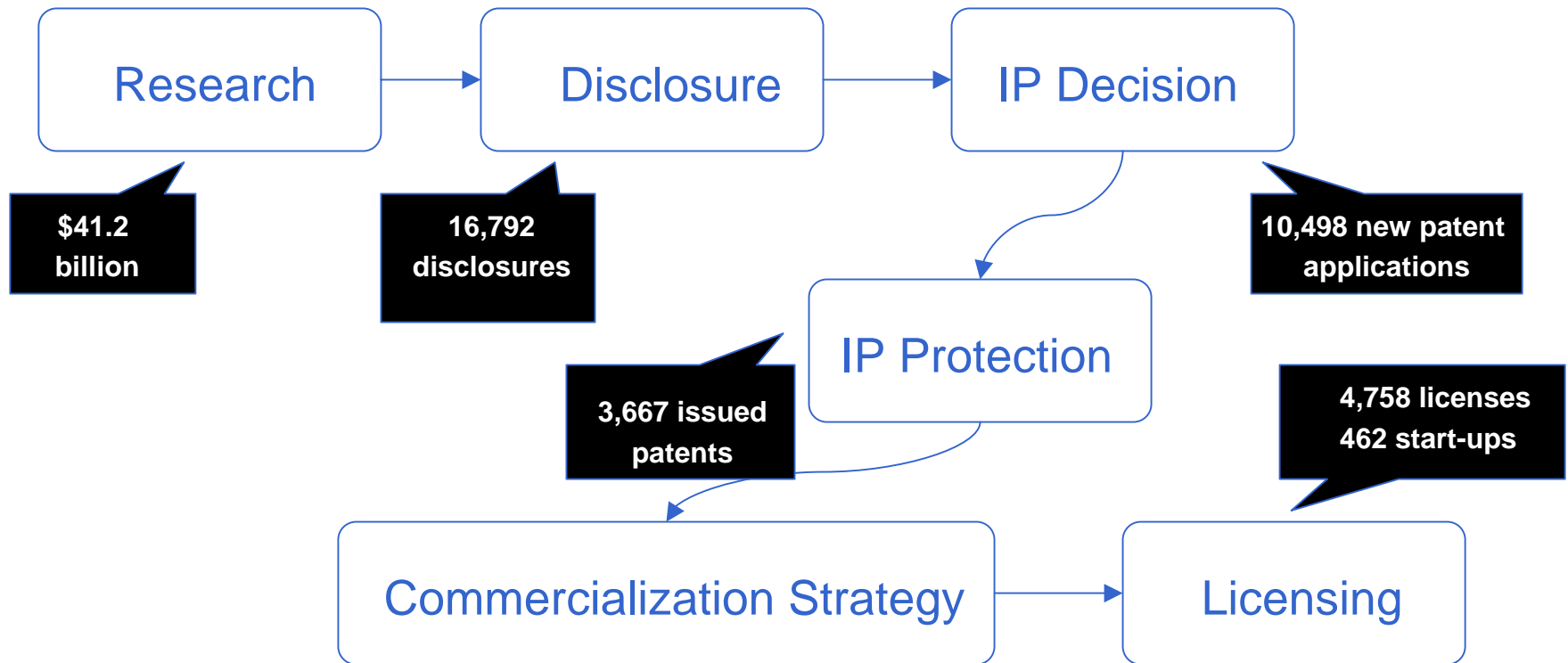


- Incorporated as 501c(6) January 2006
- The MRUN Region: MN, IA, MO, WI, IL, IN, OH, MI
- Membership categories
 - Full (voting) members are from research institutions in the region with >\$100m total annual research spending
 - Associate members must have focus on startup development
 - Research institutions outside the region
 - Institutions <\$100 m/yr inside the region
 - Other entities focused on commercialization of research through startup development
- Membership open to individuals or to institutions
- www.mrun.us

Why Universities Transfer Technology

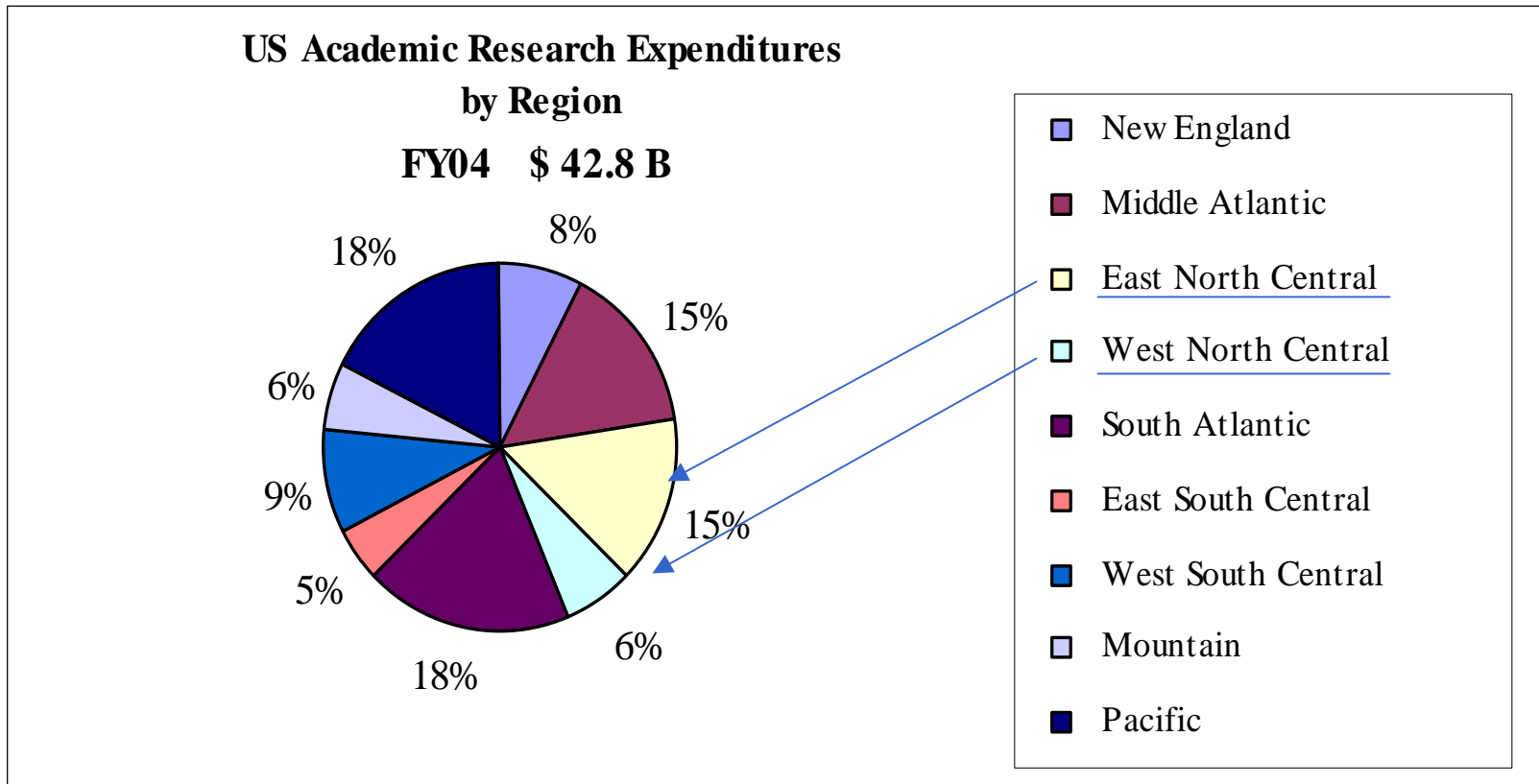
- Facilitate commercialization of research for the public good
- Generate revenue
- Induce closer ties to industry
- Obligation under [Bayh-Dole](#)

Technology Transfer at U.S. Universities



Source: AUTM Licensing Survey: FY 2004

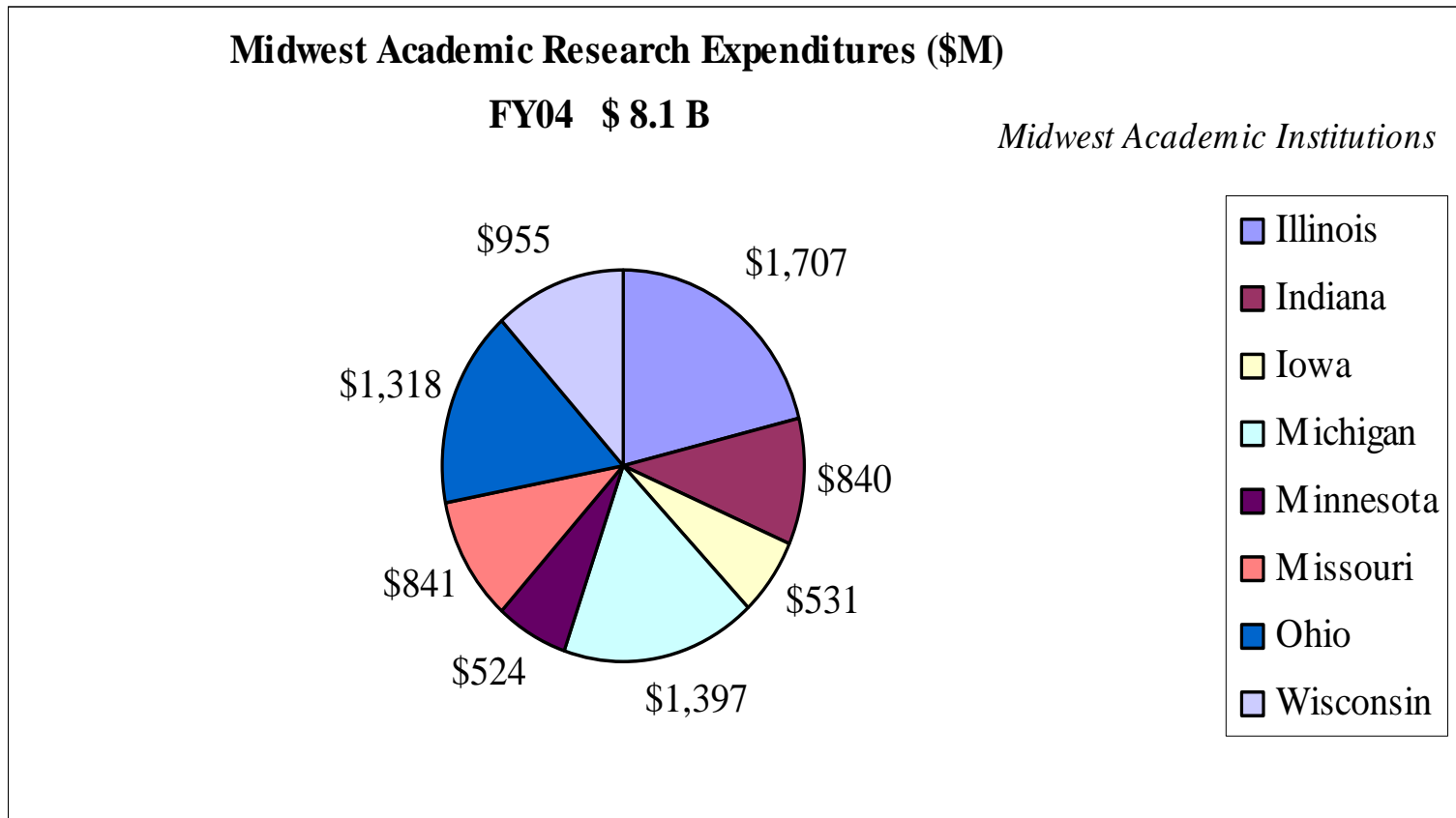
MRUN Research: A National View



National Science Foundation, R&D Expenditures 2004

MRUN = ~19% of US total

MRUN Research: A Midwest View



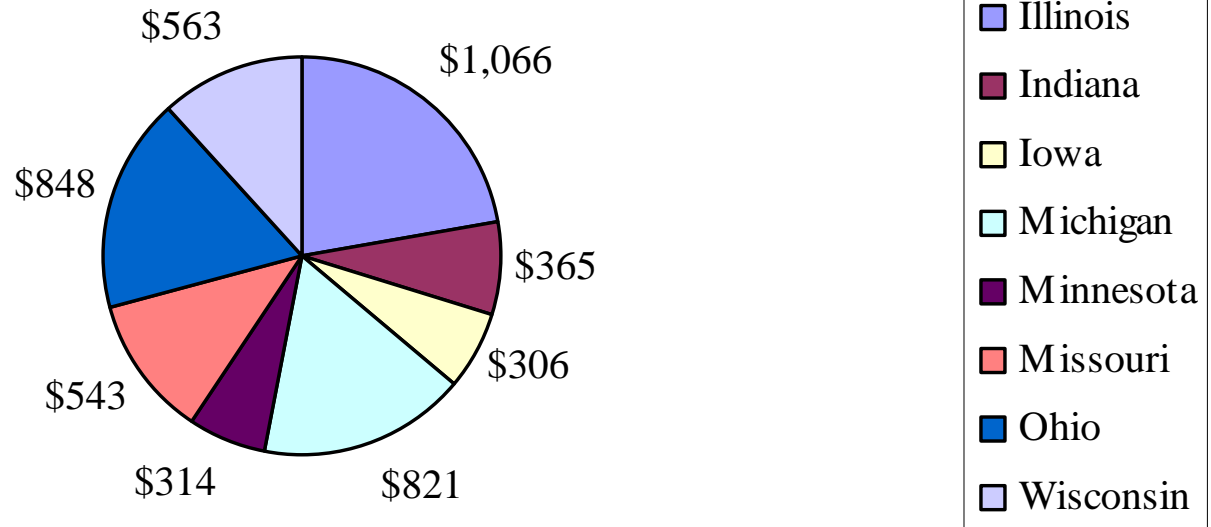
National Science Foundation, R&D Expenditures 2004

MRUN Research: Federal Funding

Federal Funding of Academic Research (\$M)

FY04 \$ 4.8 B

Midwest Academic Institutions



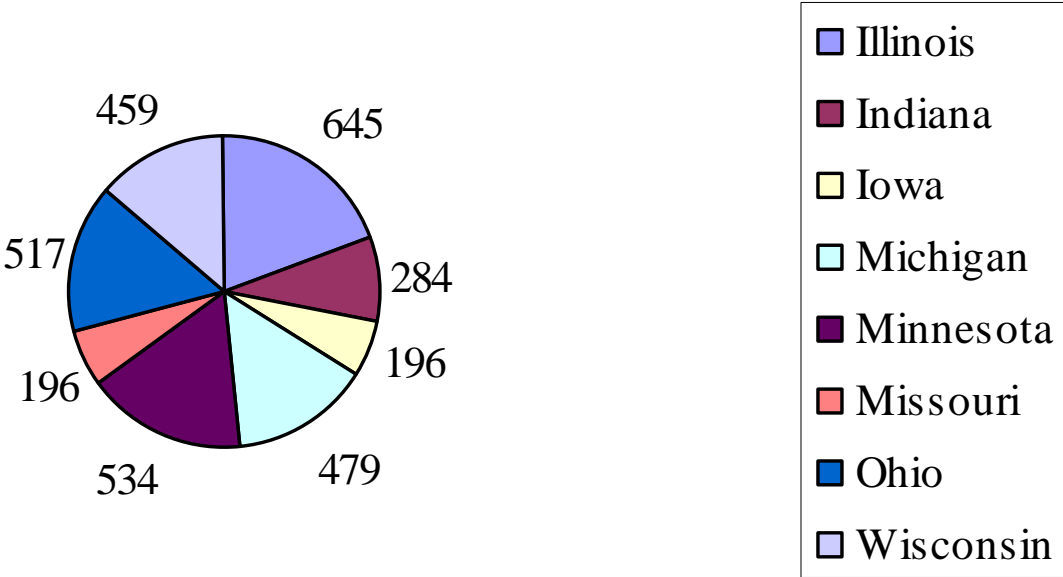
National Science Foundation, R&D Expenditures 2004

Bayh-Dole Act (1980) promotes commercialization

MRUN Inventions Disclosed

**New Disclosures in the Midwest
FY2004 3,310**

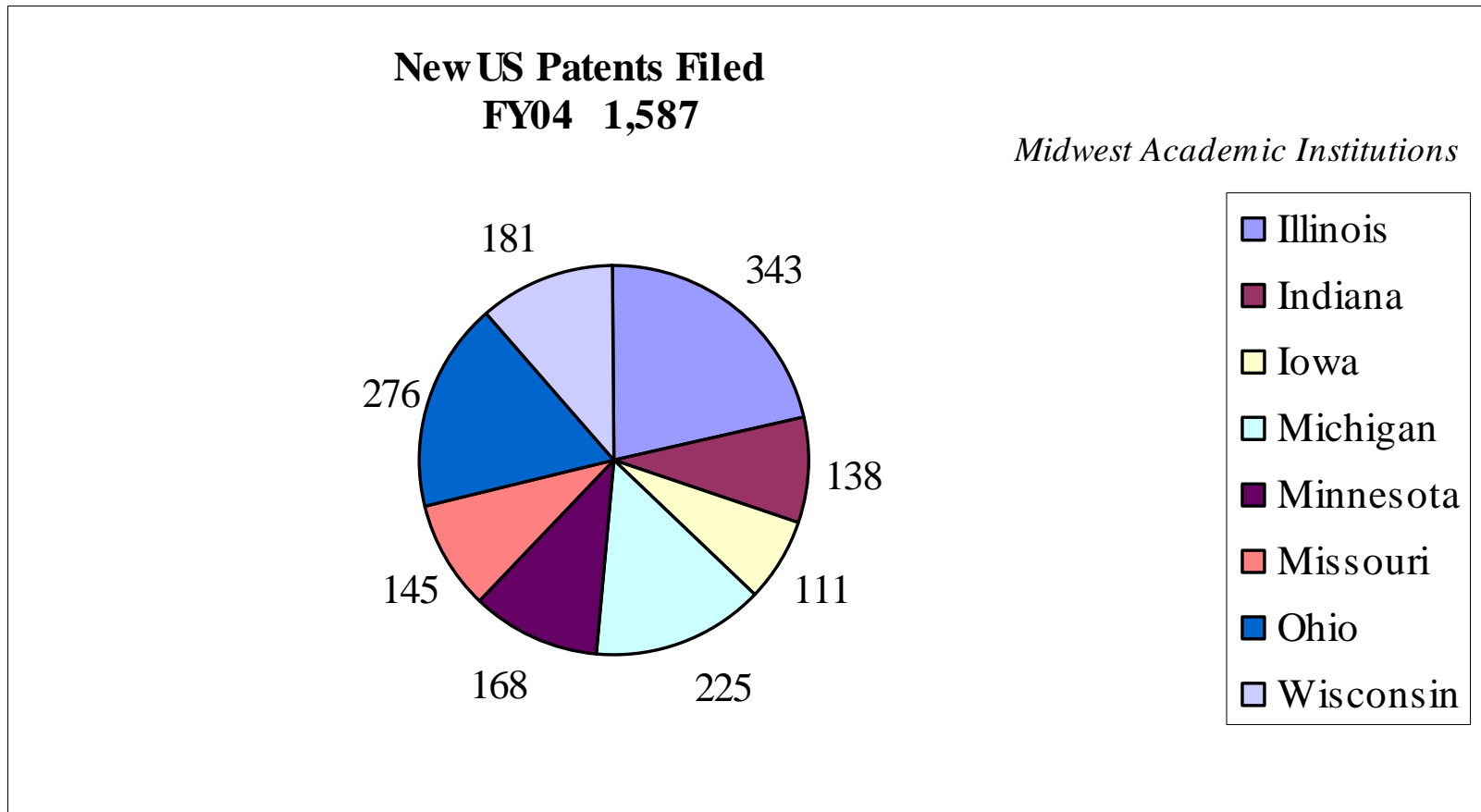
Midwest Academic Institutions



AUTM US Licensing Survey: FY 2004

MRUN = ~20% of US total 16,792 invention disclosures

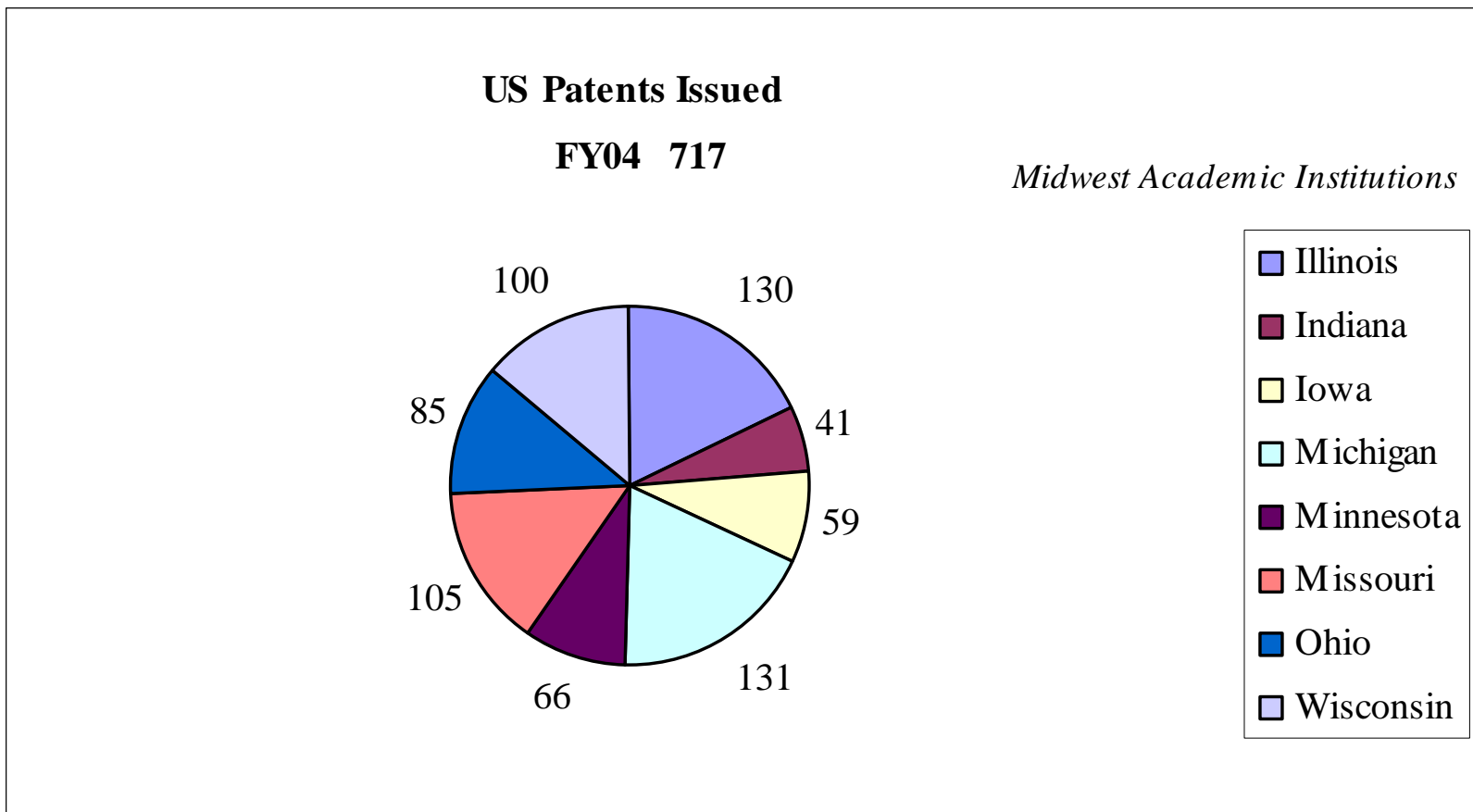
MRUN US Patents Filed



AUTM US Licensing Survey: FY 2004

MRUN = ~15% of total 10,498 US patents issued

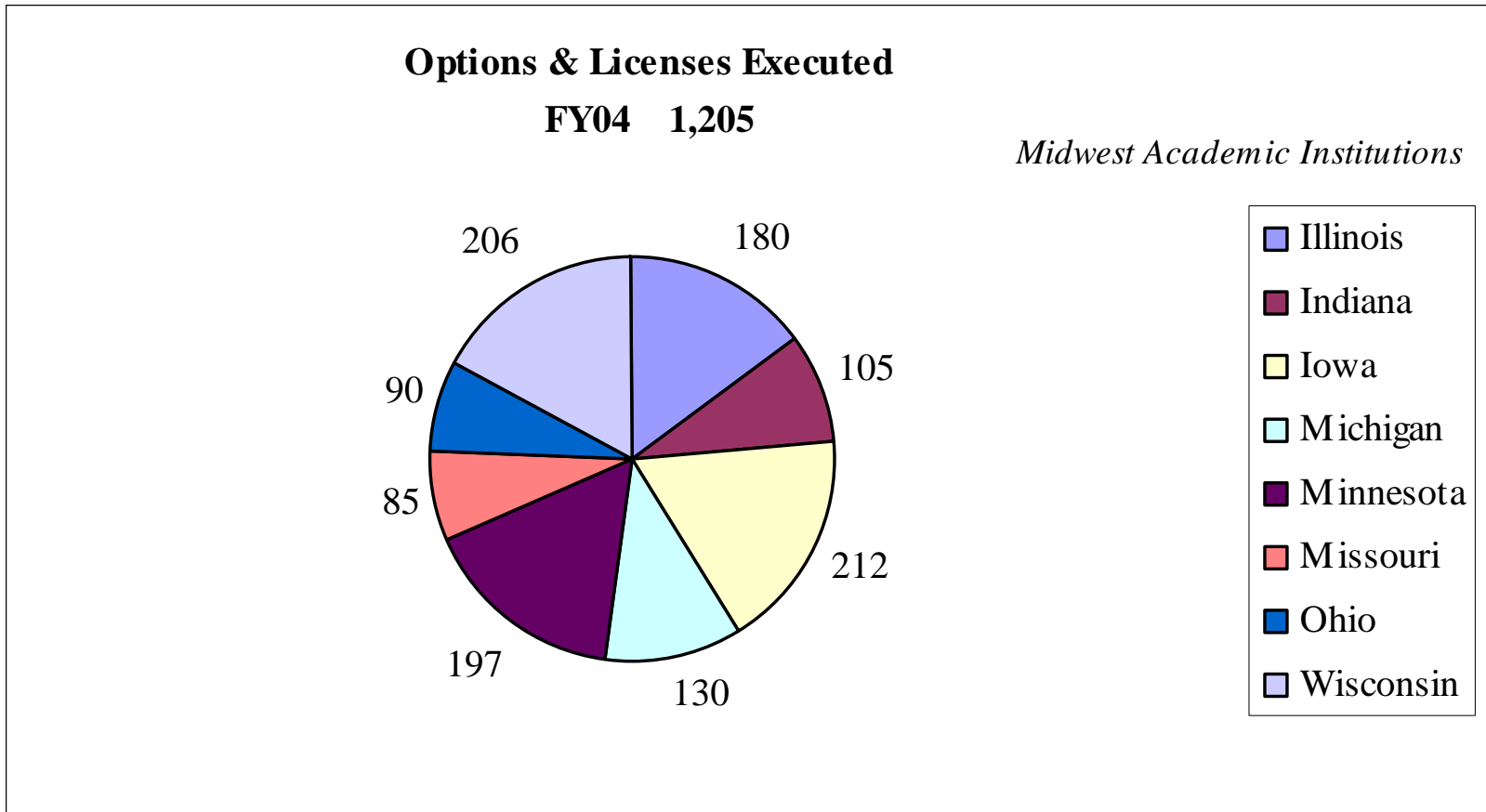
MRUN US Patents Issued



AUTM US Licensing Survey: FY 2004

MRUN = ~20% of total 3,667 US patents issued

MRUN Licenses/Options



MRUN = ~25% of US total 4,758 licenses/options

University Approaches to Start-ups

	Flexible Terms	Progressive Policies	Business Development Assistance	Help Recruit Talent	Aid in Securing Funding	Business Operations Participation	Direct Investment
Hands-in-Pocket							
Hands-Off							
Hands-On*							
Up-to-Elbow**							
	Licensing Practices		Form the Licensee		Operational Role		

Source: MIT, AUTM, MRUN, U Michigan et al

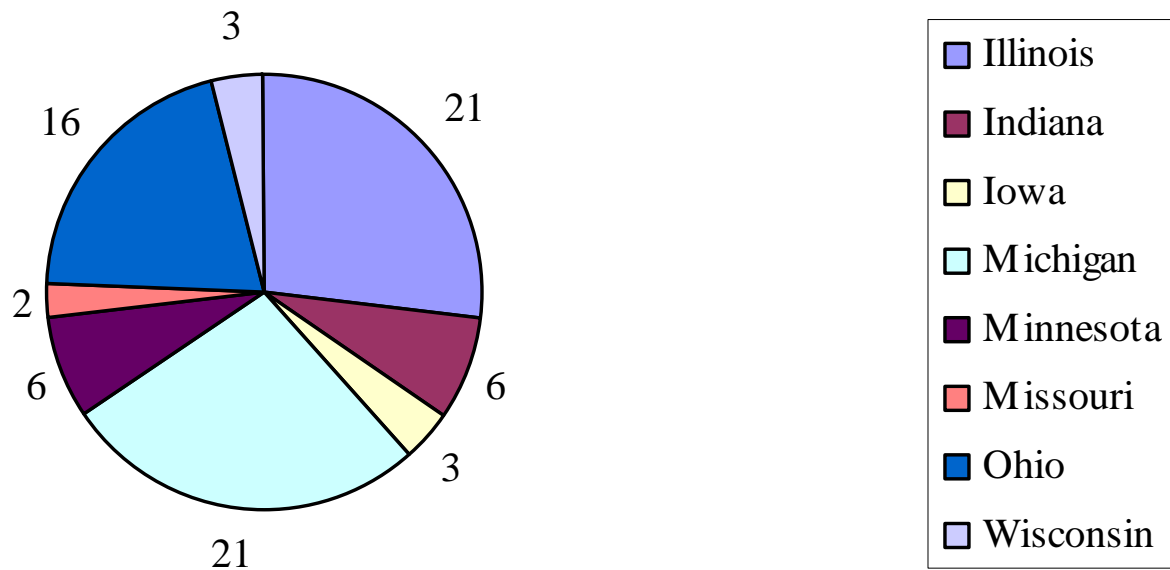
* Sometimes BusDev is quasi-external to the University

** Often exclusive arrangement with BusDev that is external to the University

MRUN Start-up Companies

**New Start-ups Licensed
FY04 78**

Midwest Academic Institutions



AUTM US Licensing Survey: FY 2004

*MRUN = ~17% of US total 462 start-up companies
34% increase from 2000-2004 (58 to 78 start-ups/yr)*

Opportunities and Deals

- In 2004, 3 of the top 10 US universities receiving the most patents were MRUN members
- In 2003, 4 MRUN members ranked in the top 25 US universities with the most new start-ups launched based on University technology
- In 2004, 2 MRUN members were in the top 5 US universities for new start-ups

Midwest Advantages

- Extensive and diverse research base
- Diverse industry base
- Increasingly more sophisticated academic technology transfer operations
- Extensive facilities for incubation and growth
- Highly skilled and educated workforce
- Midwestern work “ethic”
- Attractive cost-of-living and cost of doing business

A 5-Year Record of Progress

	MRUN			US Universities
	FY2000	FY2004	Change	Change
Disclosures	2,291	3,311	+ 44%	+ 38%
US Patents Filed	1,488	1,588	+ 6%	+ 11%
US Patents Issued	681	729	+ 7%	0%
Licenses/Options	1,056	1,210	+ 14%	+ 13%
Start-ups Formed	58	78	+ 34%	+ 15%
License Revenue	\$ 95.6 M	\$ 230.6 M	+ 144%	- 4%



MRUN

Midwest Research
University Network

www.mrun.us