

Reported to the Board of Trustees  
July 19, 2018

# University of Illinois at Urbana-Champaign

## Performance Metrics

RESEARCH PERFORMANCE UPDATES BY:  
UNIVERSITY OFFICE FOR PLANNING AND BUDGETING  
JUNE 8, 2018

REPORTED BY:  
CHANCELLOR ROBERT J. JONES  
JULY 19, 2018

# Peer Group



## **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

\*Carle Illinois College of Medicine launched 2018

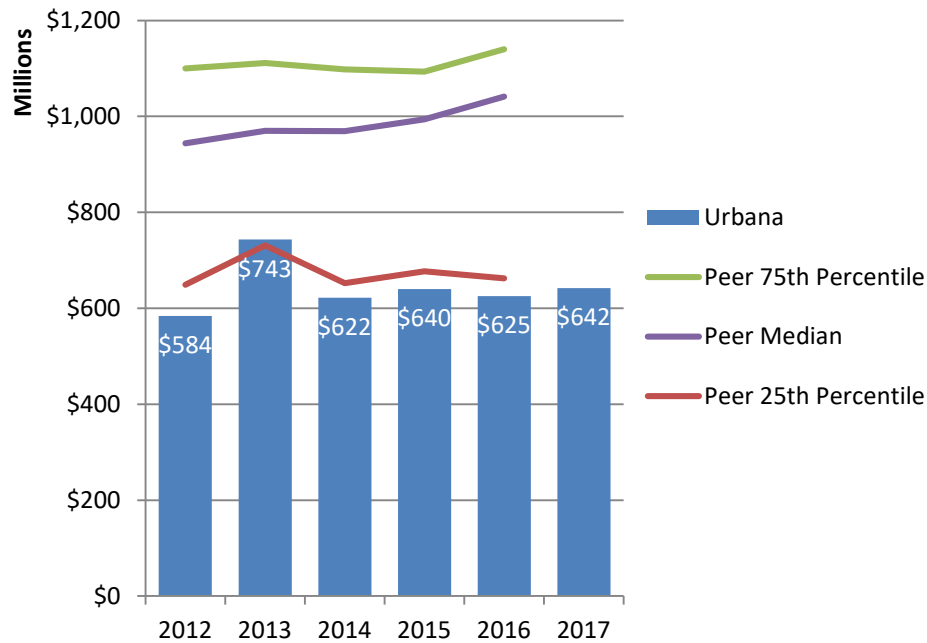
\*\*No medical center or college of medicine

# Research Performance



# Total Research and Development Expenditures\*

## FY 2012 – FY 2017



Research and development expenditures at the University of Illinois at Urbana-Champaign are less than the peer median.

Eight of nine peers have either a college of medicine or a medical center, or both.

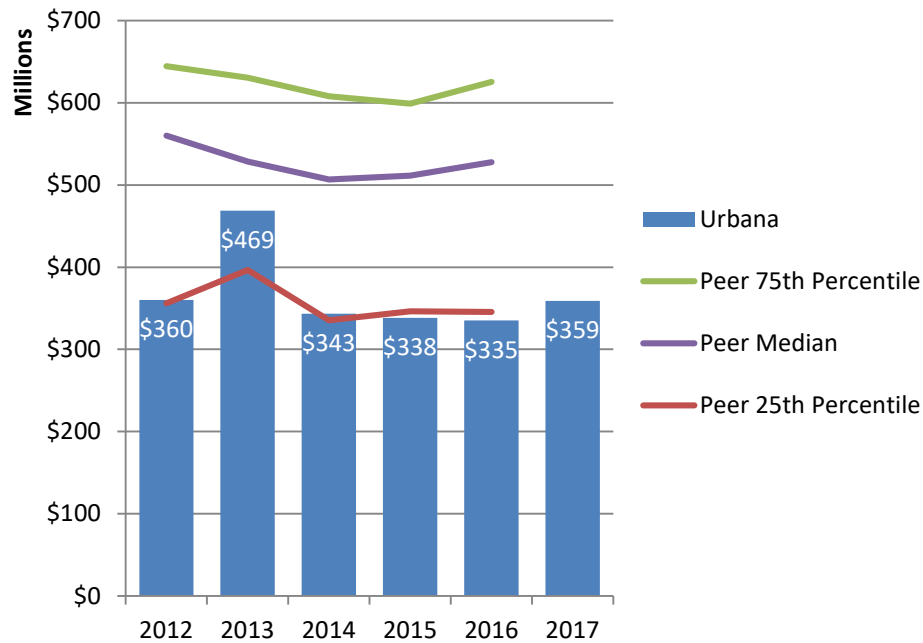
\* As reported to the NSF's Higher Education Research and Development Survey (HERD) FY 2013 increase includes \$120 million related to the construction of Blue Waters. FY 2017 peer data not available.

## Total Research and Development Expenditures\* Among Peers That Historically Did Not Have Medical Schools, FY 2012 – FY 2017



\* As reported to the NSF's Higher Education Research and Development Survey (HERD) FY 2013 increase includes \$120 million related to the construction of Blue Waters. FY 2017 peer data not available.

# Total Federal Research and Development Funding\* FY 2012 – FY 2017

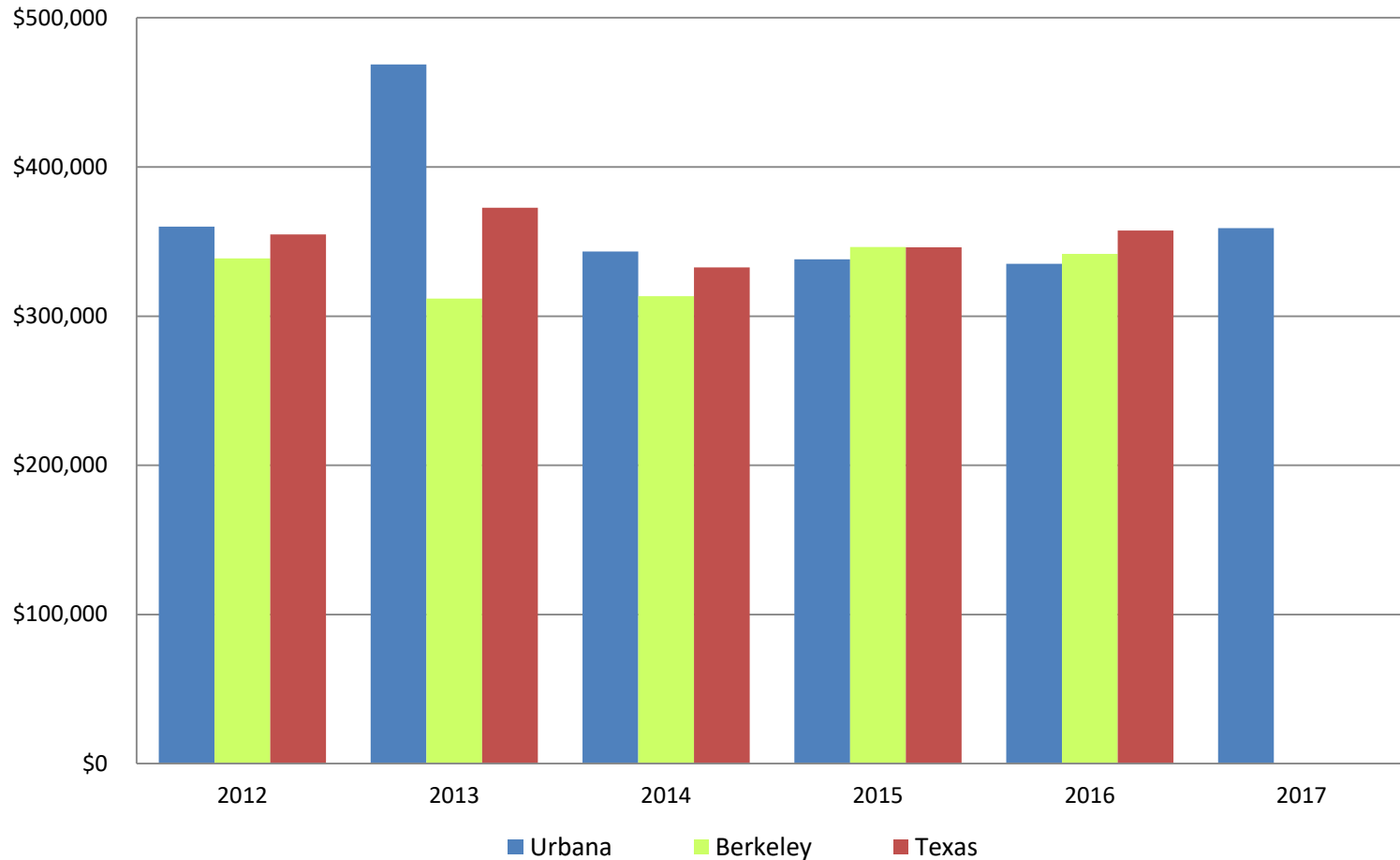


University of Illinois at Urbana-Champaign receives less total federal research funding than its peer median.

Eight of nine peers have either a college of medicine or a medical center, or both.

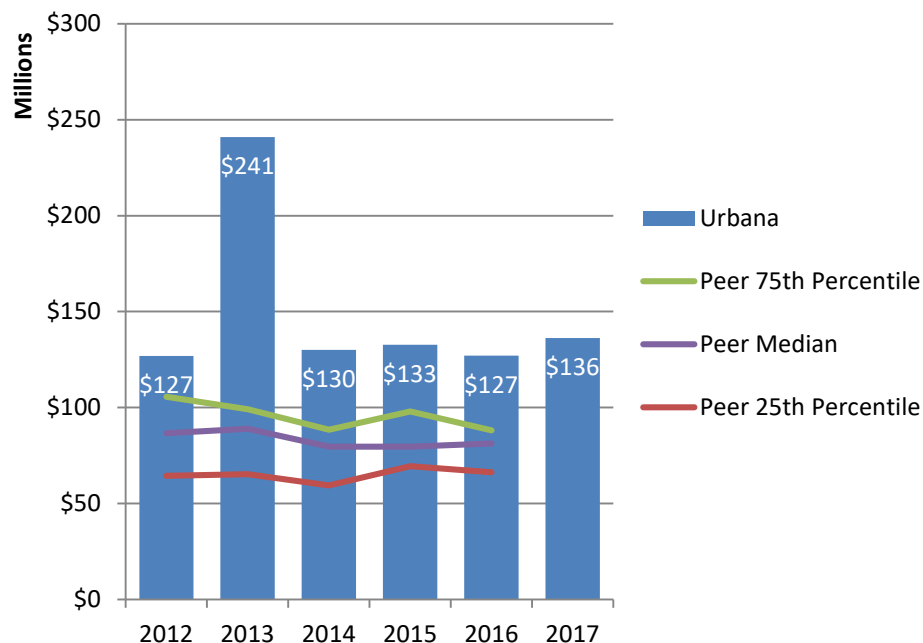
\* As reported to the NSF's Higher Education Research and Development Survey (HERD) . FY 2013 increase includes \$120 million related to the construction of Blue Waters. FY 2017 peer data not available.

## Total Federal Research and Development Funding\* Among Peers That Historically Did Not Have Medical Schools, FY 2012 – FY 2017



\* As reported to the NSF's Higher Education Research and Development Survey (HERD). FY 2013 increase includes \$120 million related to the construction of Blue Waters. FY 2017 peer data not available.

# National Science Foundation Funded Research and Development FY 2012 – FY 2017



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.

Note: FY 2013 increase includes \$120 million related to the construction of Blue Waters. FY 2017 peer data not available.



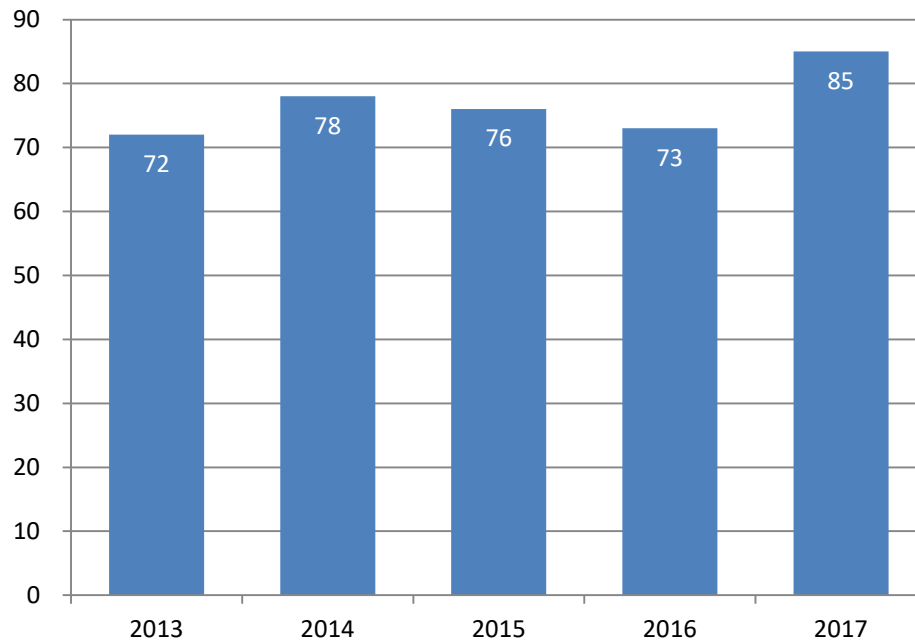
# National Science Foundation Funded Awards

## Top 15 Institutions FY 2017

Institution	Total	Research Support	Education & Human Resources	Major Research Equipment
Oregon State University	\$167,469	\$44,146	\$1,443	\$121,880
University of Illinois at Urbana-Champaign	\$147,742	\$136,277	\$11,465	\$0
Leidos Innovations Corporation	\$131,823	\$131,823	\$0	\$0
Cornell University	\$128,977	\$126,447	\$2,529	\$0
University Corporation for Atmospheric Research	\$126,206	\$126,206	\$0	\$0
University of Texas at Austin	\$111,569	\$109,015	\$2,554	\$0
University of Washington	\$107,053	\$92,646	\$14,407	\$0
University of California-Berkeley	\$106,022	\$67,117	\$38,905	\$0
University of Michigan-Ann Arbor	\$98,778	\$89,084	\$9,693	\$0
University of Wisconsin-Madison	\$96,585	\$77,583	\$19,003	\$0
Massachusetts Institute of Technology	\$95,928	\$82,287	\$13,641	\$0
Michigan State University	\$94,978	\$70,517	\$24,460	\$0
Columbia University	\$86,862	\$86,309	\$552	\$0
Association of Universities for Research in Astronomy, Inc.	\$83,170	\$22,991	\$0	\$60,179
University of Minnesota-Twin Cities	\$83,067	\$74,725	\$8,342	\$0

Source: <https://dellweb.bfa.nsf.gov/Top50Inst2/default.asp>

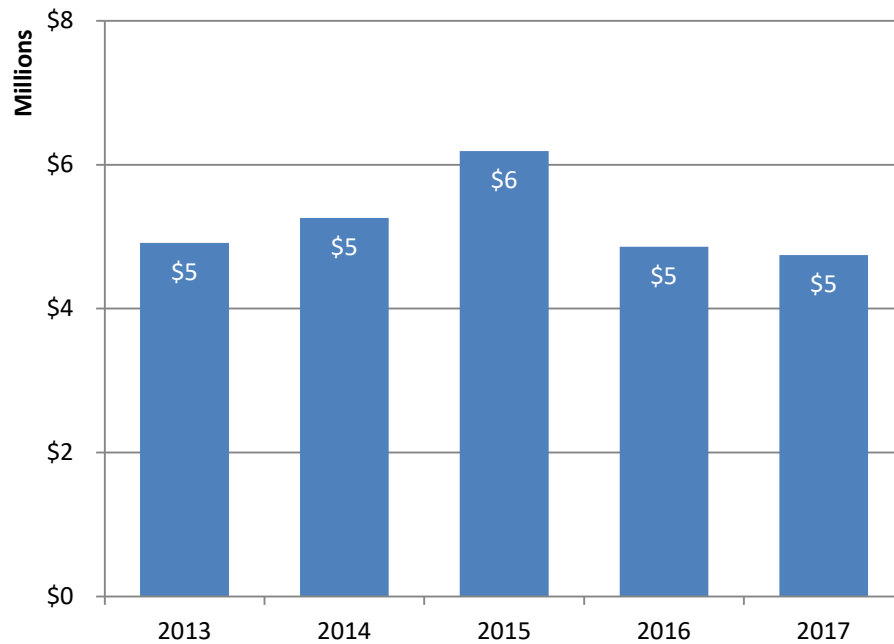
## Number of U.S. Patents Issued FY 2013 – FY 2017



The number of U.S. patents issued to the University of Illinois at Urbana-Champaign has significantly increased in FY 2017.

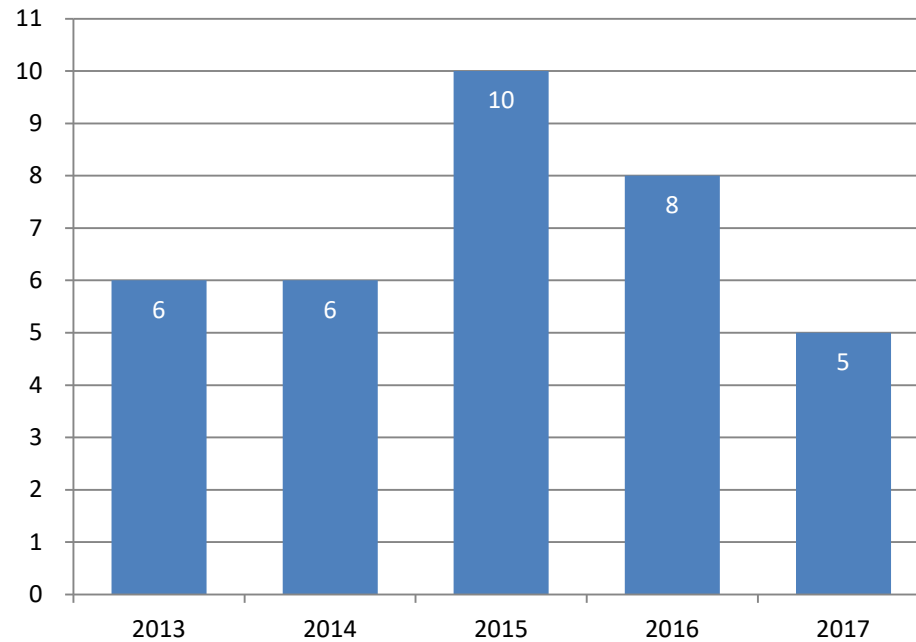
# Royalties

## FY 2013 – FY 2017



Royalties earned at the University of Illinois at Urbana-Champaign are similar to the last fiscal year.

## Number of New Start-Up Companies Formed FY 2013 – FY 2017



The number of new companies started based on technology developed at the University of Illinois at Urbana-Champaign has decreased compared to the last fiscal year.

## Notable Projects

Select, recent projects that illustrate the breadth of research excellence across campus include:

- **CABBI**, a \$115M DOE award focused on biofuels and bioproducts
- **Humanities Without Walls**, a 15-member consortium funded by the Mellon Foundation, that creates new avenues for collaborative research, teaching, and the production of scholarship in the humanities, through cross-institutional cooperation (more than \$7M since 2014)
- The **NIH Center for Macromolecular Modeling and Bioinformatics**, which drives outreach and software development for computational biology, molecular simulation, and visualization, serves more than 120,000 biomedical researchers across the nation and around the world. Founded nearly 30 years ago, the Center was successfully renewed in 2017 with a perfect score.
- Two computing projects – **Blue Waters**, totaling \$440M in combined state and federal support over 8 years, and **XSEDE**, totaling \$230M over 10 years – illustrate the remarkable relationship between Illinois and the NSF
- The **Materials Research Science and Engineering Center**, \$15M award to study the dynamic properties of materials
- Three **Major Research Instrumentation** awards: all three campus proposals submitted to this highly competitive program were funded
- **RIPE**, a \$45M renewal of a Gates Foundation funded project to enhance photosynthesis in plants