Reported to the Board of Trustees July 19, 2018

# University of Illinois at Chicago



### **Performance Metrics**

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

REPORTED BY:
CHANCELLOR MICHAEL D. AMIRIDIS
JULY 19, 2018

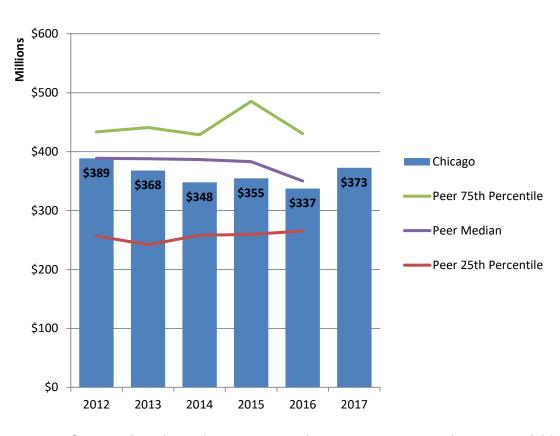
### PEER GROUPS

SUNY, University at Buffalo
University of Alabama at Birmingham
University of Cincinnati
University of Connecticut
University of Louisville
University of South Florida - Tampa
University of Utah
Virginia Commonwealth University

### RESEARCH PERFORMANCE

## UIC AND STANDARD PEER GROUP TOTAL RESEARCH AND DEVELOPMENT EXPENDITURES: FY 2012 - FY 2017

UIC was at the median in FY 2012. UIC dropped slightly below the median after three years of 5% annual decline. A 10% increase in FY 2017, UIC is poised to rise above the median.

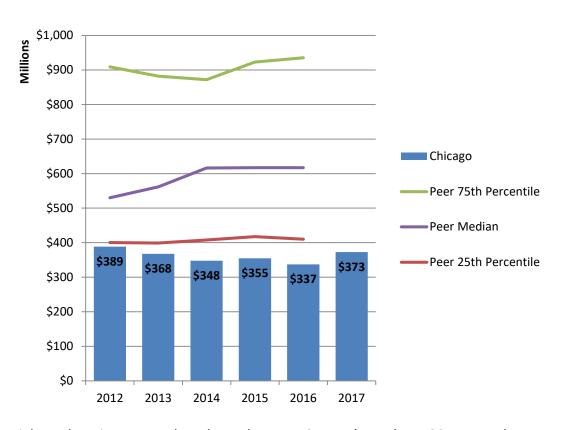




Source: NSF Survey of Research and Development Expenditures. FY 2017 peer data not available.

## UIC AND ASPIRATIONAL COMPARISON GROUP TOTAL RESEARCH AND DEVELOPMENT EXPENDITURES: FY 2012 – FY 2017

UIC research and development expenditures are lower than the 25<sup>th</sup> peer percentile since FY2013, where it has remained.

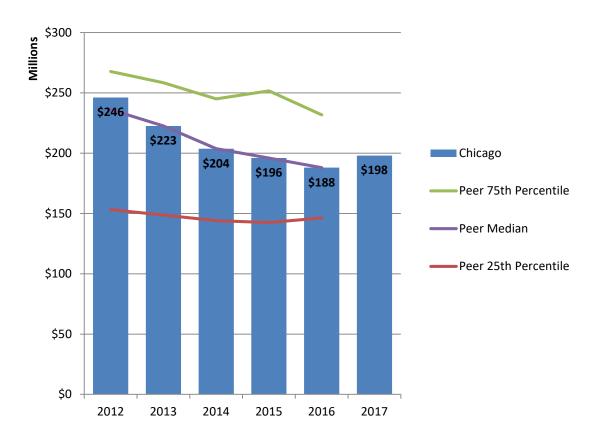




Source: Higher Education Research and Development Survey (HERD). FY 2017 peer data not available.

## UIC AND STANDARD PEER GROUP TOTAL FEDERAL RESEARCH EXPENDITURES: FY 2012 – FY 2017

From FY 2012 to FY 2016, total federal research expenditures declined for the peer group and UIC. Despite declines, UIC has been at the median since FY 2013.

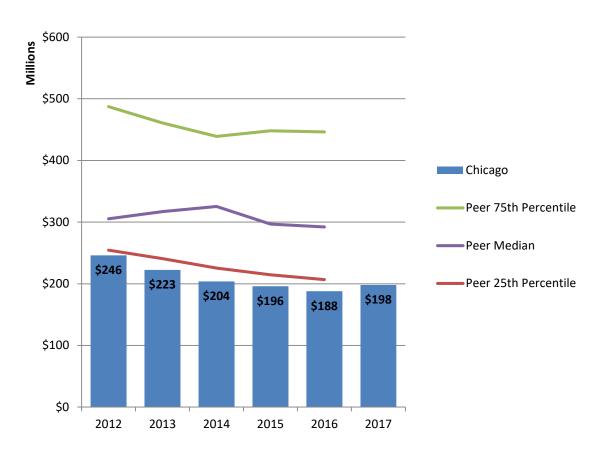


Source: Higher Education Research and Development Survey (HERD). FY 2017 peer data not available.



## UIC AND ASPIRATIONAL COMPARISON GROUP TOTAL FEDERAL RESEARCH EXPENDITURES: FY 2012 – FY 2017

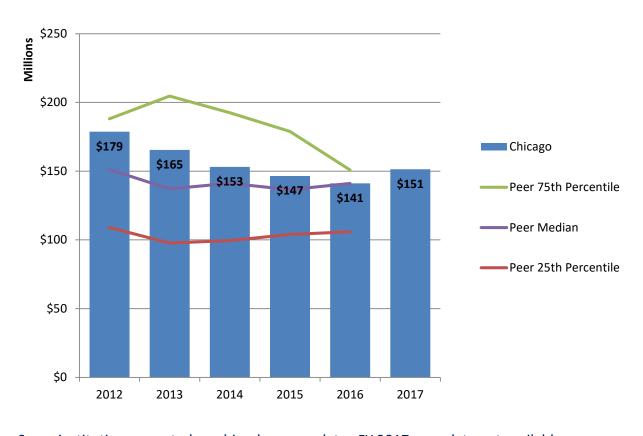
Total UIC federal research expenditures are at the peer group 25<sup>th</sup> percentile.





## UIC AND STANDARD PEER GROUP DEPARTMENT OF HEALTH AND HUMAN SERVICES (INCLUDING NIH) RESEARCH AND DEVELOPMENT EXPENDITURES: FY 2012 – FY 2017

UIC receives more HHS funding than the peer group median and is consistently ranked in the top four among its peers. NIH is the largest source of federal R&D funding for UIC.

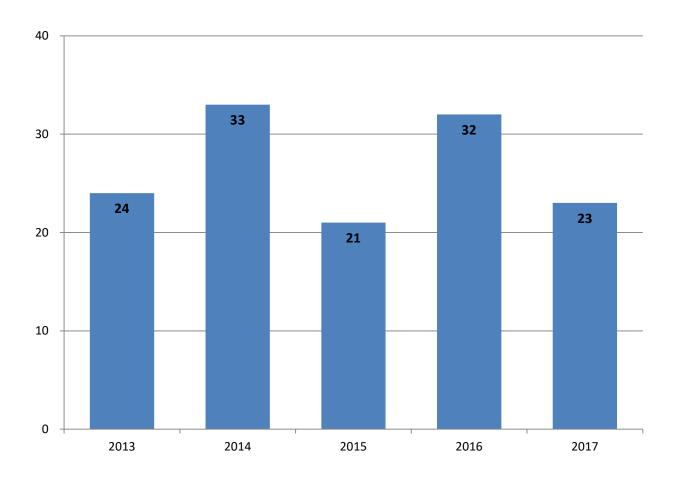




Notes: Some institutions reported combined campus data. FY 2017 peer data not available.

#### NUMBER OF U.S. PATENTS ISSUED FY 2013- FY 2017

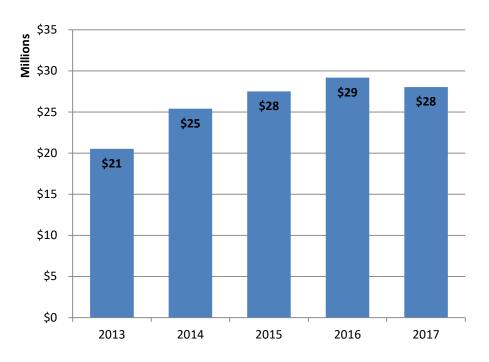
In recent years, the number of patents issued to UIC has ranged from a low of 21 in FY 2015 to a high of 33 in FY 2014, and stands at 23 in FY 2017.





## **ROYALTIES FY 2013 – FY 2017**

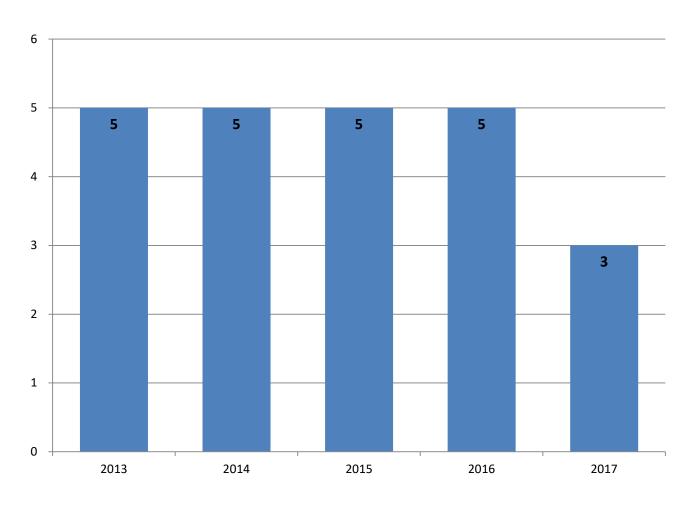
UIC licensing revenue has steadily increased since FY 2013. Most of this growth is the result of royalties from the licensed patents for Prezista. In FY 2016, total licensing revenue stood at \$29.2 million, with revenue from Prezista at \$22.4 million. In FY 2017, total licensing revenue decreased slightly to \$28 million with \$22.3 million from Prezista.





#### NUMBER OF NEW START-UP COMPANIES FORMED FY 2013 – FY 2017

In FY 2017, the number of new technology companies developed at UIC dropped to three after four consecutive years of five new companies.





## AREAS EXCEEDING EXPECTATIONS: UPGRADING RESEARCH INFRASTRUCTURE SUPPORT

- OVCR, in partnership with UIUC, UIS and AITS, developed a grants management system leveraging open source (Kuali Coeus), and University of Illinois developed software under the START (Systemwide Tools for Administration of Research and Training) umbrella:
  - myResearch Portal: will be upgraded this summer to include approval screens for proposal submission and routing;
  - myDisclosures: continue to enhance the application to streamline and facilitate the
    review of the RNUA as well as sponsor specific disclosures (as required by the federal
    regulations). Added new compliance verification process (myFCOI Checklist) for federal
    sponsors that adhere to the public health services regulations; and
  - myProposals: proposal submission and routing will be released as a pilot to two colleges in summer 2018 with a phased rollout to the rest of campus throughout FY19.
- OVCR is developing the following systems in-house:
  - e-census program for the Biologic Resources Laboratory, as well as, upgrading their animal ordering and billing systems to help streamline processes for the PI;
  - OPRS Live has been available for two years and currently moving the entire application to web forms; and
  - Electronic submission, routing and internal administrative system for the Animal Care Committee (ACC) to launch in FY19.

## AREAS EXCEEDING EXPECTATIONS: STUDENT SUCCESS AND EXPERIENCE

#### **Student Research Forum and Impact Day**

- Students present their scholarly efforts and celebrate the depth and breadth of research across all disciplines
- April 2018, over 360 students registered to participate
- April 2019, event will be rebranded to include greater depth and breadth of student activities

#### **Research Resources Center (RRC):**

- Participated in or gave lectures at over 66 workshops/courses this past year and have provided hands-on learning to students
- Trained over 503 undergraduate, graduate students and others to use the instrumentation in the Core facilities within the past year

#### **Information Technology Team:**

- Provided robust training for 8 Graduate Assistants through support and development of ACC Web, BRL e-census and animal ordering, and OPRSLive
- Graduate Assistants have gone on to positions at Goldman Sachs, GrubHub, Amazon, and various start-ups



## AREAS SEEING IMPROVEMENT: POSTDOCTORAL FELLOWS

- Postdoctoral Association (PDA) held 1<sup>st</sup> Annual Career Development Symposium, attended by 250 postdocs and graduate students from UIC, UIUC, Northwestern, University of Chicago and other local institutions.
- Associate Director for Postdoctoral Affairs to be hired with interviews to be concluded for an August 2018 start date.

### STRATEGIES FOR IMPROVEMENT: NEW AND ONGOING INITIATIVES

#### **East Meets West**

- In partnership between the Provost/Vice Chancellor for Academic Affairs and the Vice Chancellor for Health Affairs, East Meets West provides opportunities for multi-disciplinary, cross campus collaborations bringing faculty and students together at monthly research mixers.
- OVCR hosted a CURRENT, Innovations in Advanced Water Research and Technology, workshop focusing on a research partnership with Technion, Israel Institute of Technology:
  - Faculty from UIC, UIUC, U of C and Argonne attended and support was provided by OVCR staff for events held at the University of Chicago, UIUC, Metropolitan Water Reclamation District (MWRD) and Argonne.
  - UIC faculty are competing for seed funding provided by Current.

### AREAS SEEING IMPROVEMENT: NEW AND ONGOING INITIATIVES

#### **Research Development Services**

- Hired two new Associate Directors, who have met with over 150 faculty and staff across campus.
- Established a new weekly e-newsletter to distribute funding announcements and research-related news.
- Initiated campus-wide print and digital media anthology project for Social Justice and Community Disparities initiative; 31 contributions to date; planning workshop scheduled for September.
- Convened speed networking event for Functional and Regenerative Materials
   (FRM) initiative, 26 faculty representing 13 departments from 6 colleges attended.
- Facilitated the preparation of two proposals for large center grants with investigators from the FRM initiative.
- Planned workshop for October with keynote presentation by NIH Deputy Director Lawrence Tabak.

#### AREAS SEEING IMPROVEMENT: NEW AND ONGOING INITIATIVES

#### **Army Research Laboratory (ARL) – Central**

- ARL, the Army's Corporate Research Lab has decided to form extended and open campuses on university locations.
- Partnered in the ARL-Central initiative with University of Chicago, Northwestern, UIUC, University of Wisconsin and Purdue.
- Developing joint work statements and research proposals with the ARL-Scientists and Engineers.
- Held 8 workshops at UIC to date in areas such as sensors, cybersecurity, materials, machine language, and AI with over 100 faculty engaged.

## AREAS NEEDING IMPROVEMENT: INFRASTRUCTURE

 Deferred maintenance continues to be an issue with respect to ageing research infrastructure and equipment, including the HVAC systems for the Biologic Resources Laboratory (BRL) and Research Resources Center (RRC)

#### **NOTABLE AWARDS**

- \$15.8 million, one-year grant from the Illinois Criminal Justice Information Authority, for the Chicago Project for Violence Prevention/Cease Fire.
- \$6.7 million, five-year grant from the National Center on Minority Health & Health Disparities, for the UIC Center for Health Equity Research (CHER). The new UIC center will investigate how various social structures and determinants contribute to the health of marginalized groups.
- \$4.6 million, five-year grant from the National Heart, Lung and Blood Institute, to study the molecular neurobiology of chronic pain in patients with sickle cell disease and to develop potential new drug treatments.
- \$1.9 million, two grants from the Andrew W. Mellon Foundation, to teach and mentor undergraduate students to explore and conduct research in the humanities. The second grant will develop a national fellowship program designed to mentor Latino studies scholars as they complete their doctoral research and improve their job-market readiness.