Reported to the Board of Trustees
July 23, 2015

University of Illinois at Urbana-Champaign

Dashboard Indicators

RESEARCH PERFORMANCE UPDATES BY:
UNIVERSITY OFFICE FOR PLANNING AND BUDGETING
JUNE 12, 2015

PRESENTED BY:
CHANCELLOR PHYLLIS WISE
JULY 22, 2015

Peer Groups

University of Illinois at Urbana-Champaign*
University of California - Berkeley*
University of California - Los Angeles
University of California - San Diego
University of Michigan - Ann Arbor
University of North Carolina - Chapel Hill**
University of Texas - Austin***
University of Washington
University of Wisconsin - Madison
University of Virginia

* No medical center.
** Medical center affiliated with the university, but owned by the state.
*** An affiliated medical center is under construction and will begin operations in 2017.

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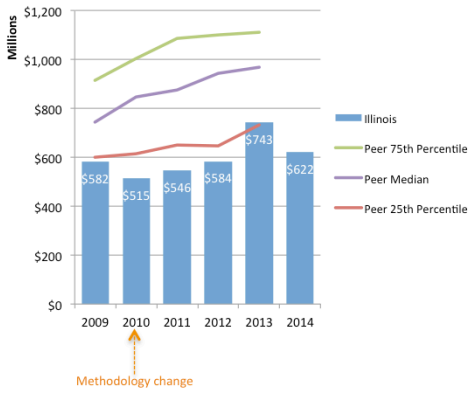
The University of Illinois at Urbana-Champaign has a unique breadth of research expertise, with world-renowned strengths in the arts, agriculture, business, the humanities, and the social sciences, as well as top-ranked programs in the natural sciences and engineering. Our researchers address society's most pressing problems by doing what we do best—interdisciplinary research that drives positive change in our communities, our state, our nation, and the world.

Total Research and Development Expenditures*
FY 2009 – FY 2014



Though increasing in FY 2012 and FY 2013, research and development expenditures at the University of Illinois at Urbana-Champaign are less than the peer median.

University of Illinois at Urbana-Champaign does not have a medical center nor a college of medicine, but seven of its nine peers have one or both.

* As reported to the NSF Survey of Research and Development Expenditures. FY 2013 increase includes $120 million related to the construction of Blue Waters. FY 2014 peer data not available.

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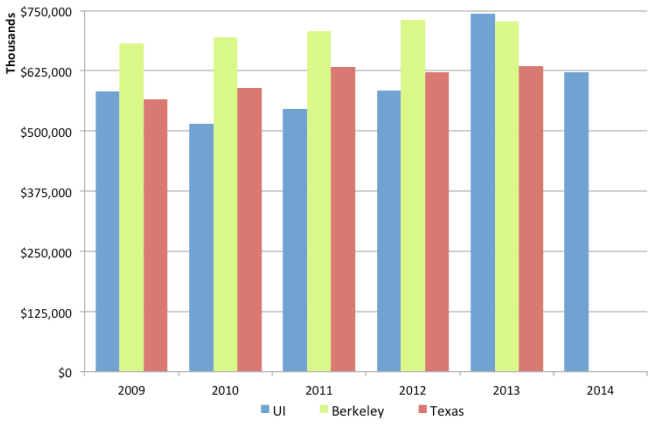
Even without a medical school, the University of Illinois at Urbana-Champaign is a research powerhouse. We continue to grow the research enterprise, and, according to the most recently available NSF data (FY 2013), are the #22 institution in higher education research and development expenditures.

Total Research and Development Expenditures* Among Peers Without Medical Schools FY 2009 – FY 2014



* As reported to the NSF Survey of Research and Development Expenditures. FY 2013 increase includes $120 million related to the construction of Blue Waters. FY 2014 peer data not available.

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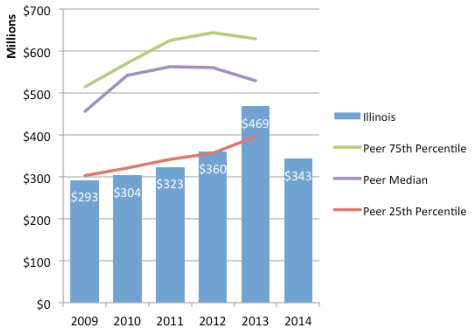
Total Federal Research and Development Funding*
FY 2009 – FY 2014



University of Illinois at Urbana-Champaign receives less total federal research funding than its peer median.

University of Illinois at Urbana-Champaign does not have a medical center nor a college of medicine, but seven of its nine peers have one or both.

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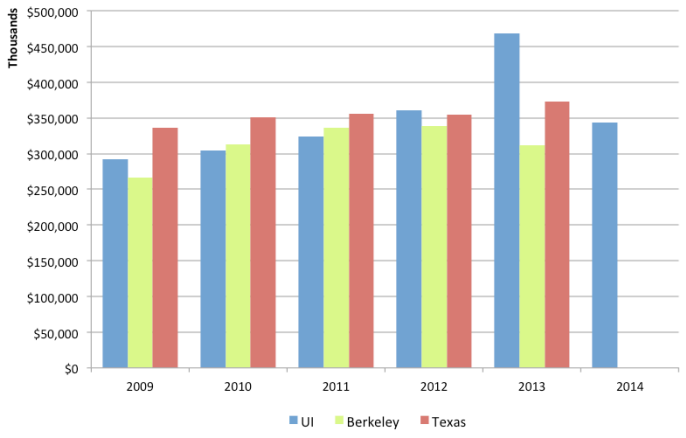
Nationally, federal funding for research has been stagnant. The proposed College of Medicine will enable us to compete for more federal research funding.

Total Federal Research and Development Funding* Among Peers Without Medical Schools FY 2009 – FY 2014



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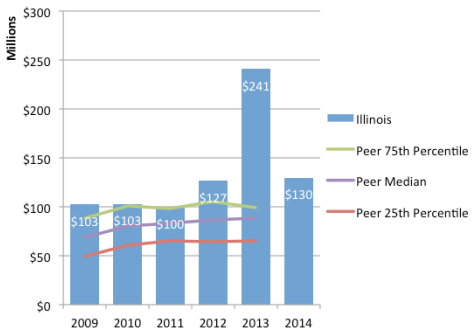
Important federal funding sources include the National Science Foundation and the National Institutes of Health, but Illinois also has robust funding from the Department of Defense, Homeland Security, the Department of Energy, USDA, and USAID. Research in these areas hews closely to Illinois strengths in computation, energy research, drugs and devices, electronics, and neuroscience, among many other areas.

National Science Foundation Funded Research and Development
FY 2009 – FY 2014



University of Illinois at Urbana-Champaign receives more NSF funding than its peer median and is consistently ranked in the top three among its peers.

NSF is the largest source of Federal R&D funding for the University of Illinois at Urbana-Champaign.

* Some institutions reported combined campus data. FY 2013 increase includes $120 million related to the construction of Blue Waters. FY 2014 peer data not available.

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Year in and year out, Illinois is among the top universities in NSF-funded research and development expenditures.

National Science Foundation Funded Awards
Top 15 Institutions FY 2014

Institution	Total	Research Support	Education & Human Resources	Major Research Equipment
Lockheed Martin Corporation	$183,154	$183,029	$0	$125
University of Illinois at Urbana-Champaign	$169,787	$165,410	$4,377	$0
Consortium for Ocean Leadership, Inc.	$133,343	$105,968	$0	$27,375
University Corporation For Atmospheric Research	$121,619	$121,619	$0	$0
Cornell University	$117,322	$108,055	$9,267	$0
National Ecological Observatory Network, Inc.	$114,200	$21,000	$0	$93,200
University of California-Berkeley	$113,803	$93,404	$20,399	$0
University of Washington	$95,438	$85,254	$10,184	$0
California Institute of Technology	$92,680	$76,118	$1,642	$14,920
Columbia University	$90,493	$86,653	$3,840	$0
Massachusetts Institute of Technology	$89,816	$74,953	$14,862	$0
University of Michigan-Ann Arbor	$89,421	$78,361	$11,060	$0
University of Wisconsin-Madison	$87,643	$68,058	$19,585	$0
Stanford University	$86,158	$83,856	$2,302	$0
Michigan State University	$79,376	$65,523	$13,853	$0

Source: http://dellweb.bfa.nsf.gov/Top50Inst2/default.asp

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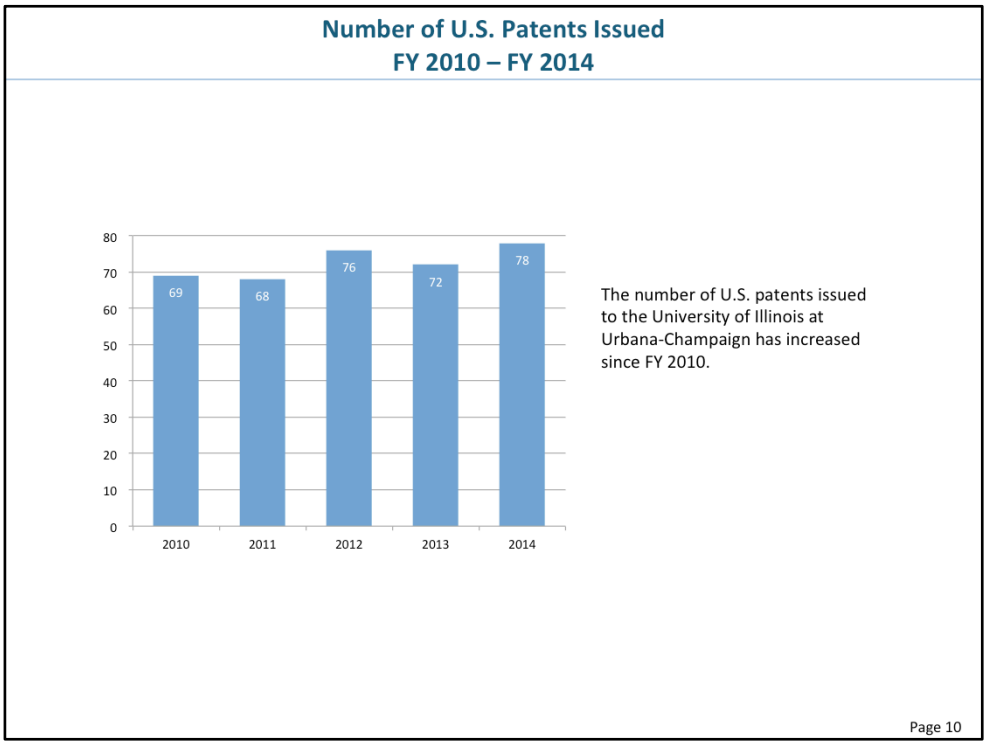
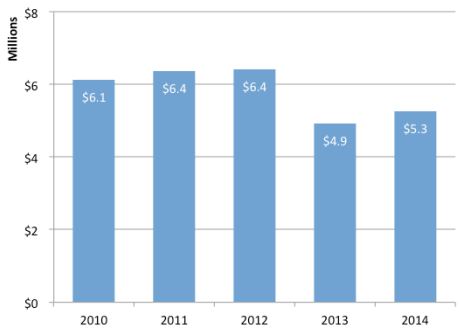
Illinois has a remarkable relationship with the National Science Foundation. The Blue Waters Supercomputer is a critical investment in our nation's research infrastructure, enabling scientists across the country to accelerate their research, leading to new knowledge and discovery.



The three campuses of the University of Illinois rank #18 on the NAIA

46% of US patents issued in FY2014 were licensed or optioned at the time of issuance.

Royalties
FY 2010 – FY 2014



Royalties earned at the University of Illinois at Urbana-Champaign have decreased since FY 2012.

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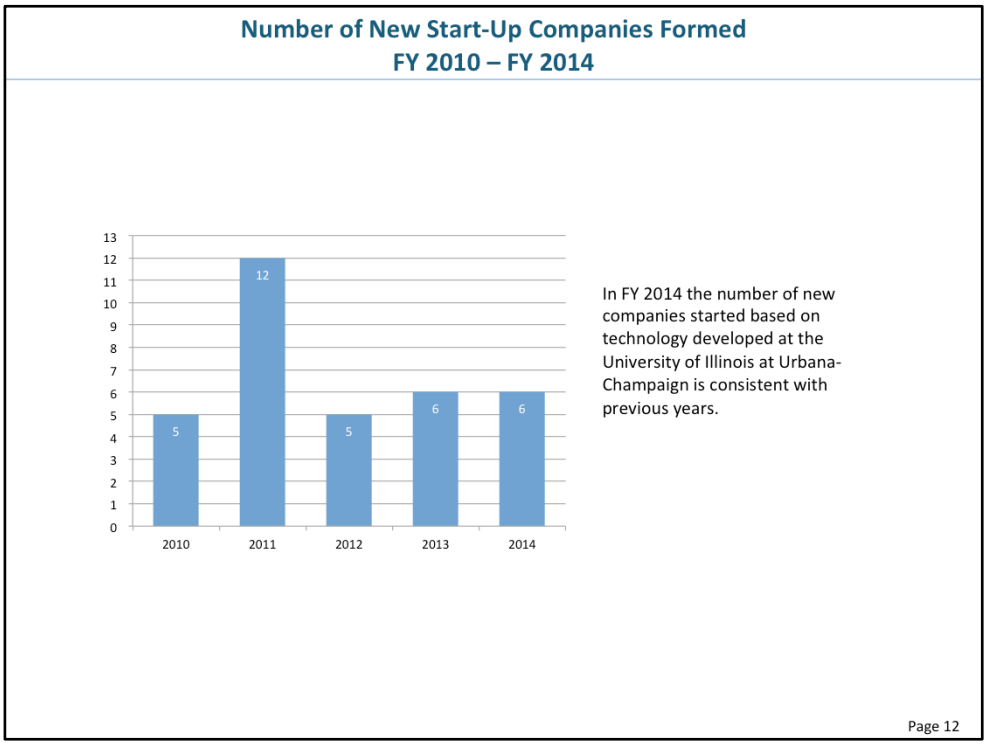
Royalties are not the full measure of the impact of a robust tech transfer program. The university's intellectual property forms the basis for many successful start-up companies who then go on to further develop IP and realize significant economic impact in job creation, and ultimately, benefit to society.



FY 2014 start-up companies were based on innovations in areas such as Education, Aerospace Engineering, Advanced Materials, and Computer Networking and Security. Early indicators suggest that Fiscal 2015 looks to be a very good year for start companies licensing university intellectual property.

Overview

Areas of Strength/Accomplishments

Strengthening the research enterprise:

- Improved customer service and support for the important business and compliance functions that support the university's research enterprise, enabling faculty and other researchers to focus on their scholarship.
- Supported the integration of research with the University's educational mission:
  - Overall 1,900 students were involved in the activities of our campus-wide interdisciplinary research institutes in 2014. Over 350 student volunteers staffed educational and outreach activities.
- Comprehensive overhaul of campus research safety activities
- Launched Office of Proposal Development
- Launched Research Data Service

Grants and awards:

- Noteworthy new grants:
  - Homeland Security Center of Excellence in Critical Infrastructure Resilience
  - NIH Center of Excellence for Big Data Computing
  - ARPA-E award for Mobile Energy-Crop Phenotyping
  - Mellon Foundation grant to support new Humanities initiatives
  - Department of Energy award for Energy Frontier Research Center
- Faculty recognition:
  - Medal of Science, National Academy of Sciences, National Academy of Inventors, Guggenheim Fellowships, National Endowment for the Humanities

Areas for Improvement

1. Continuing innovation to support important business and compliance functions
2. Retaining preeminence in both disciplinary and interdisciplinary research in light of the state budget situation.
3. Competing for Federal, Industry, and Foundation funding
4. Creating opportunities for diverse populations and perspectives in the university's research enterprise, to sustain and build excellence

Strategy to Address Areas for Improvement

1. Innovation in Business Processes
- Launching STARTMyDisclosures for Conflict of Interest management, and Illinois Research Connections to showcase research expertise and encourage research connections
- Evaluating and revising the Division of Animal Resources financial model
- Refining Research Administration Policies and Procedures
- Improving campus research communications infrastructure, both internal and external

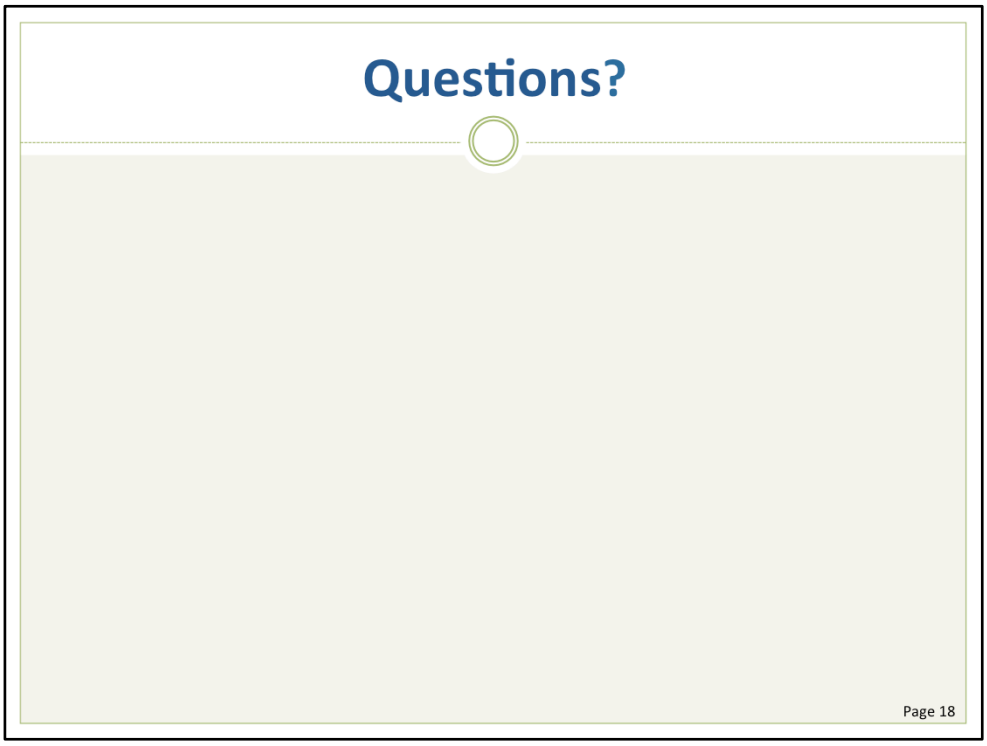
2. Retain Preeminence in Interdisciplinary Research
- Evaluating and implementing Working Group recommendations
- Launching new initiatives and sunsetting others

3. Competing for Funding
- Ongoing Office of Proposal Development activities to support large-scale grantseeking
- IHSI formed to support research in biomedical areas
- Ongoing support for grantseeking in the Arts, Humanities, and Social Sciences

4. Enhancing Diversity
- Enhancing relationships with HBCUs/MSIs
- IPRH move to OVCR promotes broader campuswide support for research through engagement with other campuswide interdisciplinary research institutes

Areas to Watch

- Aging facilities and equipment, and deferred maintenance
- State bureaucracy, particularly procurement challenges
- Recruitment of research faculty and staff by other institutions
- Administrative burden on faculty and other researchers generated by new regulations from sponsors


Questions?
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