



# RESEARCH REPORT

OFFICE OF THE VICE CHANCELLOR FOR RESEARCH  
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

DECEMBER

2016

At Illinois, we're among the nation's research powerhouses—for the last six years running, we have been awarded more funding from the National Science Foundation than any other university in the nation.

Our work permeates our classrooms, fueling new ideas, new companies, and even entirely new industries.

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[#ILLINOISRESEARCH](#)

**\$640M**Total Expenditures  
(FY2015)Cost share and  
unreimbursed F&A included**3,013**

Faculty (Fall 2016)

1,932 Tenure/Tenure Track;  
1,081 Other (including Visiting and  
Specialized Faculty, combined)**781**

Earned Doctorates

NSF Survey of  
Earned Doctorates,  
2015**33,467**

Undergraduate Students, Fall 2016

**11,413**

Graduate Students, Fall 2016

**24%**

Total International Students

**3.1M**Square Footage  
for Research**150+**Centers, laboratories, and research institutes  
conducting groundbreaking research**24M+**Items and materials in the  
University Library



Robert J. Jones was named chancellor of the University of Illinois at Urbana-Champaign.



NCSA celebrated its 30th Anniversary.



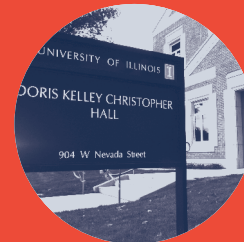
Illinois was named a partner in a \$3.5 million Midwest I-Corps Node.



NCSA's XSEDE project received a five-year, \$120 million extension.



Three new Illinois Industry/University Cooperative Research Centers (I/UCRCs) were announced.



The Family Resiliency Center celebrated the 10th Anniversary of Doris Kelley Christopher Hall.



The Carle Illinois College of Medicine—the first new college on campus in more than 50 years—hired its first dean.



Illinois led the nation in NEH Fellowships, for the second year in a row.



U of I researchers were involved in 30% of all 2016 Department of Defense MURI projects.



The Humanities Without Walls project—led by the Illinois Program for Research in the Humanities—was awarded a \$4.2 million renewal.



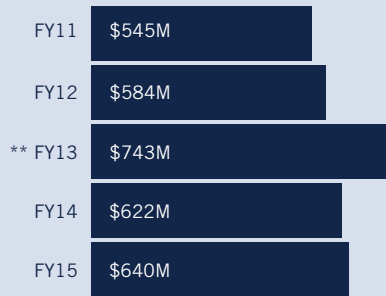
The University announced the launch of the Siebel Center for Design.



FOR MORE  
[go.illinois.edu/  
research](https://go.illinois.edu/research)

## EXPENDITURES

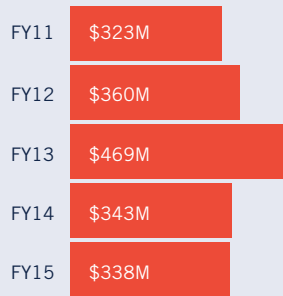
### TOTAL RESEARCH AND DEVELOPMENT (R&D) EXPENDITURES\* FY11 – FY15



\*HERD results include cost sharing, unreimbursed F&A, and non-sponsored institutional research support.

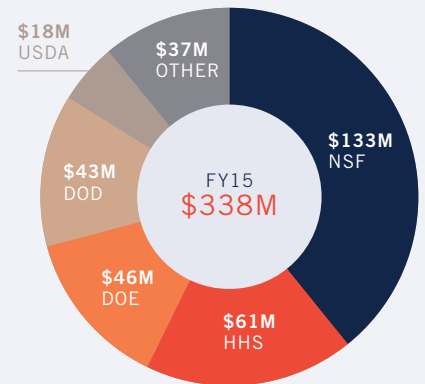
\*\*FY13 increase includes \$120M related to construction of the Blue Waters Supercomputer

### TOTAL SPONSORED FEDERAL R&D EXPENDITURES FY11 – FY15



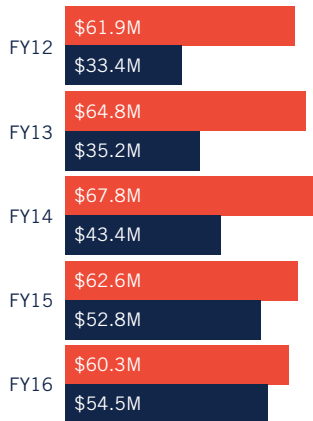
Federal prime awardee includes dollars passed through other entities.

### TOTAL EXPENDITURES BY FEDERAL AGENCY FY15



- National Science Foundation
- U.S. Department of Health and Human Services
- U.S. Department of Energy
- U.S. Department of Defense
- U.S. Department of Agriculture
- Other

CORPORATE  
SUPPORT OF  
CAMPUS  
2012 - 2016



- Corporate Contracts\*
- Corporate Philanthropy \*\*

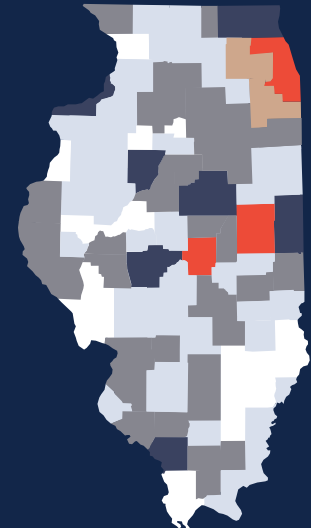
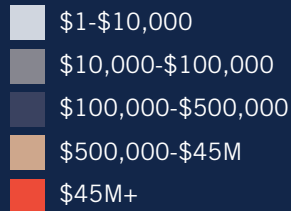
\* Actual expenditures of non-philanthropic corporate funds

\*\*Total receipts from outright gifts, pledge payments, and grant payments

Federal funding is the primary source of support for research at Illinois—and the money that our researchers spend on the equipment and services they use to conduct experiments, make discoveries, and solve big problems benefits communities across the state.

IMPACT IN NEARLY EVERY COUNTY  
IN ILLINOIS

From 2012-2014, university researchers spent more than \$156M on equipment and services in the state of Illinois.



Champaign-Urbana is regularly recognized as one of the nation’s leading tech hubs and a top city for recent college grads.

RESEARCH PARK AND ENTERPRISEWORKS

15  
buildings

100  
companies

594  
student interns

1,711  
employees



Home to a growing number of “Corporate Innovation Centers,” that enable companies to generate fresh ideas and harness cutting-edge technologies

200 Acres

adjacent to campus, developed with a private partner

43,000 sq.ft.

EnterpriseWorks is a small business incubator/accelerator located in the Research Park, that provides support for early stage tech firms

Research Park employers include:





## SUPPORTING NEW IDEAS & COMPANIES

Hundreds of teams and start-up companies receive support from University resources that enable entrepreneurship and economic development.

**51** start-up tenants in the EnterpriseWorks incubator.

Between 2013-2015, more than 100 teams participated in the Illinois I-Corps site, raising over **\$24M** in external funding.

Companies that incubated at EnterpriseWorks have raised an impressive **\$911M** in venture capital/private equity financing.

**62%** of Illinois startups remain in the state.

From 2010-2015, companies in the Research Park were awarded **\$88.7M** in SBIR/STTR funding.

**120** student start-up teams competed in the 2016 Cozad New Venture Competition.

## TECHNOLOGY MANAGEMENT METRICS

1,026

Invention disclosures  
in the last five years

750+

Active, issued  
U.S. Patents

### ROYALTIES

<u>6.41M</u>	<u>4.91M</u>	<u>5.26M</u>	<u>6.19M</u>	<u>4.85M</u>
FY12	FY13	FY14	FY15	FY16

### NEWLY LICENSED START-UP COMPANIES (FIRST LICENSE OF UNIVERSITY IP)

<u>5</u>	<u>6</u>	<u>6</u>	<u>10</u>	<u>8</u>
FY12	FY13	FY14	FY15	FY16

### U.S. PATENTS ISSUED

<u>76</u>	<u>72</u>	<u>78</u>	<u>76</u>	<u>73</u>
FY12	FY13	FY14	FY15	FY16

## CONVERGENCE

THE HALLMARK OF ILLINOIS RESEARCH

“The scientific opportunities enabled by convergence—the coming together of insights and approaches from originally distinct fields—will make fundamental contributions in our drive to provide creative solutions to the most difficult problems facing us as a society.”

NATIONAL RESEARCH COUNCIL, 2014

PATH-BREAKING  
RESEARCH

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A CULTURE OF  
COLLABORATION

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WORLD-CLASS  
RESOURCES

**HEALTH**

Treatments and tools to improve human health

**ENERGY &  
ENVIRONMENT**

Actionable research for a changing environment

**CREATIVITY  
& HUMAN  
UNDERSTANDING**

Pushing boundaries in academia and the public square

**AGRICULTURE**

Innovations to feed the world

**BASIC SCIENCE &  
ENGINEERING**

Underlying discoveries that enable fundamental research advances

**SOCIAL & BEHAVIORAL  
SCIENCES**

Understanding the drivers of human behavior

**ADVANCING  
TECHNOLOGY**

Harnessing the power of computing, data, and information

**INFRASTRUCTURE**

Equipment and services that support the nation's research community



**FOR MORE  
RESEARCH UPDATES**

**@UofIResearch  
#ILLINOISresearch**

INSTITUTE	WHAT WE DO	CORE ACTIVITIES
<b>BECKMAN INSTITUTE FOR ADVANCED SCIENCE AND TECHNOLOGY</b> <a href="http://beckman.illinois.edu">beckman.illinois.edu</a>	Interdisciplinary research in physical sciences, biological imaging, computation, engineering, behavior, and neuroscience	<ul style="list-style-type: none"> <li>• Integrative Imaging</li> <li>• Intelligent Systems</li> <li>• Molecular and Electronic Nanostructures</li> </ul>
<b>CARL R. WOESE INSTITUTE FOR GENOMIC BIOLOGY</b> <a href="http://igb.illinois.edu">igb.illinois.edu</a>	Genomics-based research in energy use and production, the environment, human health, and agriculture	<ul style="list-style-type: none"> <li>• Systems Biology</li> <li>• Cellular and Metabolic Engineering</li> <li>• Genome Technology</li> </ul>
<b>ILLINOIS PROGRAM FOR RESEARCH IN THE HUMANITIES</b> <a href="http://iprh.illinois.edu">iprh.illinois.edu</a>	Research in the humanities, arts, and social sciences for deeper understanding of people, societies, artifacts, and events	<ul style="list-style-type: none"> <li>• Fellowships for faculty, graduate students, and post-docs</li> <li>• Lectures, symposia, and panel discussions</li> <li>• Research clusters/reading groups</li> <li>• Awards that recognize excellence in humanities research</li> <li>• Public engagement (i.e., The Odyssey Project)</li> </ul>
<b>INSTITUTE FOR SUSTAINABILITY, ENERGY, AND ENVIRONMENT</b> <a href="http://sustainability.illinois.edu">sustainability.illinois.edu</a>	Actionable research to find solutions for global needs in sustainability, energy, and environment	<ul style="list-style-type: none"> <li>• Research in Climate Solutions, Energy Transitions, Sustainable Infrastructure, Water and Land, Stewardship, and Secure and Sustainable Agriculture</li> <li>• Campus sustainability efforts</li> <li>• Education and outreach</li> </ul>

## INSTITUTE

## WHAT WE DO

## CORE ACTIVITIES

### INTERDISCIPLINARY HEALTH SCIENCES INITIATIVE

[healthinitiative.illinois.edu](http://healthinitiative.illinois.edu)

Support and coordination for campus health sciences research

- Strengthen relationships with clinical providers
- Support for clinical and campus research communities
- Enhance the University's stature as a leader in biomedical research

### NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS (NCSA)

[nca.illinois.edu](http://nca.illinois.edu)

Computational power and expertise to develop simulations and study models that cannot be physically created in labs

- Bioinformatics and Health Sciences
- Computing and Data Sciences
- Culture and Society
- Earth and Environment
- Materials and Manufacturing
- Physics and Astronomy

### PRAIRIE RESEARCH INSTITUTE

[prairie.illinois.edu](http://prairie.illinois.edu)

Objective research, expertise, and data to steward our nation's natural and cultural resources

- Energy
- Climate
- Water
- Agriculture
- Public Health
- Environment

## LARGE-SCALE RESEARCH INITIATIVES AND CENTERS IN COLLEGES ACROSS CAMPUS

Center on Health, Aging, and Disability  
[chad.illinois.edu](http://chad.illinois.edu)

Coordinated Science Laboratory  
[csl.illinois.edu](http://csl.illinois.edu)

Family Resiliency Center  
[familyresiliency.illinois.edu](http://familyresiliency.illinois.edu)

Frederick Seitz Materials Research Laboratory  
[mrl.illinois.edu](http://mrl.illinois.edu)

Illinois Applied Research Institute  
[appliedresearch.illinois.edu](http://appliedresearch.illinois.edu)

Micro + Nanotechnology Lab (MNTL)  
[mntl.illinois.edu](http://mntl.illinois.edu)

Unit for Criticism and Interpretive Theory  
[criticism.english.illinois.edu](http://criticism.english.illinois.edu)

Both undergrad and graduate students are involved in all aspects of research at Illinois, working in labs, conducting field trials, doing analysis, and presenting discoveries. In 2015, more than 2,000 students were involved in the campus-wide interdisciplinary research institutes.

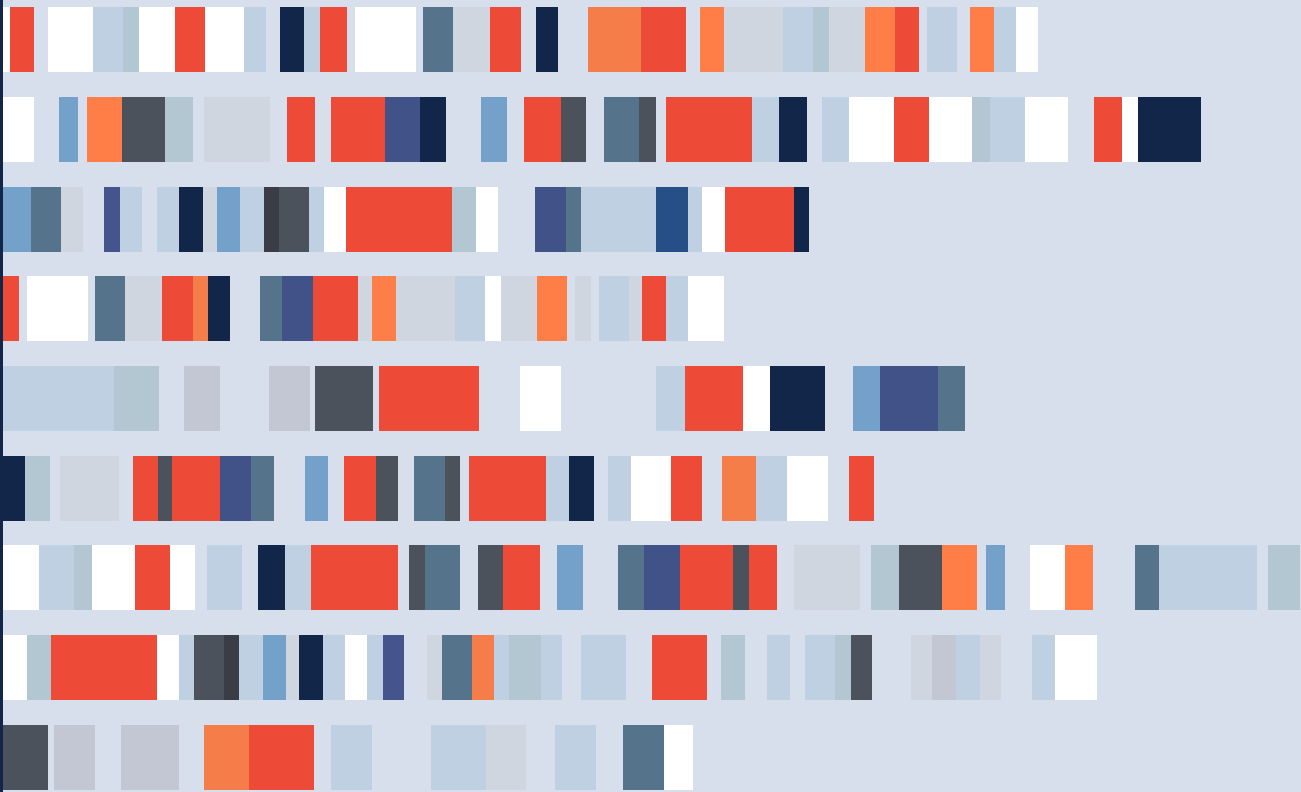
Meanwhile, research faculty and staff teach courses, offer guest lectures, and present workshops to foster practical training of graduate students—enhancing learning and creating unique educational opportunities.

FIND ILLINOIS RESEARCH EXPERTISE

VISIT [WWW.EXPERTS.ILLINOIS.EDU](http://WWW.EXPERTS.ILLINOIS.EDU)

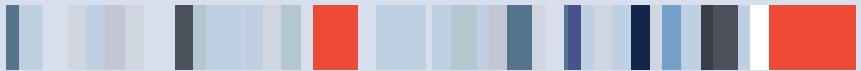
DISCOVER FACULTY PROFILES | IDENTIFY COLLABORATORS | SEARCH FOR SCHOLARLY WORKS & PUBLICATIONS





THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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