BOSTON

TOP RECIPIENT of NIH FUNDING for

CONSECUTIVE YEARS



BOSTON REDEVELOPMENT AUTHORITY





CITY OF BOSTON Office of the Mayor Martin J. Walsh

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The BRA Research Division strives to understand the current environment of the city to produce quality research and targeted information that will inform and benefit the residents and businesses of Boston. The Division conducts research on Boston's economy, population, and commercial markets for all departments of the BRA, the City of Boston, and related organizations.

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ABOUT NIH

The National Institutes of Health (NIH), a part of the U.S. Department of Health and Human Services, is the largest source of funding for medical research in the world. Its mission is "to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability." NIH is comprised of 27 Institutes and Centers, each with a specific agenda focused on particular diseases or body systems.² In fiscal year 2013, NIH invested over \$29 billion in medical research.3 More than 80% of this funding went towards extramural awards, or funding provided to researchers and organizations outside the NIH.485 The NIH awarded almost 50,000 grants to researchers at organizations in every state within the U.S., creating and supporting thousands of jobs.⁶ Forty-seven Boston organizations and companies received over \$1.72 billion in NIH funding. This funding plays an integral role in supporting the city's life sciences and biotechnology industries.

BOSTON:THE TOP RECIPIENT OF NIH FUNDING FOR 19 CONSECUTIVE YEARS

For the 19th consecutive year, Boston received the most funding from the National Institutes of Health (NIH) of all cities in the United States, at over \$1.72 billion. This total represented 72.3% of all NIH funding in Massachusetts. In fiscal year 2013 (FY13), 47 hospitals, educational institutions, organizations, and companies received 3,626 awards from NIH. Eight Boston organizations received over \$100 million in NIH funding, helping to make Boston a powerhouse in medical research. Those eight organizations were:

Organization	Awards	Funding
Massachusetts General Hospital ⁷	778	\$339,490,480
Brigham and Women's Hospital	576	\$315,919,592
Harvard University (Medical School)	388	\$185,223,961
Children's Hospital Corporation	303	\$126,812,298
Beth Israel Deaconess Medical Center	267	\$118,785,811
Harvard University (School of Public Health)	188	\$115,870,367
Dana Farber Cancer Institute	201	\$115,844,948
Boston University Medical Campus	240	\$107,762,256

Since 1992, Boston has received over \$28.7 billion in NIH funding. As seen in the chart on the next page, Boston's NIH funding reached a record high in 2009 due to economic stimulus dollars created by the American Recovery and Reinvestment Act (ARRA). After 2009, funding levels decreased as ARRA ended, but Boston's annual NIH funding has stayed fairly consistent at slightly over \$1.7 billion during fiscal years 2011, 2012, and 2013.

¹ National Institutes of Health. "About NIH," last modified February 27, 2014. http://www.nih.gov/about/mission.htm

² National Institutes of Health. "About NIH," last modified February 27, 2014. http://www.nih.gov/about/mission.htm

³ National institutes of Health. "Actual Obligations by Budget Mechanism, FY 2000 – FY 2013." http://officeofbudget. od.nih.gov/pdfs/FY15/Mechanism%20Detail%20for%20Total%20NIH%20FY%202000%20-%20FY%20 2013-Publish.pdf

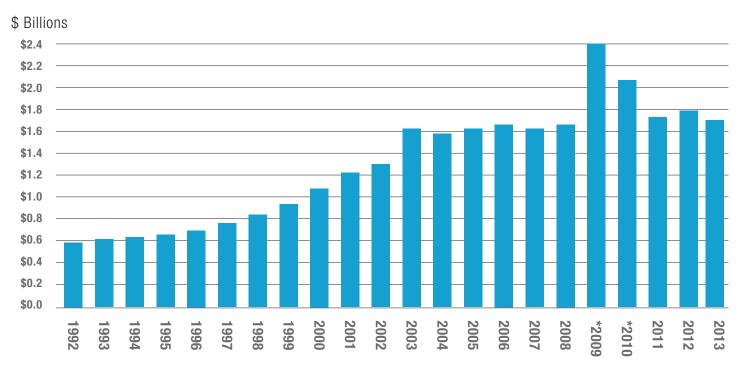
⁴ National Institutes of Health. History of Congressional Appropriations, Fiscal Years 2000-2013. http://officeofbudget.od.nih.gov/pdfs/FY15/Approp%20%20History%20by%20IC%20through%20FY%202013.pdf

⁵ National Institutes of Health. "About NIH," last modified February 27, 2014. http://www.nih.gov/about/mission.htm

⁶ National Institutes of Health. "About NIH," last modified February 27, 2014. http://www.nih.gov/about/mission.htm

⁷ When FY13 data was downloaded from the NIH website, "Massachusetts General Hospi" and "Massachusetts General Hospital" were listed as two separate organizations. For this report, we combined the two to obtain the true funding amount for Massachusetts General Hospital in FY13.

Boston NIH Awards: 1992-2013



*Includes ARRA funding

NATIONAL COMPARISONS

Following behind Boston were New York, Seattle, San Diego and Philadelphia, respectively. Boston received about \$320 million more in NIH funding than New York. These five cities combined earned almost a quarter of NIH funding in the U.S. in FY13.



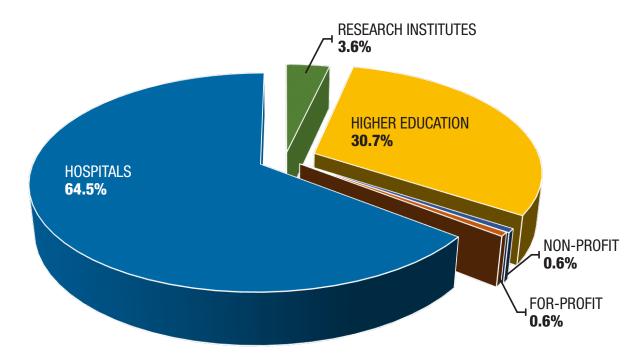
TOP U.S. RECIPIENTS

Three Boston organizations were among the top 30 funding recipients in the United States. Massachusetts General Hospital, Brigham and Women's Hospital, and Harvard University Medical School were ranked 14th, 16th, and 29th respectively in the United States. These three organizations received 1,752 awards and over \$840 million in funding, representing 35.3% of funding in Massachusetts and 48.8% of funding in Boston. The top 30 NIH funding recipients in the U.S. in FY13 were:

Rank	Organization	City	Awards	Funding
1	Johns Hopkins University	Baltimore, MD	1281	\$574,844,637
2	University of California San Francisco	San Francisco, CA	1174	\$501,656,900
3	University of Washington	Seattle, WA	932	\$454,274,167
4	University of Pennsylvania	Philadelphia, PA	1081	\$451,194,908
5	University of Michigan	Ann Arbor, MI	1021	\$412,016,862
6	University of Pittsburgh at Pittsburgh	Pittsburgh, PA	963	\$396,728,993
7	University of North Carolina Chapel Hill	Chapel Hill, NC	892	\$383,752,058
8	Saic-Frederick, Inc.	Frederick, MD	66	\$370,006,506
9	University of California	La Jolla (San Diego), CA	847	\$362,004,733
10	Stanford University	Stanford, CA	828	\$357,812,990
11	Duke University	Durham, NC	753	\$350,249,092
12	Yale University	New Haven, CT	875	\$348,058,771
13	University of California Los Angeles	Los Angeles, CA	829	\$341,211,533
14	Massachusetts General Hospital	Boston, MA	788	\$339,490,480
15	Washington University	Saint Louis, MO	817	\$321,046,726
16	Brigham and Women's Hospital	Boston, MA	576	\$315,919,592
17	Vanderbilt University Medical Center	Nashville, TN	797	\$311,110,760
18	Columbia University Health Sciences	New York, NY	752	\$305,384,118
19	Emory University	Atlanta, GA	635	\$272,395,344
20	University of Minnesota	Minneapolis, MN	606	\$263,576,394
21	University of Wisconsin- Madison	Madison, WI	617	\$240,740,136
22	Fred Hutchinson Cancer Research Center	Seattle, WA	269	\$199,131,915
23	Scripps Research Institute	La Jolla (San Diego), CA	335	\$198,275,639
24	Mount Sinai School of Medicine	New York, NY	452	\$197,480,383
25	Mayo Clinic Rochester	Rochester, MN	376	\$192,248,756
26	Oregon Health & Science University	Portland, OR	431	\$190,719,145
27	University of Alabama at Birmingham	Birmingham, AL	457	\$188,847,448
28	Baylor College of Medicine	Houston, TX	438	\$185,954,665
29	Harvard University (Medical School)	Boston, MA	388	\$185,223,961
30	University of Colorado Denver	Aurora, CO	502	\$184,692,174

BOSTON FUNDING

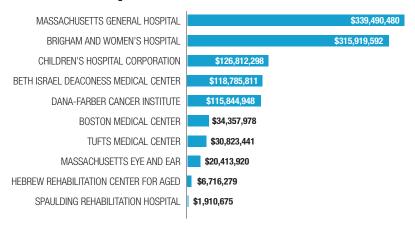
NIH provides vital funding to Boston's hospitals, colleges and universities, research institutes, non-profit organizations, and for-profit companies. In FY13, hospitals received 64.5% of Boston's NIH funding, at over \$1.11 billion. Educational institutions received the next highest amount, at over \$529 million or approximately 30.7% of the city's total NIH funding. The remaining 4.8% was awarded to a mix of research institutes, non-profits, and for-profit companies.



HOSPITALS

In FY13, Boston's hospitals received over \$1.1 billion in funding and 2,360 awards. Massachusetts General Hospital was at the top of this group. In fact, this marks the 13th consecutive year for Massachusetts General Hospital (MGH) as the top recipient of NIH funding in the state. MGH alone received a total of 788 awards and almost \$339.5 million. Brigham and Women's Hospital was next, with 576 awards and over \$315 million in funding. Most notably, however, is that Massachusetts General Hospital and Brigham and Women's Hospital were the top two NIH-funded hospitals in all of the U.S.

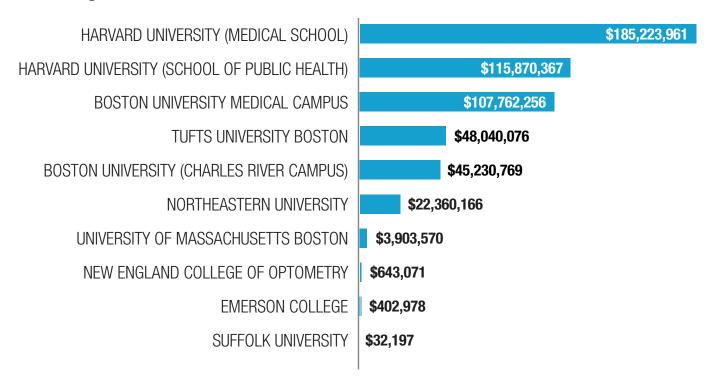
Boston Hospitals



EDUCATIONAL INSTITUTIONS

After hospitals, educational institutions received the next highest amount of NIH funding in Boston. Ten colleges and universities received over \$529 million and 1,114 awards, which made up 30.7% of NIH funding in Boston. Harvard University Medical School received the most funding with over \$185 million and 388 awards. Next was Harvard University School of Public Health with over \$115 million and 188 awards.

Boston Higher Education



RESEARCH INSTITUTES, NON-PROFITS, AND COMPANIES

The remaining 4.8% of Boston's NIH funding was awarded to 27 research institutes, non-profits, and for-profit companies. Joslin Diabetes Center received the most funding among the research institutes, with 35 awards and over \$27.6 million. Among nonprofits, Harvard Pilgrim Health Care was the top recipient, with 11 awards and \$5 million. Finally, Immunetics, Inc. was the top recipient among for-profit companies, with 5 awards and almost \$2.7 million.

LOOKING AHEAD

In May of 2014, the Mayors of Boston, Cambridge, Quincy, Somerville, and Braintree announced the creation of the Life Sciences Corridor, an area that is connected by the Massachusetts Bay Transit Authority (MBTA) Red Line and is home to over 450 life sciences companies, a highly skilled labor force, and world-renowned hospitals, colleges, and universities. In FY13, the hospitals, colleges and universities, research institutes, non-profits, and companies within the Life Sciences Corridor received over \$2 billion in funding from NIH and 4,169 awards. This represents 85.1% of NIH funding in Massachusetts. Additionally, the companies located within these cities will be able to take advantage of funding opportunities available through the Massachusetts Life Sciences Center, backed by a ten-year, \$1 billion state investment initiative.

Boston has been a leader in the life sciences industry for years. This regional partnership will ensure that the medical research and life sciences organizations within the Greater Boston region will continue to receive the resources they need to conduct groundbreaking work and make this sector even stronger.





