

FY16 NIH Market Analysis

February 20, 2017

Summary



Overview:

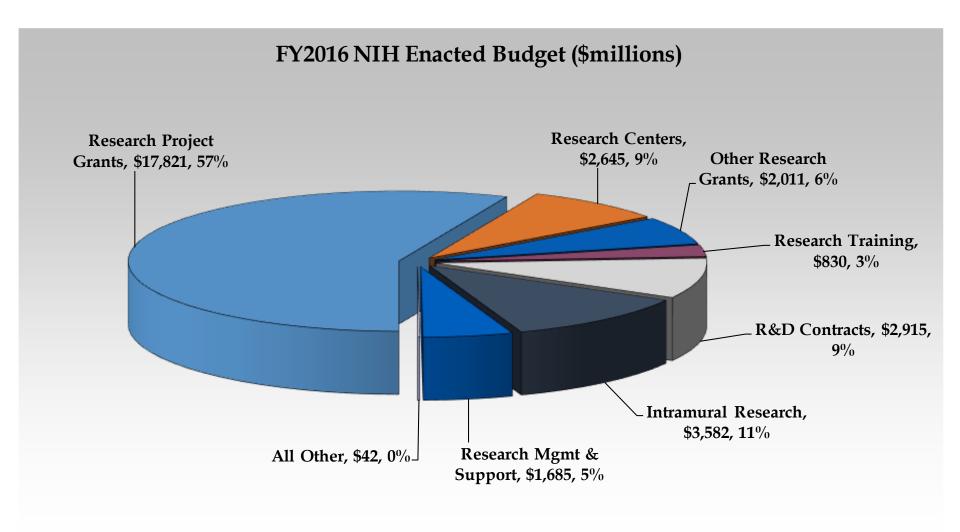
- The NIH is the largest sponsor of Medical Research with a budget of approximately \$31.4B for FY16, the latest actual year reported.
 - From a PHS perspective, DHHS sponsored research, which is comprised primarily by the NIH, represented \$732M or 48% of sponsored research activity in FY16, as measured on an immediate sponsor basis.
- Within PHS, the DHHS (immediate) sponsored research revenues have increased by 30% between FY07 and FY16, while the proportion of total DHHS sponsored research activity has decreased from 58% to 48%.
 - The driver behind lower DHHS sponsor mix is the growth in other sponsored research which is being fueled by increased Industry, Foundation, Non-Profit (excluding DHHS subcontracts), and Internal sponsors.
- DHHS research activity within PHS, including DHHS originating subcontracts, has increased by 92% over the same FY07 to FY16 period, and the proportion of total research activity has also increased from 8% to 9%.
- Maximizing DHHS sponsored research is critical to the overall financial wellbeing of PHS. Not only does DHHS account for 48% of total research revenues, it generates almost 60% of total IDC. That dependency increases to 73% of total FY16 IDC revenues when including DHHS subcontracts.

NIH Trends and Challenges:

- Approximately two-thirds of the NIH \$31B budget is earmarked for extramural funding. The FY07 extramural funding level of \$23.5B increased to ~\$26B in FY16, indicating a stagnant growth rate in available funding to the research community.
- Over the same FY07 to FY16 period, the number of NIH awards have decreased, applications have increased, with the resulting success rates down around 18% in FY16, but has been as low as 17% in recent years. The comparable PHS success rate is 22% to 24%.
- PHS continues to receive the bulk of its awards from The NCI, NHLBI, NIA, NIAID, NIDDK, NIMH and NINDS.

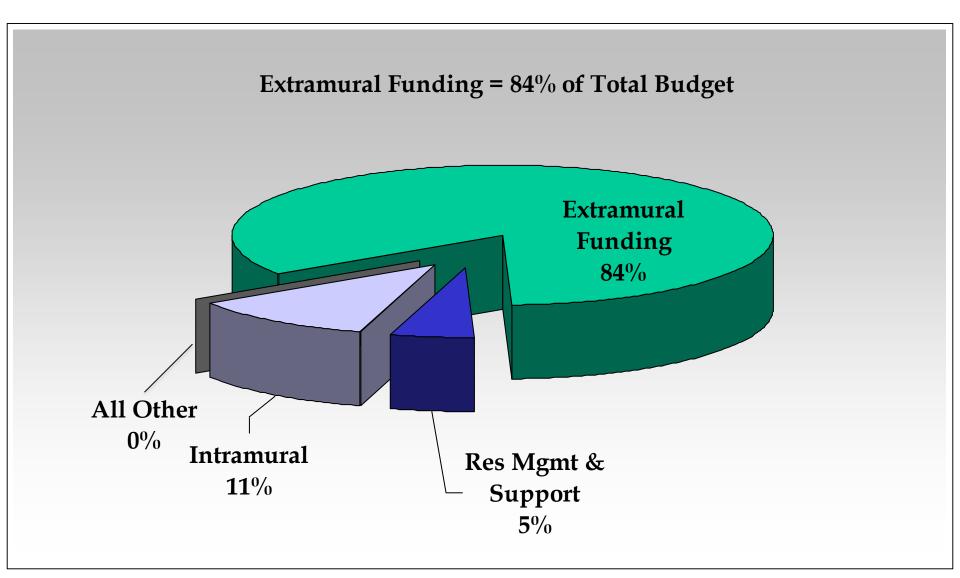
FY2016 Total NIH Budget: \$31.4 Billion





NIH FY16 Extramural Funding: \$26.1B

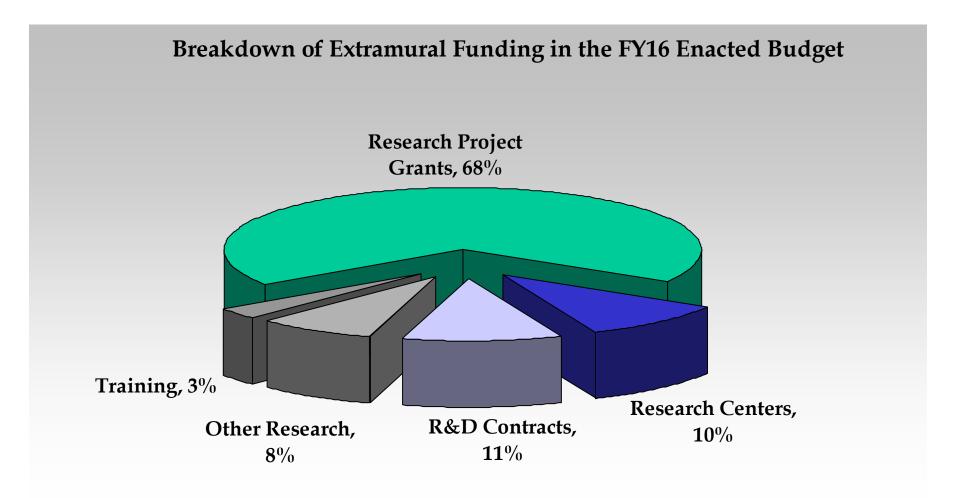




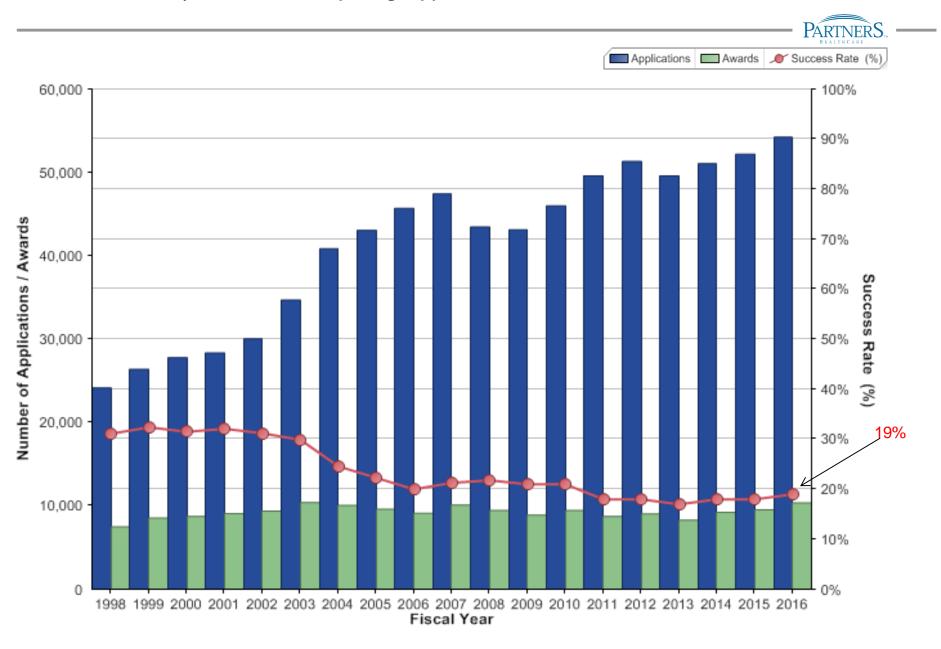
Source: NIH FY2016 Data Book

NIH FY16 Extramural Funding-continued





NIH Research Project Grants Competing Applications, Awards, and Success Rates 1998-2016





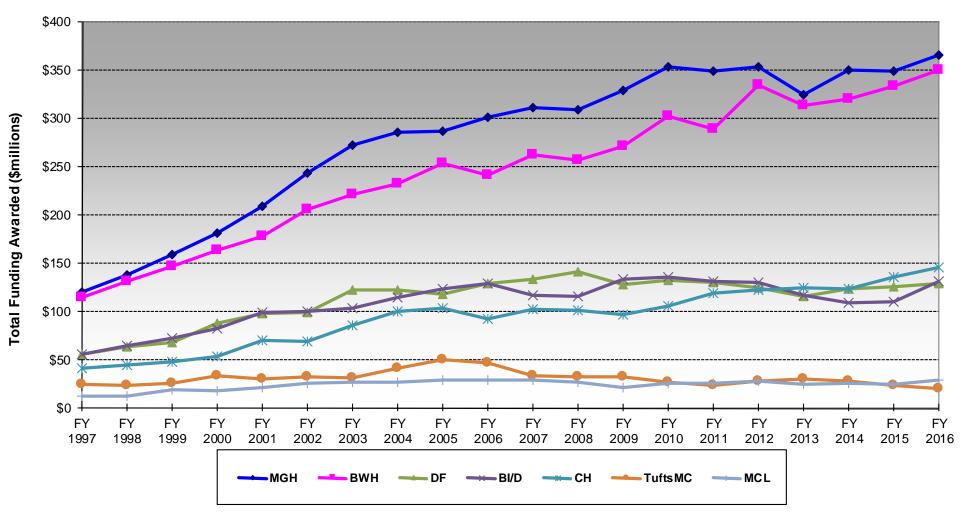
RESEARCH PROJECT GRANTS: SUCCESS RATES

| INSTITUTES & | | FY 2009 | | FY2011 | FY 2012 | FY2013 | FY 2014 | FY 2015 | FY 2016 | FY 2017 |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|
| | F 1 2008 | F 1 2009 | F 1 2010 | F 1 2011 | F 1 2012 | F 1 2013 | F 1 2014 | F 1 2013 | Enacted | Request |
| CENTERS*,1,2 | | | | | | | | | | |
| NCI | 21.0% | 19.0% | 17.1% | 13.8% | 13.6% | 13.7% | 14.1% | 13.0% | 12.4% | 17.0% |
| NHLBI | 22.0% | 22.0% | 19.9% | 17.4% | 14.7% | 16.9% | 18.2% | 21.9% | 22.2% | 24.3% |
| NIDCR | 20.0% | 19.0% | 22.2% | 22.5% | 21.2% | 19.9% | 21.5% | 22.0% | 19.1% | 17.4% |
| NIDDK | 25.0% | 23.0% | 25.9% | 20.7% | 19.8% | 21.0% | 22.9% | 20.3% | 18.5% | 17.3% |
| NINDS | 21.0% | 21.0% | 22.6% | 21.1% | 19.5% | 19.8% | 18.7% | 20.5% | 17.0% | 15.0% |
| NIAID | 23.0% | 19.0% | 23.9% | 20.2% | 23.2% | 18.8% | 22.0% | 21.5% | 24.9% | 18.5% |
| NIGMS | 27.0% | 27.0% | 26.9% | 23.1% | 24.4% | 19.9% | 24.8% | 29.6% | 31.2% | 24.6% |
| NICHD | 17.0% | 15.0% | 15.2% | 12.4% | 12.5% | 10.8% | 12.5% | 11.5% | 13.7% | 12.1% |
| NEI | 30.0% | 30.0% | 26.9% | 28.8% | 29.8% | 23.7% | 26.7% | 21.4% | 23.3% | 20.3% |
| NIEHS | 18.0% | 18.0% | 25.1% | 14.7% | 14.3% | 15.3% | 15.0% | 14.7% | 17.8% | 16.8% |
| NIA | 20.0% | 18.0% | 14.5% | 16.1% | 15.5% | 13.6% | 15.9% | 17.7% | 29.8% | 18.3% |
| NIAMS | 21.0% | 20.0% | 21.4% | 14.9% | 15.6% | 15.9% | 18.1% | 16.7% | 18.7% | 17.5% |
| NIDCD | 29.0% | 32.0% | 30.2% | 27.5% | 26.6% | 22.5% | 25.8% | 24.9% | 26.3% | 20.5% |
| NIMH | 21.0% | 22.0% | 22.1% | 17.1% | 21.6% | 18.7% | 19.4% | 20.4% | 20.1% | 19.1% |
| NIDA | 24.0% | 22.0% | 19.8% | 18.2% | 21.2% | 19.5% | 18.0% | 19.6% | 15.0% | 15.0% |
| NIAAA | 26.0% | 24.0% | 26.5% | 18.6% | 18.4% | 19.5% | 19.2% | 16.4% | 16.7% | 17.5% |
| NINR | 20.0% | 21.0% | 13.2% | 8.5% | 13.0% | 9.1% | 11.6% | 8.0% | 8.5% | 7.2% |
| NHGRI | 32.0% | 34.0% | 33.6% | 27.4% | 23.9% | 20.5% | 17.7% | 18.8% | 19.2% | 13.3% |
| NIBIB | 19.0% | 18.0% | 16.0% | 12.9% | 12.1% | 13.7% | 13.1% | 12.0% | 15.8% | 11.0% |
| NIMHD ³ | N/A | 11.0% | 8.0% | 11.9% | 9.9% | 4.3% | 11.9% | 13.7% | 11.8% | 11.8% |
| NCCIH ⁴ | 12.0% | 12.0% | 11.0% | 9.1% | 9.5% | 11.6% | 8.7% | 10.8% | 15.4% | 12.2% |
| NCATS ⁵ | N/A | N/A | N/A | N/A | 0.0% | 0.0% | 16.7% | 66.7% | 29.5% | 14.1% |
| FIC | 28.0% | 21.0% | 26.1% | 11.9% | 16.0% | 14.6% | 9.1% | 9.7% | 15.8% | 10.7% |
| NLM ⁶ | 21.0% | 12.0% | 21.1% | 16.1% | 12.8% | 12.3% | 19.4% | 19.8% | 17.9% | 17.1% |
| ORIP & SEPA ^{7,8} | 15.0% | 22.0% | 22.0% | 21.3% | 18.6% | 20.0% | 19.6% | 21.5% | 23.8% | 20.7% |
| Common Fund | 12.0% | 17.0% | 11.1% | 11.3% | 8.0% | 9.2% | 10.0% | 12.1% | 11.7% | 12.2% |
| NIH ⁹ | 21.3% | 21.0% | 21.0% | 20.5% | 17.5% | 16.7% | 18.0% | 18.3% | 19.2% | 17.5% |

NIH Budget History



FY 1997 - FY 2016* Local Hopitals NIH Extramural Funding

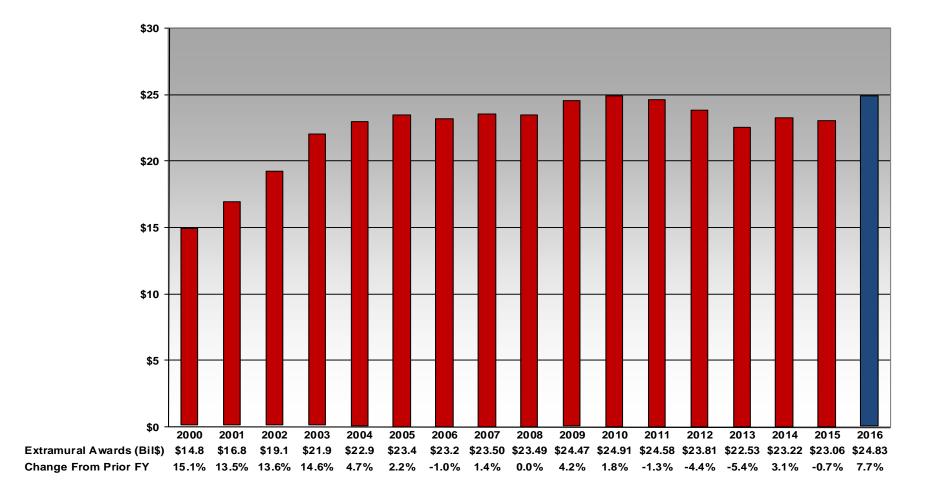


^{*}Includes Research Management and Support, Cancer Control funds, construction, and building and facilities.

NIH Extramural Awards



NIH Extramural Funding (in \$Billions) Fiscal Years 2000 - 2016*



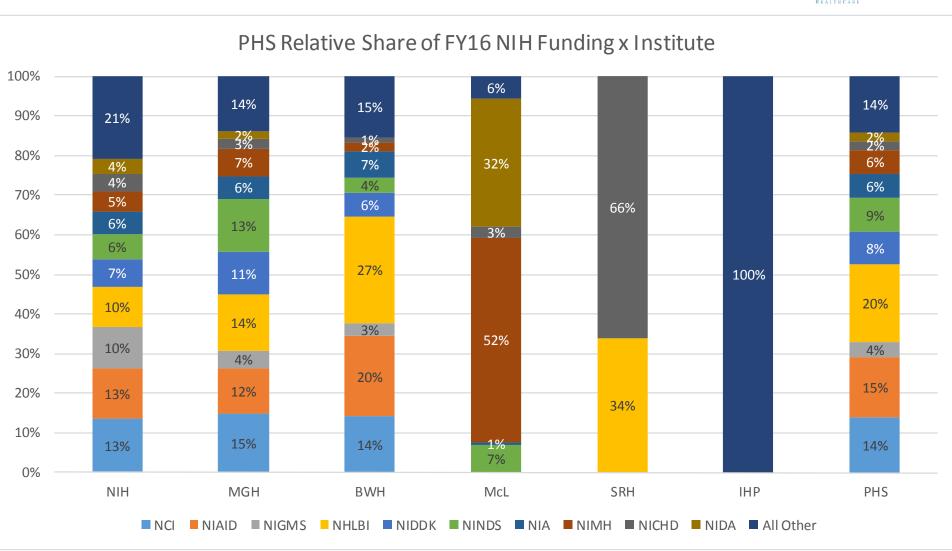
Breakdown of NIH Funding by Institute



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|--------------|--|---------------------|----------------------------|---------------------|----------------------|---------------------|----------------------------|---------------------|----------------------|---------------------|----------------------------|
| | | | | | 20: | 16 FUNDING | MECHANISM | | | | |
| Institute/Ce | Total Funding | Resea | rch Grants ¹ | Fello | wships ² | Trainin | g Grants ³ | Constr | uction ⁴ | Other | Awards ⁵ |
| nter | rotal Fulluling | Number of | Total Funding ⁷ | Number of | Total | Number of | Total Funding ⁷ | Number of | Total | Number of | Tatal Fundina ⁷ |
| | | Awards ⁶ | Total Funding ⁷ | Awards ⁶ | Funding ⁷ | Awards ⁶ | Total Funding ⁷ | Awards ⁶ | Funding ⁷ | Awards ⁶ | Total Funding ⁷ |
| FIC | \$68,595,980 | 132 | \$32,038,753 | 0 | \$0 | 0 | \$0 | 0 | \$0 | 129 | \$36,557,227 |
| NCATS | \$570,085,566 | 215 | \$542,296,312 | 0 | \$0 | 47 | \$22,680,718 | 0 | \$0 | 5 | \$5,108,536 |
| NCCIH | \$111,141,228 | 218 | \$107,447,348 | 10 | \$479,528 | 8 | \$3,214,352 | 0 | \$0 | 0 | \$0 |
| NCI | \$3,144,136,903 | 5,714 | \$3,072,897,028 | 545 | \$22,417,392 | 144 | \$48,822,483 | 0 | \$0 | 0 | \$0 |
| NEI | \$572,201,786 | 1,339 | \$560,993,898 | 89 | \$4,264,628 | 40 | \$6,943,260 | 0 | \$0 | 0 | \$0 |
| NHGRI | \$432,596,611 | 384 | \$425,151,618 | 9 | \$399,558 | 15 | \$7,045,435 | 0 | \$0 | 0 | \$0 |
| NHLBI | \$2,433,673,676 | 4,341 | \$2,331,574,562 | 352 | \$15,704,236 | 219 | \$86,394,878 | 0 | \$0 | 0 | \$0 |
| NIA | \$1,348,821,681 | 2,042 | \$1,324,501,294 | 125 | \$5,570,619 | 66 | \$18,749,768 | 0 | \$0 | 0 | \$0 |
| NIAAA | \$343,638,616 | 835 | \$331,097,554 | 111 | \$4,626,522 | 24 | \$7,914,540 | 0 | \$0 | 0 | \$0 |
| NIAID | \$3,038,647,188 | 4,883 | \$2,983,260,567 | 239 | \$10,709,387 | 183 | \$44,677,234 | 0 | \$0 | 0 | \$0 |
| NIAMS | \$449,701,912 | 1,191 | \$434,251,376 | 67 | \$3,140,404 | 50 | \$12,310,132 | 0 | \$0 | 0 | \$0 |
| NIBIB | \$339,364,908 | 796 | \$327,705,539 | 25 | \$1,098,353 | 46 | \$10,561,016 | 0 | \$0 | 0 | \$0 |
| NICHD | \$1,052,165,137 | 2,100 | \$1,021,132,045 | 113 | \$5,286,044 | 96 | \$23,922,860 | 0 | \$0 | 22 | \$1,824,188 |
| NIDA | \$852,294,795 | 1,707 | \$828,534,997 | 123 | \$5,013,885 | 50 | \$18,745,913 | 0 | \$0 | 0 | \$0 |
| NIDCD | \$344,517,595 | 890 | \$331,638,780 | 129 | \$5,674,915 | 34 | \$7,203,900 | 0 | \$0 | 0 | \$0 |
| NIDCR | \$303,100,106 | 674 | \$292,486,346 | 87 | \$3,828,324 | 17 | \$6,785,436 | 0 | \$0 | 0 | \$0 |
| NIDDK | \$1,638,694,443 | 3,343 | \$1,580,485,601 | 301 | \$14,145,905 | 185 | \$44,062,937 | 0 | \$0 | 0 | \$0 |
| NIEHS | \$427,397,927 | 870 | \$407,288,463 | 35 | \$1,568,527 | 43 | \$18,303,913 | 0 | \$0 | 1 | \$237,024 |
| NIGMS | \$2,440,978,884 | 4,763 | \$2,231,411,724 | 381 | \$18,927,513 | 394 | \$190,639,647 | 0 | \$0 | 0 | \$0 |
| NIMH | \$1,240,296,543 | 2,532 | \$1,203,950,812 | 211 | \$9,053,849 | 96 | \$26,743,545 | 0 | \$0 | 2 | \$548,337 |
| NIMHD | \$235,944,997 | 246 | \$230,242,141 | 4 | \$139,716 | 22 | \$5,563,140 | 0 | \$0 | 0 | \$0 |
| NINDS | \$1,434,203,891 | 3,364 | \$1,406,721,851 | 317 | \$13,366,920 | 57 | \$14,115,120 | 0 | \$0 | 0 | \$0 |
| NINR | \$116,201,349 | 252 | \$108,197,436 | 52 | \$1,768,218 | 22 | \$6,235,695 | 0 | \$0 | 0 | \$0 |
| NLM | \$59,766,641 | 104 | \$41,471,193 | 1 | \$40,790 | 28 | \$17,483,812 | 0 | \$0 | 12 | \$770,846 |
| OD | \$542,917,852 | 496 | \$492,975,052 | 4 | \$146,503 | 37 | \$7,376,970 | 13 | \$5,894,192 | 38 | \$36,525,135 |
| Total | \$23,541,086,215 | 43,431 | \$22,649,752,290 | 3,330 | \$147,371,736 | 1,923 | \$656,496,704 | 13 | \$5,894,192 | 209 | \$81,571,293 |

Breakdown of NIH Funding by Institute





NIH Institute Acronyms

| PARTNERS. |
|------------|
| HEALTHCARE |

| NCI | National Cancer Institute |
|-------|---|
| NIAID | National Institute of Allergy and Infectious Diseases |
| NIGMS | National Institute of General Medical Sciences |
| NHLBI | National Heart, Lung, and Blood Institute |
| NIDDK | National Institute of Diabetes and Digestive and Kidney Diseases |
| NINDS | National Institute on Neurological Disorders and Stroke |
| NIA | National Institute on Aging |
| NIMH | National Institute of Mental Health |
| NICHD | Eunice Kennedy Shriver National Institute of Child Health and Human Development |
| NIDA | National Institute on Drug Abuse |
| NEI | National Eye Institute |
| NCATS | National Center for Advancing Translational Sciences |
| OD | Office of the Director |
| NIAMS | National Institute of Arthritis and Musculoskeletal and Skin Diseases |
| NHGRI | National Human Genome Research Institute |
| NIEHS | National Institute of Environmental Health Sciences |
| NIDCD | National Institute on Deafness and Other Communication Disorders |
| NIAAA | National Institute on Alcohol Abuse and Alcoholism |
| NIBIB | National Institute of Biomedical Imaging and Bioengineering |
| NIDCR | National Institute of Dental and Craniofacial Research |
| NIMHD | National Institute on Minority Health and Health Disparities |
| NINR | National Institute of Nursing Research |
| NCCIH | National Center for Complementary and Integrative Health (formally NCCAM) |
| FIC | Fogarty International Center |
| NLM | National Library of Medicine |
| | |

FY12 - FY16 NIH Extramural Awards Ranking of All Institutions



FY 2012 - FY 2016 NIH RANKING OF INSTITUTION & ACTIVITY BASED ON NIH TOTAL FUNDING TO ALL ACTIVITIES

| | Rar | nk | | | | | | Percent Change | | | | CAGR | | | |
|------|------|------|------|------|--|---------------|---------------|----------------|---------------|---------------|--------|-------|-------|-------|-------|
| FY12 | FY13 | FY14 | FY15 | FY16 | INSTITUTION | FY 2012 | FY 2013 | FY 2014 | FY2015 | FY2016 | 12-13 | 13-14 | 14-15 | 15-16 | 12-16 |
| 1 | 1 | 1 | 1 | 1 | JOHNS HOPKINS UNIVERSITY | \$606,763,376 | \$552,624,436 | \$573,859,735 | \$567,666,828 | \$634,940,987 | -8.9% | 3.8% | -1.1% | 11.9% | 1.1% |
| 2 | 2 | 2 | 2 | 2 | UNIVERSITY OF CALIFORNIA SAN FRANCISCO | \$500,437,073 | \$487,012,070 | \$537,257,705 | \$557,140,709 | \$575,219,351 | -2.7% | 10.3% | 3.7% | 3.2% | 3.5% |
| 3 | 5 | 6 | 3 | 3 | UNIVERSITY OF MICHIGAN AT ANN ARBOR | \$456,305,212 | \$396,727,311 | \$412,933,811 | \$449,440,199 | \$483,326,335 | -13.1% | 4.1% | 8.8% | 7.5% | 1.4% |
| 4 | 3 | 3 | 4 | 4 | UNIVERSITY OF PENNSYLVANIA | \$454,975,727 | \$434,609,877 | \$478,169,721 | \$448,051,440 | \$473,635,717 | -4.5% | 10.0% | -6.3% | 5.7% | 1.0% |
| 6 | 6 | 5 | 5 | 5 | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | \$419,497,679 | \$394,579,413 | \$419,236,398 | \$425,603,684 | \$472,566,210 | -5.9% | 6.2% | 1.5% | 11.0% | 3.0% |
| 14 | 9 | 8 | 7 | 6 | STANFORD UNIVERSITY | \$334,539,989 | \$338,757,645 | \$384,029,203 | \$421,175,041 | \$425,062,412 | 1.3% | 13.4% | 9.7% | 0.9% | 6.2% |
| 10 | 7 | 7 | 10 | 7 | UNIVERSITY OF NORTH CAROLINA CHAPEL HILL | \$367,798,748 | \$367,252,487 | \$392,740,918 | \$375,543,736 | \$408,423,743 | -0.1% | 6.9% | -4.4% | 8.8% | 2.7% |
| 9 | 10 | 11 | 12 | 8 | YALE UNIVERSITY | \$370,284,870 | \$333,160,740 | \$360,022,831 | \$352,274,351 | \$406,376,306 | -10.0% | 8.1% | -2.2% | 15.4% | 2.4% |
| 5 | 4 | 4 | 6 | 9 | UNIVERSITY OF WASHINGTON | \$442,509,710 | \$422,731,094 | \$423,671,871 | \$422,917,954 | \$402,088,254 | -4.5% | 0.2% | -0.2% | -4.9% | -2.4% |
| 7 | 8 | 9 | 8 | 10 | UNIVERSITY OF CALIFORNIA SAN DIEGO | \$394,982,560 | \$358,014,070 | \$382,148,517 | \$387,576,202 | \$400,413,190 | -9.4% | 6.7% | 1.4% | 3.3% | 0.3% |
| 13 | 12 | 14 | 14 | 11 | DUKE UNIVERSITY | \$342,675,382 | \$326,166,532 | \$342,155,642 | \$333,942,671 | \$397,768,992 | -4.8% | 4.9% | -2.4% | 19.1% | 3.8% |
| 8 | 14 | 10 | 9 | 12 | WASHINGTON UNIVERSITY | \$381,158,684 | \$318,396,985 | \$372,123,938 | \$377,643,762 | \$396,519,867 | -16.5% | 16.9% | 1.5% | 5.0% | 1.0% |
| 11 | 11 | 12 | 11 | 13 | UNIVERSITY OF CALIFORNIA LOS ANGELES | \$360,699,034 | \$330,544,193 | \$357,983,245 | \$370,466,843 | \$380,488,703 | -8.4% | 8.3% | 3.5% | 2.7% | 1.3% |
| 17 | 16 | 16 | 16 | 14 | COLUMBIA UNIVERSITY HEALTH SCIENCES | \$315,357,565 | \$300,254,124 | \$306,159,165 | \$330,752,289 | \$379,738,538 | -4.8% | 2.0% | 8.0% | 14.8% | 4.8% |
| 12 | 13 | 13 | 13 | 15 | MASSACHUSETTS GENERAL HOSPITAL | \$352,991,454 | \$339,490,000 | \$350,268,662 | \$352,918,609 | \$364,981,379 | -3.8% | 3.2% | 0.8% | 3.4% | 0.8% |
| 15 | 15 | 15 | 15 | 16 | BRIGHAM AND WOMEN'S HOSPITAL | \$334,072,073 | \$315,920,000 | \$322,834,979 | \$333,619,020 | \$349,521,979 | -5.4% | 2.2% | 3.3% | 4.8% | 1.1% |
| 18 | 19 | 18 | 18 | 17 | EMORY UNIVERSITY | \$263,600,497 | \$250,085,940 | \$265,282,296 | \$287,920,427 | \$294,496,913 | -5.1% | 6.1% | 8.5% | 2.3% | 2.8% |
| 20 | 20 | 19 | 19 | 18 | UNIVERSITY OF WISCONSIN MADISON | \$229,863,895 | \$236,078,135 | \$254,296,731 | \$268,460,009 | \$281,550,402 | 2.7% | 7.7% | 5.6% | 4.9% | 5.2% |
| 33 | 22 | 22 | 20 | 19 | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | \$178,678,872 | \$192,159,300 | \$234,768,741 | \$257,359,170 | \$275,560,503 | 7.5% | 22.2% | 9.6% | 7.1% | 11.4% |
| 23 | 33 | 32 | 23 | 20 | NORTHWESTERN UNIVERSITY AT CHICAGO | \$217,044,427 | \$165,521,977 | \$181,195,768 | \$220,533,145 | \$257,242,821 | -23.7% | 9.5% | 21.7% | 16.6% | 4.3% |
| | | | | | | <u>L</u> | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | PARTNERS HEALTHCARE | \$716,693,528 | \$682,699,000 | \$704,506,243 | \$713,232,959 | \$744,420,217 | -4.7% | 3.2% | 1.2% | 4.4% | 1.0% |

 $Notes: Partners\ Health care\ figures\ include\ MGH,\ BWH,\ McL,\ SRH\ and\ IHP.\ Excludes\ ARRA.$

FY12- FY16 NIH Ranking of Independent Hospitals



FY 2012 - FY 2016 NIH RANKING OF INSTITUTION & ACTIVITY BASED ON NIH TOTAL FUNDING TO ALL ACTIVITIES

| | Ra | nk | | | | | Total F | anding | | | Per | cent Cha | nge | | CAGR |
|------|------|------|------|------|---------------------------------------|---------------|---------------|---------------|---------------|---------------|--------|----------|--------|--------|-------|
| FY12 | FY13 | FY14 | FY15 | FY16 | INSTITUTION | FY 2012 | FY 2013 | FY 2014 | FY 2015 | FY 2016 | 12-13 | 13-14 | 14-15 | 15-16 | 12-16 |
| 1 | 1 | 1 | 1 | 1 | MASSACHUSETTS GENERAL HOSPITAL | \$352,991,454 | \$339,490,000 | \$350,268,662 | \$352,918,609 | \$364,981,379 | -3.8% | 3.2% | 0.8% | 3.4% | 0.8% |
| 2 | 2 | 2 | 2 | 2 | BRIGHAM AND WOMEN'S HOSPITAL | \$334,072,073 | \$315,920,000 | \$322,834,979 | \$333,619,020 | \$349,521,979 | -5.4% | 2.2% | 3.3% | 4.8% | 1.1% |
| #N/A | #N/A | #N/A | #N/A | 3 | VANDERBILT UNIVERSITY MEDICAL CENTER | #N/A | #N/A | #N/A | #N/A | \$241,301,060 | #N/A | #N/A | #N/A | #N/A | #N/A |
| 5 | 3 | 3 | 3 | 4 | CHILDREN'S HOSPITAL BOSTON | \$122,338,322 | \$124,160,864 | \$122,897,976 | \$135,489,308 | \$145,731,397 | 1.5% | -1.0% | 10.2% | 7.6% | 4.5% |
| 3 | 4 | 6 | 5 | 5 | BETH ISRAEL DEACONESS MEDICAL CENTER | \$129,691,590 | \$116,122,449 | \$108,156,442 | \$109,950,180 | \$130,439,913 | -10.5% | -6.9% | 1.7% | 18.6% | 0.1% |
| 4 | 5 | 4 | 4 | 6 | DANA-FARBER CANCER INSTITUTE | \$124,380,684 | \$115,379,421 | \$122,652,215 | \$125,295,828 | \$128,050,993 | -7.2% | 6.3% | 2.2% | 2.2% | 0.7% |
| 6 | 7 | 7 | 7 | 7 | CINCINNATI CHILDRENS HOSP MED CTR | \$101,839,995 | \$96,824,494 | \$98,187,760 | \$96,088,403 | \$108,784,288 | -4.9% | 1.4% | -2.1% | 13.2% | 1.7% |
| #N/A | 6 | 5 | 6 | 8 | CHILDRENS HOSPITAL OF PHILADELPHIA | #N/A | \$105,248,052 | \$112,146,779 | \$107,975,876 | \$108,125,259 | #N/A | 6.6% | -3.7% | 0.1% | #N/A |
| 7 | 8 | 8 | 8 | 9 | ST. JUDE CHILDREN'S RESEARCH HOSPITAL | \$55,097,329 | \$49,039,532 | \$48,650,426 | \$52,088,764 | \$54,675,595 | -11.0% | -0.8% | 7.1% | 5.0% | -0.2% |
| 11 | 12 | 10 | 11 | 10 | SEATTLE CHILDREN'S HOSPITAL | \$33,334,078 | \$30,652,212 | \$39,068,563 | \$38,150,472 | \$50,051,774 | -8.0% | 27.5% | -2.3% | 31.2% | 10.7% |
| 14 | 15 | 12 | 9 | 11 | CEDARS-SINAI MEDICAL CENTER | \$27,425,416 | \$27,956,249 | \$34,423,826 | \$41,464,366 | \$47,417,909 | 1.9% | 23.1% | 20.5% | 14.4% | 14.7% |
| 8 | 9 | 9 | 10 | 12 | NEW YORK STATE PSYCHIATRIC INSTITUTE | \$49,807,571 | \$43,606,668 | \$46,903,956 | \$40,234,946 | \$42,984,276 | -12.4% | 7.6% | -14.2% | 6.8% | -3.6% |
| 16 | 16 | 16 | 12 | 13 | NATIONAL JEWISH HEALTH | \$24,678,905 | \$25,551,400 | \$25,154,637 | \$35,256,665 | \$32,453,676 | 3.5% | -1.6% | 40.2% | -8.0% | 7.1% |
| 12 | 13 | 17 | 15 | 14 | RHODE ISLAND HOSPITAL | \$28,628,016 | \$30,461,209 | \$24,335,750 | \$24,289,073 | \$29,152,940 | 6.4% | -20.1% | -0.2% | 20.0% | 0.5% |
| 10 | 11 | 15 | 14 | 15 | ROSWELL PARK CANCER INSTITUTE CORP | \$34,734,432 | \$34,034,861 | \$25,220,309 | \$28,371,593 | \$27,887,985 | -2.0% | -25.9% | 12.5% | -1.7% | -5.3% |
| 9 | 10 | 11 | 13 | 16 | BOSTON MEDICAL CENTER | \$37,309,152 | \$34,306,306 | \$38,130,340 | \$30,277,116 | \$27,143,128 | -8.0% | 11.1% | -20.6% | -10.4% | -7.6% |
| 13 | 17 | 14 | 16 | 17 | MC LEAN HOSPITAL (BELMONT, MA) | \$27,450,842 | \$24,628,000 | \$28,396,545 | \$24,171,160 | \$27,927,109 | -10.3% | 15.3% | -14.9% | 15.5% | 0.4% |
| 19 | 20 | 18 | 18 | 18 | CHILDREN'S HOSPITAL OF LOS ANGELES | \$16,555,073 | \$17,149,123 | \$22,880,063 | \$22,263,973 | \$20,236,544 | 3.6% | 33.4% | -2.7% | -9.1% | 5.1% |
| 17 | 18 | 19 | 19 | 19 | MASSACHUSETTS EYE AND EAR INFIRMARY | \$21,950,002 | \$20,413,920 | \$22,398,211 | \$20,663,625 | \$19,813,390 | -7.0% | 9.7% | -7.7% | -4.1% | -2.5% |
| 48 | 41 | 43 | 46 | 43 | SPAULDING REHABILITATION HOSPITAL | \$1,388,159 | \$1,911,000 | \$1,514,347 | \$1,337,483 | \$1,376,858 | 37.7% | -20.8% | -11.7% | 2.9% | -0.2% |

Notes: Partners Healthcare figures include MGH, BWH, McL, SRH and IHP. Excludes ARRA.

NIH Funding Market Share Trends



NIH Share of Total Awards Funding by Fiscal Year *

of Awards

BRIGHAM AND WOMEN'S HOSPITAL MASSACHUSETTS GENERAL HOSPITAL MC LEAN HOSPITAL (BELMONT, MA) SPAULDING REHABILITATION HOSPITAL INSTITUTE OF HEALTH PROFESSIONALS TOTAL PHS

Total NIH

| | 2013 | | 2014 | | 201 | 5** | 2016 (as of 12/27/16) | | |
|------|--------|---------|----------|---------|----------|---------|-----------------------|---------|--|
| # Aw | ards | % Total | # Awards | % Total | # Awards | % Total | # Awards | % Total | |
| | 576 | 1.1% | 564 | 1.1% | 539 | 1.0% | 570 | 1.1% | |
| | 788 | 1.5% | 778 | 1.5% | 769 | 1.5% | 796 | 1.5% | |
| | 80 | 0.2% | 84 | 0.2% | 83 | 0.2% | 74 | 0.1% | |
| | 5 | 0.0% | 5 | 0.0% | 5 | 0.0% | 5 | 0.0% | |
| | 2 | 0.0% | 5 | 0.0% | 4 | 0.0% | 2 | 0.0% | |
| | 1,451 | 2.8% | 1,436 | 2.8% | 1,400 | 2.7% | 1,447 | 2.8% | |
| _ | 51,588 | 100.0% | 51,512 | 100.0% | 51,382 | 100.0% | 51,666 | 100.0% | |

in Thousands \$

BRIGHAM AND WOMEN'S HOSPITAL MASSACHUSETTS GENERAL HOSPITAL MC LEAN HOSPITAL (BELMONT, MA) SPAULDING REHABILITATION HOSPITAL INSTITUTE OF HEALTH PROFESSIONALS TOTAL PHS

Total NIH

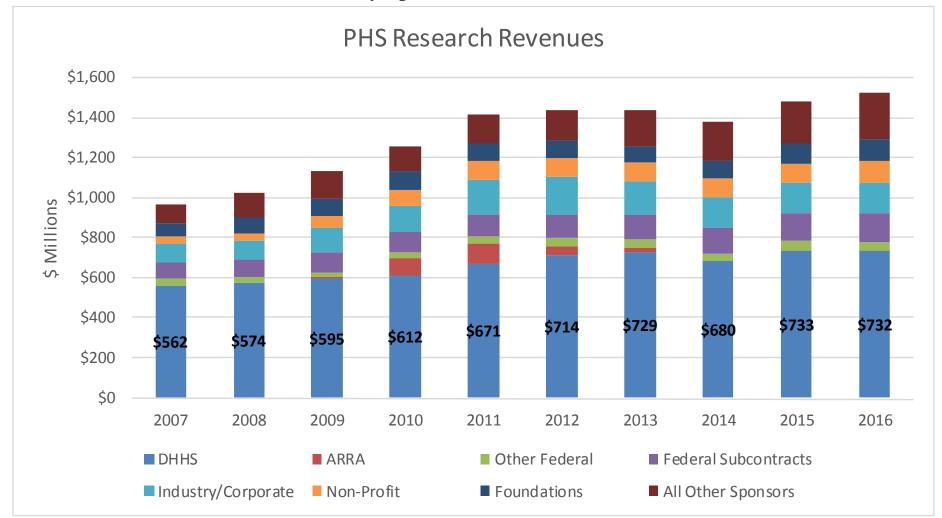
| 2013 | | 2014 | | | 201 | 5** | 2016 (as of 1 | 2/27/16) |
|------------------|---------|------------------|---------|-----|------------|---------|------------------|----------|
| Amount | % Total | Amount | % Total | | Amount | % Total | Amount | % Total |
| \$ 315,920 | 1.4% | \$ 322,835 | 1.4% | \$ | 333,215 | 1.4% | \$ 349,522 | 1.4% |
| \$ 339,490 | 1.5% | \$ 350,269 | 1.5% | \$ | 350,849 | 1.5% | \$ 364,981 | 1.5% |
| \$ 24,628 | 0.1% | \$ 28,397 | 0.1% | \$ | 26,165 | 0.1% | \$ 27,927 | 0.1% |
| \$ 1,911 | 0.0% | \$ 1,514 | 0.0% | \$ | 1,337 | 0.0% | \$ 1,377 | 0.0% |
| \$ 750 | 0.0% | \$ 1,492 | 0.0% | \$ | 1,187 | 0.0% | \$ 613 | 0.0% |
| \$ 682,698 | 3.0% | \$ 704,506 | 3.0% | \$ | 712,753 | 3.1% | \$ 744,420 | 3.0% |
| \$ 22,524,766 | 100.0% | \$ 23,220,975 | 100.0% | \$2 | 23,064,634 | 100.0% | \$ 24,832,729 | 100.0% |

- * Includes Authorized Funding for both new awards and renewals over 12 month period within NIH Fiscal period. NIH fiscal periods will not match PHS emergence of revenues due to timing.
- **Final FY15 data updated to remove duplicates on April 8, 2016. Final "Frozen" FY16 data as of December 27, 2016.
- ***Note PHS market share typically runs higher earlier in the year and declines at year-end when final R&D distributions are reported.
 - PHS Share of FY16 NIH Funding continues to remain top-ranked for Independent Hospitals and is ~\$32M higher versus the 2015 level of \$712M.
 - FY16 NIH funding is 6% higher than FY15, and the outlook for FY17-FY18 should reflect this increase.

PHS Research Revenue Trends



• Total PHS research revenues increased 3% in FY16, driven primarily by increased Non-Profit, Foundation, and Internally sponsored research.

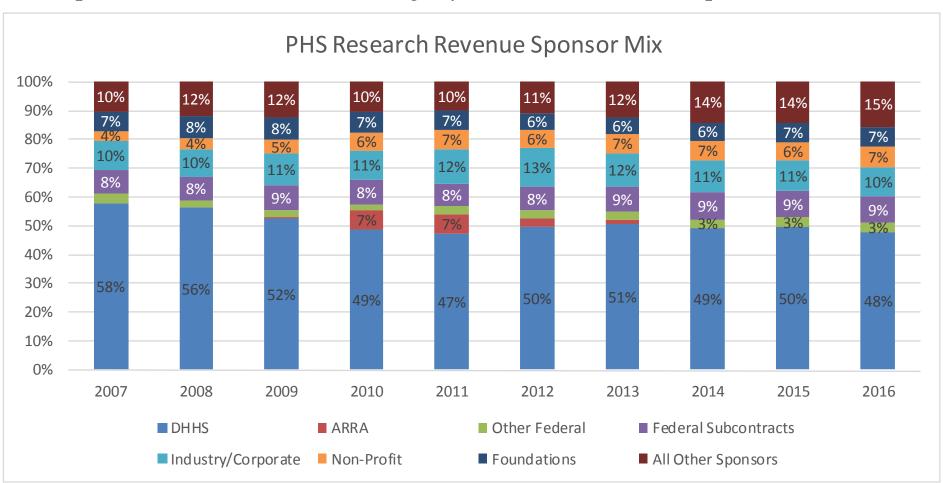


Source: PHS Research Revenues FY07- FY16 Actual. PHS includes BWH, MGH, McL, SRH, and all other PHS entities. Note: Research Activity, excludes Other Science and P&L adjustments.

PHS Research Revenue Sponsor Mix



■ In FY16, the proportion of Non-Profit (Non-Federal subcontracts) and Internally sponsored research increased slightly, while DHHS fell 2% points.



Source: PHS Research Revenues FY07- FY16 Actual. PHS includes BWH, MGH, McL, SRH, and all other PHS entities. Note: Research Activity, excludes Other Science and P&L adjustments.

DHHS New Awards FY10-FY16 by Scientific Activity Grouping



| | | | | | | | | HEALTHC | ARE |
|-------------|----------------------|------------------------------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|
| Institution | Analytics - Activity | Is Award Fiscal Year Awarded | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Parent | Group - | | Budget | Budget | Budget | Budget | Budget | Budget | Budget |
| - 0.1 0 110 | Parent | | Period | Period | Period | Period | Period | Period | Period |
| | | Metrics | Amount - | Amount - | Amount - |
| | | | Awarded | Awarded | Awarded | Awarded | Awarded | Awarded | Awarded |
| BWH | Basic Scien | ce Research | 93,730,490 | 70,771,888 | 79,475,930 | 77,633,865 | 52,715,872 | 60,261,058 | 95,447,340 |
| BWH | Clinical Trial | | 80,854,940 | 102,519,915 | 33,192,633 | 17,611,100 | 391,389,019 | 48,140,069 | 69,315,124 |
| BWH | Other Clinica | al Research | 203,580,649 | 127,610,447 | 192,964,327 | 149,834,380 | 125,926,910 | 159,269,498 | 171,657,238 |
| BWH | Training/ Oth | ner | 31,426,327 | 29,625,560 | 21,925,368 | 33,724,239 | 14,075,020 | 35,677,099 | 33,589,635 |
| BWH | Total | | 409,592,406 | 330,527,810 | 327,558,258 | 278,803,584 | 584,106,821 | 303,347,724 | 370,009,337 |
| McLean | Basic Scien | ce Research | 15,698,548 | 13,440,994 | 10,629,365 | 16,999,011 | 14,846,719 | 10,014,562 | 11,600,706 |
| McLean | Clinical Trial | | | 784,141 | | | 3,261,173 | 8,416,902 | |
| McLean | Other Clinica | al Research | 24,381,972 | 7,920,273 | 12,940,371 | 3,184,631 | 5,041,110 | 8,205,444 | 13,878,226 |
| McLean | Training/ Oth | ner | 3,620,757 | 3,648,552 | 3,687,954 | 2,779,788 | 2,685,261 | 3,027,813 | 2,325,185 |
| McLean | Total | | 43,701,277 | 25,793,960 | 27,257,690 | 22,963,430 | 25,834,263 | 29,664,721 | 27,804,117 |
| MGH | Basic Scien | ce Research | 205,732,686 | 172,862,100 | 117,786,438 | 89,001,973 | 124,375,351 | 164,824,507 | 132,870,446 |
| MGH | Clinical Trial | | 20,473,077 | 47,028,570 | 21,548,843 | 23,437,420 | 108,199,365 | 25,200,776 | 13,479,525 |
| MGH | Other Clinica | al Research | 165,693,356 | 173,471,657 | 108,015,121 | 127,853,894 | 155,950,081 | 170,055,599 | 220,129,226 |
| MGH | Training/ Oth | ner | 30,685,891 | 37,004,649 | 37,565,958 | 32,720,149 | 40,406,307 | 34,009,279 | 52,548,168 |
| MGH | Total | | 422,585,010 | 430,366,976 | 284,916,360 | 273,013,436 | 428,931,104 | 394,090,161 | 419,027,365 |
| SRH | Basic Scien | ce Research | 24,995 | | | | | | |
| SRH | Clinical Trial | | | | | | 447,562 | | 495,499 |
| SRH | Other Clinica | al Research | 3,025,596 | | | 2,368,517 | | 2,773,642 | 2,298,795 |
| SRH | Training/ Oth | ner | | | 792,629 | 548,640 | | | |
| SRH | Total | | 3,050,591 | | 792,629 | 2,917,157 | 447,562 | 2,773,642 | 2,794,294 |
| Total | | | 878,929,284 | 786,688,746 | 640,524,937 | 577,697,607 | 1,039,319,750 | 729,876,248 | 819,635,113 |

^{*} Research Activity, excluding Other Science and P&L adjustments.

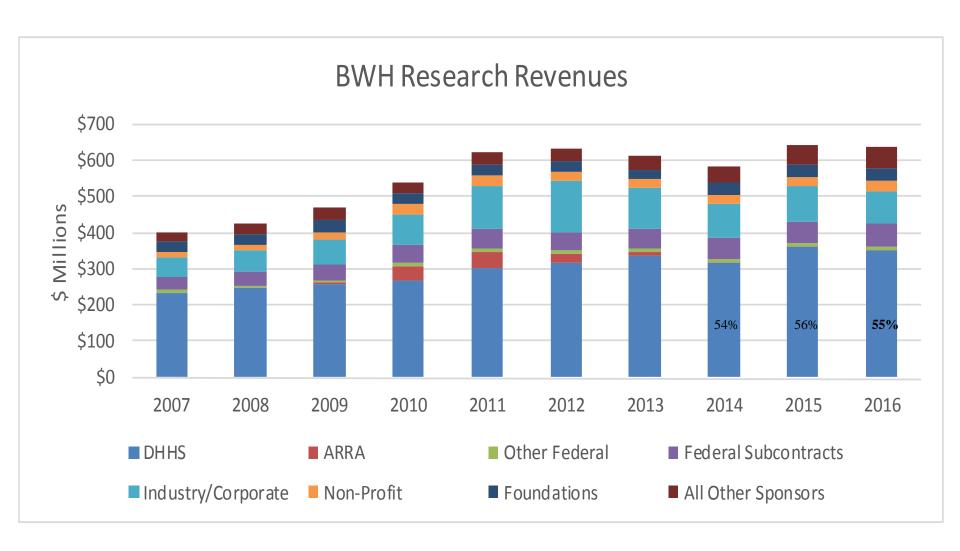
DHHS Research Activity FY10-FY16 by IDC, TDC, & Total Revenue



| Institution | Metrics | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | IDC | 76,659,822 | 85,020,984 | 92,196,329 | 89,278,764 | 83,172,467 | 87,489,537 | 83,731,383 |
| BWH | TDC | 190,585,773 | 214,924,429 | 226,577,292 | 246,181,069 | 230,092,635 | 272,475,598 | 265,617,566 |
| | Total Rev | 267,245,595 | 299,945,414 | 318,773,621 | 335,459,833 | 313,265,102 | 359,965,135 | 349,348,949 |
| | IDC | 7,113,052 | 7,249,440 | 7,315,811 | 8,281,953 | 7,471,646 | 6,925,832 | 7,782,626 |
| McLean | TDC | 14,462,640 | 18,438,204 | 17,922,236 | 20,210,689 | 18,719,806 | 18,502,311 | 17,819,528 |
| | Total Rev | 21,575,693 | 25,687,644 | 25,238,047 | 28,492,642 | 26,191,452 | 25,428,143 | 25,602,153 |
| | IDC | 97,585,837 | 104,275,382 | 119,377,290 | 112,866,591 | 105,369,528 | 104,933,859 | 105,103,130 |
| MGH | TDC | 225,283,017 | 241,001,083 | 250,444,801 | 250,904,317 | 231,173,903 | 238,160,445 | 247,516,728 |
| | Total Rev | 322,868,854 | 345,276,465 | 369,822,091 | 363,770,909 | 336,543,430 | 343,094,304 | 352,619,858 |
| | IDC | 481,796 | 485,611 | 482,976 | 487,655 | 452,778 | 445,443 | 501,803 |
| SRH | TDC | 932,171 | 1,026,597 | 1,070,636 | 1,105,199 | 1,410,982 | 953,806 | 1,507,759 |
| | Total Rev | 1,413,966 | 1,512,208 | 1,553,612 | 1,592,855 | 1,863,760 | 1,399,249 | 2,009,562 |
| | IDC | 181,840,507 | 197,031,417 | 219,372,406 | 210,914,964 | 196,466,419 | 199,794,672 | 197,118,942 |
| Total | TDC | 431,263,601 | 475,390,314 | 496,014,965 | 518,401,275 | 481,397,326 | 530,092,160 | 532,461,581 |
| | Total Rev | 613,104,109 | 672,421,730 | 715,387,371 | 729,316,239 | 677,863,745 | 729,886,831 | 729,580,522 |

BWH Research Revenue Trends-All Sponsors





BWH DHHS Research Revenue Top COS

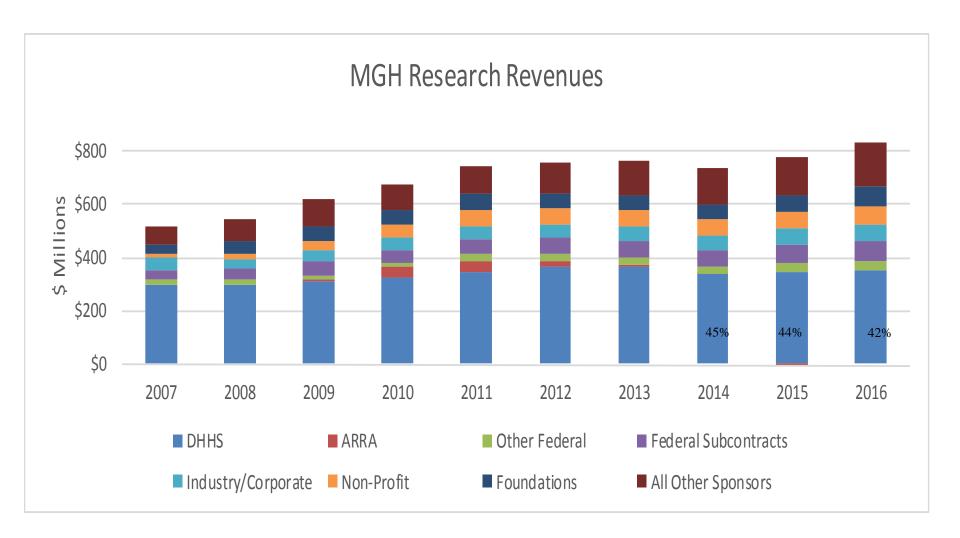


| | | HEA | ALTHCARE |
|--|------------------------------------|---------------|---------------|
| cos | Department | 2016 | 2015 |
| COS | Department | Total Revenue | Total Revenue |
| 30SA - AIDS Research Center (BWH) | 30AA - Medicine (BWH) | 61,257,468 | 54,003,818 |
| 36AA - Channing Division of Network Medicine (BWH) | 30AA - Medicine (BWH) | 34,617,610 | 40,629,050 |
| 36JA - Preventive Medicine (BWH) | 30AA - Medicine (BWH) | 23,765,624 | 25,719,247 |
| 30JA - Immunology Unit (BWH) | 30AA - Medicine (BWH) | 21,822,633 | 19,339,213 |
| 36CA - Genetics (BWH) | 30AA - Medicine (BWH) | 15,575,249 | 17,124,889 |
| 30CA - Cardiology (BWH) | 30AA - Medicine (BWH) | 14,823,243 | 15,259,551 |
| 54AA - Radiology (BWH) | 54AA - Radiology (BWH) | 13,882,117 | 12,925,106 |
| 30PA - Pulmonary (BWH) | 30AA - Medicine (BWH) | 13,575,518 | 16,564,320 |
| 36KA - Sleep Medicine (BWH) | 30AA - Medicine (BWH) | 12,896,565 | 13,812,035 |
| 56OA - CALGB (BWH) | 56AA - Surgery (BWH) | 11,643,414 | 16,447,308 |
| 30LA - Reproductive Endocrine (BWH) | 30AA - Medicine (BWH) | 10,170,350 | 8,319,182 |
| 42KA - Division of Multiple Sclerosis & Neuro Immunology (BWH) | 42AA - Neurology (BWH) | 9,716,579 | 8,910,365 |
| 30IA - Infectious Disease (BWH) | 30AA - Medicine (BWH) | 9,157,130 | 10,496,069 |
| 42DA - Division of Basic Neuroscience Research (BWH) | 42AA - Neurology (BWH) | 8,495,575 | 6,947,297 |
| 30RA - Renal (BWH) | 30AA - Medicine (BWH) | 7,998,583 | 9,431,193 |
| 30HA - Hematology (BWH) | 30AA - Medicine (BWH) | 7,918,938 | 7,031,397 |
| 10AA - Anesthesia (BWH) | 10AA - Anesthesia (BWH) | 7,029,247 | 12,293,840 |
| 52AA - Pathology (BWH) | 52AA - Pathology (BWH) | 6,683,619 | 8,184,510 |
| 30EA - Endocrine (BWH) | 30AA - Medicine (BWH) | 6,211,712 | 5,032,338 |
| 16AA - Dermatology (BWH) | 16AA - Dermatology (BWH) | 5,758,450 | 5,662,241 |
| 30KA - General Medicine (BWH) | 30AA - Medicine (BWH) | 5,233,997 | 4,639,643 |
| 30GA - Gastroenterology (BWH) | 30AA - Medicine (BWH) | 5,225,460 | 4,220,285 |
| 36EA - Pharmacoepidemiology (BWH) | 30AA - Medicine (BWH) | 4,696,796 | 3,813,010 |
| 82AA - Other (BWH) | 82AA - Other (BWH) | 4,517,314 | 5,135,994 |
| 22DA - Other (BWH) | 22AA - Obstetrics/Gynecology (BWH) | 4,070,486 | 2,358,597 |
| | | | |

Source: PHS Research Revenues FY15-FY16 Actual. Note: Research Activity, excludes P&Ladjustments

MGH Research Revenue Trends- All Sponsors





Source: PHS Research Revenues FY07- FY16 Actual.

Note: Research Activity, excludes Other Science and P&L adjustments

MGH DHHS Research Revenue Top COS

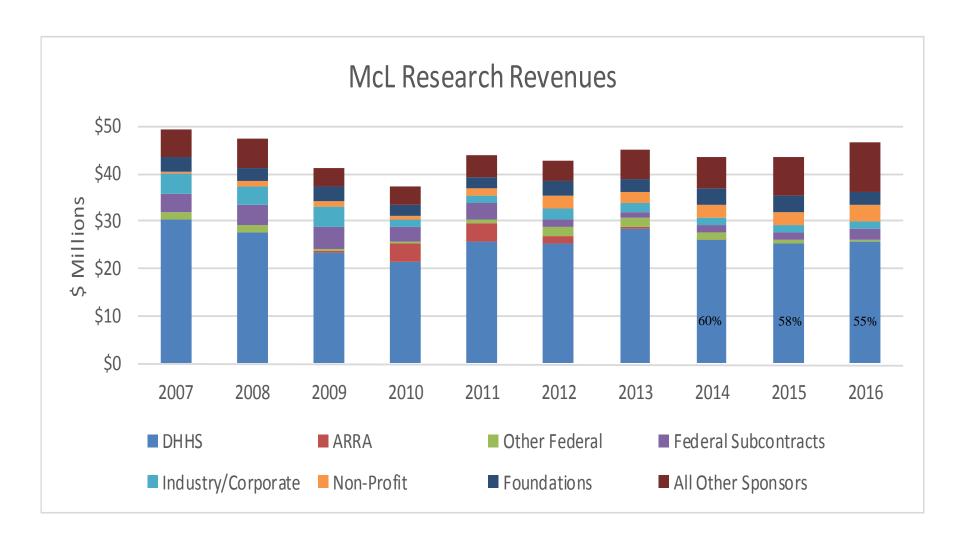


| | | n E. | ALIBOARE |
|--|--|---------------|---------------|
| cos | Department | 2016 | 2015 |
| | De pai tille lit | Total Revenue | Total Revenue |
| 42AA - Neurology (MGH) | 42AA - Neurology (MGH) | 32,240,021 | 30,148,868 |
| 54CA - Martinos Center (MGH) | 54AA - Radiology (MGH) | 28,621,739 | 26,705,748 |
| 30CA - Cardiac Unit (MGH) | 30AA - Medical Services (MGH) | 14,666,136 | 12,097,971 |
| 30GA - GI Unit (MGH) | 30AA - Medical Services (MGH) | 13,864,809 | 14,182,390 |
| 30IA - Infectious Disease Unit (MGH) | 30AA - Medical Services (MGH) | 11,782,960 | 12,960,748 |
| 15AA - Center for Genomic Medicine (MGH) | 15AA - Center for Genomic Medicine (MGH) | 11,539,124 | 12,551,829 |
| 19AA - Center for Systems Biology (MGH) | 19AA - Center for Systems Biology (MGH) | 11,391,857 | 13,213,418 |
| 56RA - Surgery, Science & Engineering (MGH) | 56AA - Surgery (MGH) | 11,159,679 | 10,477,794 |
| 17AA - WCP Wellman Photomedicine (MGH) | 17AA - WCP Wellman Photomedicine (MGH) | 10,671,233 | 10,491,448 |
| 28AA - Molecular Biology (MGH) | 28AA - Molecular Biology (MGH) | 10,427,635 | 10,474,443 |
| 25AA - Ragon Institute of MGH, MIT and Harvard (MGH) | 25AA - Ragon Institute of MGH, MIT and | 9,898,891 | 11,541,283 |
| 10AA - Anesthesia (MGH) | 10AA - Anesthesia (MGH) | 9,237,134 | 10,825,446 |
| 38AA - Cancer Center (MGH) | 38AA - Cancer Center (MGH) | 8,364,210 | 6,801,118 |
| 44EA - Neuroscience and Neuroimaging (MGH) | 44AA - Psychiatry (MGH) | 8,356,794 | 7,909,741 |
| 30RA - Renal Unit (MGH) | 30AA - Medical Services (MGH) | 8,039,100 | 6,971,157 |
| 44AA - Psychiatry (MGH) | 44AA - Psychiatry (MGH) | 7,438,727 | 7,658,588 |
| 30OA - Rheum, Allergy and Immunology (MGH) | 30AA - Medical Services (MGH) | 7,372,868 | 8,428,649 |
| 16CA - Dermatology - CBRC (MGH) | 16AA - Dermatology (MGH) | 6,777,918 | 7,207,425 |
| 30EA - Endocrine Unit (MGH) | 30AA - Medical Services (MGH) | 6,663,253 | 6,686,142 |
| 38BA - Hematology/Oncology (MGH) | 38AA - Cancer Center (MGH) | 6,466,368 | 6,647,882 |
| 44BA - Mood and Anxiety Disorders (MGH) | 44AA - Psychiatry (MGH) | 6,334,793 | 5,564,203 |
| 30WA - Neuroendocrine (MGH) | 30AA - Medical Services (MGH) | 5,711,419 | 5,644,851 |
| 13AA - CRMT Regen Med and Technology (MGH) | 13AA - CRMT Regen Med and Technology | 5,616,977 | 6,337,297 |
| 42BA - Neurology Clinical Research Institute (MGH) | 42AA - Neurology (MGH) | 5,585,782 | 3,272,053 |
| 30UA - Biostatistics (MGH) | 30AA - Medical Services (MGH) | 5,400,671 | 3,006,370 |
| | | | |

Source: PHS Research Revenues FY15-FY16 Actual. Note: Research Activity, excludes P&Ladjustments

McL Research Revenue Trends- All Sponsors





Source: PHS Research Revenues FY07- FY16 Actual.

Note: Research Activity, excludes Other Science and P&L adjustments

| McL DHHS Research Revenue Top COS | | | | | | |
|---|---|---|--|--|--|--|
| cos | Department | Т | | | | |
| 91AA - Basic Neuroscience Department (McLean) | 91AA - Basic Neuroscience Department (McLean) | | | | | |
| 90AA - Alcohol and Drug Abuse Department (McLean) | 90AA - Alcohol and Drug Abuse Department (McLean) | | | | | |
| | OAAA Dannaasian and Anviety Disanders | | | | | |

Total Revenue 3,550,876

2016

2,552,796

2.162.912

1,759,375

1.507.795

1,221,526

1,089,910

962,302

929.833

754,951

745,631

728,383

709,242

672.581

631,971

535,648

Total Revenue 4,427,394 2,601,765 2,640,565

2,496,405

2,105,675

933,419

583,553

1,253,556

1,061,743

1,050,702

1,027,715

381,967

1,142,281

829,812

228,063

382,800

721,653

25

0

2015

94AA - Depression and Anxiety Disorders

Department (McLean) 96AA - Psychotic Disorders Department (McLean)

91AA - Basic Neuroscience Department

91AA - Basic Neuroscience Department

98AA - Research Centers (McLean)

98AA - Research Centers (McLean)

98AA - Research Centers (McLean)

99AA - Administration (McLean)

91AA - Basic Neuroscience Department

92AA - Child and Adolescent Psychiatry

95AA - Neuroimaging Department (McLean)

91AA - Basic Neuroscience Department

91AA - Basic Neuroscience Department

98AA - Research Centers (McLean)

95AA - Neuroimaging Department (McLean)

(McLean)

(McLean)

(McLean)

(McLean)

(McLean)

Department (McLean)

Source: PHS Research Revenues FY15-FY16 Actual. Note: Research Activity, excludes P&Ladjustments

95DA - Cognitive and Clinical Neuroimaging Core (McLean)

98CA - Alcohol and Drug Abuse Clinical Research Center (McLean)

94AA - Depression and Anxiety Disorders Department (McLean)

96EA - Schizophrenia and Bipolar Disorder Research Progra

91HA - Laboratory for Translational Neuroscience (McLean)

91KA - Molecular Neurobiology Laboratory (McLean)

91BA - Behavioral Genetics Laboratory (McLean)

91FA - Genetic Neuropharamacology (McLean)

91DA - Cellular Neurobiology Laboratory (McLean)

98DA - Brain Imaging Center (McLean)

99BA - Administration (McLean)

98GA - Harvard Brain Tissue Resource Center (McLean)

92CA - Developmental Biopsychiatry Research Program (McLean)

98EA - The Conte Center for Psychiatric and Molecular Neu

95CA - Behavioral Psychopharmacology Research Laboratory

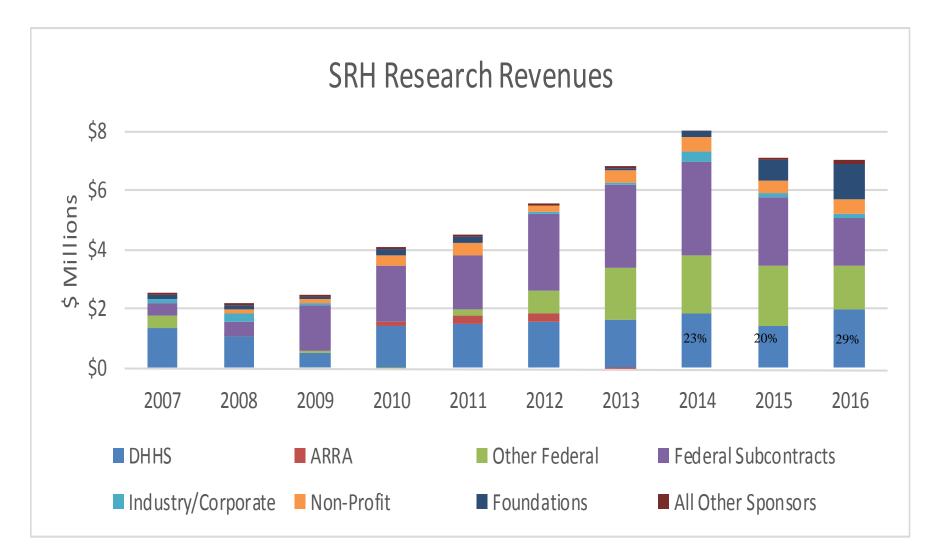
(McLean)

(McLean)

(McLean)

SRH Research Revenue Trends- All Sponsors





Source: PHS Research Revenues FY07- FY16 Actual.

Note: Research Activity, excludes Other Science and P&L adjustments

SRH DHHS Research Revenue Top COS



| cos | Department | 2016 | 2015 | |
|---|---|---------------|---------------|--|
| COS | Department | Total Revenue | Total Revenue | |
| 74BA - Dept of Physical Med and Rehab (SRH) | 74BA - Dept of Physical Med and Rehab (SRH) | 2,009,562 | 1,399,249 | |
| Total | | 2,009,562 | 1,399,249 | |

Source: PHS Research Revenues FY15-FY16 Actual. Note: Research Activity, excludes P&Ladjustments

FY16-FY15 Sponsor Mix - Including Federal Subcontracts



| | | 2016 | | | | 2015 | | | | | |
|-------------|--------------------------------------|-------------|------------------|---------------|-------------|------------|-------------|------------------|---------------|-------------|------------|
| Institution | Immediate Sponsor Type With Fed Subs | | MTDC Recovery | | | | | MTDC Recovery | | | |
| | | IDC | Rate | TC | % Total IDC | % Total TC | IDC | Rate | TC | % Total IDC | % Total TC |
| BWH | DHHS | 84,081,986 | 58.1% | 350,323,478 | 60% | 55% | 87,911,181 | 55.8% | 361,030,275 | 63% | 56% |
| | Federal Subcontracts | 22,266,075 | 62.7% | 59,710,231 | 16% | 9% | 21,901,268 | 61.8% | 58,986,392 | 16% | 9% |
| | Other Federal | 4,298,881 | 56.0% | 13,228,322 | 3% | 2% | 3,796,184 | 58.5% | 12,127,626 | 3% | 2% |
| | Industry/Corporate | 16,911,982 | 33.8% | 93,436,085 | 12% | 15% | 14,237,067 | 31.0% | 97,174,552 | 10% | 15% |
| | Non-Profit | 2,309,110 | 9.4% | 28,560,610 | 2% | 4% | 2,209,389 | 10.3% | 25,652,431 | 2% | 4% |
| | Foundations | 3,207,561 | 12.9% | 33,152,812 | 2% | 5% | 3,318,198 | 12.7% | 35,955,821 | 2% | 6% |
| | All Other Sponsors | 6,588,244 | 13.9% | 60,752,613 | 5% | 10% | 6,030,336 | 14.4% | 52,376,776 | 4% | 8% |
| | Total | 139,663,838 | 41.7% | 639,164,150 | 100% | 100% | 139,403,624 | 41.7% | 643,303,873 | 100% | 100% |
| McLean | DHHS | 7,782,626 | 52.1% | 25,602,153 | 70% | 55% | 6,925,832 | 47.7% | 25,428,143 | 71% | 58% |
| | Federal Subcontracts | 748,025 | 55.6% | 2,095,897 | 7% | 4% | 516,192 | 58.0% | 1,475,423 | 5% | 3% |
| | Other Federal | 182,327 | 47.2% | 570,252 | 2% | 1% | 152,765 | 35.4% | 680,000 | 2% | 2% |
| | Industry/Corporate | 493,823 | 43.2% | 1,590,768 | 4% | 3% | 418,060 | 34.7% | 1,636,852 | 4% | 4% |
| IVICLEATI | Non-Profit | 256,346 | 8.7% | 3,620,020 | 2% | 8% | 275,085 | 12.3% | 2,669,212 | 3% | 6% |
| | Foundations | 277,971 | 12.3% | 2,628,418 | 3% | 6% | 362,614 | 13.3% | 3,366,162 | 4% | 8% |
| | All Other Sponsors | 1,353,538 | 14.9% | 10,727,444 | 12% | 23% | 1,049,257 | 15.1% | 8,406,188 | 11% | 19% |
| | Total | 11,094,655 | 34.6% | 46,834,953 | 100% | 100% | 9,699,806 | 33.5% | 43,661,980 | 100% | 100% |
| MGH | DHHS | 105,102,973 | 57.0% | 352,604,552 | 54% | 42% | 104,924,462 | 59.4% | 343,075,037 | 56% | 44% |
| | Federal Subcontracts | 25,792,336 | 55.3% | 78,821,132 | 13% | 9% | 24,633,293 | 57.1% | 73,506,039 | 13% | 9% |
| | Other Federal | 9,641,865 | 58.4% | 30,310,135 | 5% | 4% | 9,476,501 | 59.0% | 33,979,962 | 5% | 4% |
| | Industry/Corporate | 15,787,156 | 41.4% | 59,127,756 | 8% | 7% | 15,016,274 | 38.5% | 57,628,016 | 8% | 7% |
| | Non-Profit | 11,351,662 | 20.7% | 74,171,527 | 6% | 9% | 10,847,888 | 22.3% | 64,152,751 | 6% | 8% |
| | Foundations | 7,017,129 | 13.3% | 71,672,190 | 4% | 9% | 5,268,231 | 11.4% | 60,973,984 | 3% | 8% |
| | All Other Sponsors | 18,474,813 | 14.5% | 164,578,239 | 10% | 20% | 16,577,906 | 14.4% | 148,768,843 | 9% | 19% |
| | Total | 193,167,934 | 37.1% | 831,285,532 | 100% | 100% | 186,744,554 | 38.5% | 782,084,632 | 100% | 100% |
| | DHHS | 501,803 | 42.2% | 2,009,562 | 33% | 29% | 445,443 | 48.5% | 1,399,249 | 24% | 20% |
| | Federal Subcontracts | 530,806 | 48.3% | 1,636,306 | 35% | 23% | 744,080 | 52.2% | 2,301,380 | 40% | 32% |
| | Other Federal | 363,012 | 45.7% | 1,423,922 | 24% | 20% | 576,522 | 46.1% | 2,089,101 | 31% | 29% |
| SRH | Industry/Corporate | 5,583 | 6.5% | 113,950 | 0% | 2% | 8,952 | 15.4% | 147,030 | 0% | 2% |
| SKH | Non-Profit | 28,425 | 6.2% | 491,615 | 2% | 7% | 4,210 | 1.1% | 408,363 | 0% | 6% |
| | Foundations | 87,396 | 10.1% | 1,251,733 | 6% | 18% | 62,220 | 13.0% | 689,772 | 3% | 10% |
| | All Other Sponsors | 12,382 | 14.8% | 96,134 | 1% | 1% | 7,105 | 14.3% | 56,155 | 0% | 1% |
| | Total | 1,529,408 | 33.4% | 7,023,222 | 100% | 100% | 1,848,532 | 40.7% | 7,091,051 | 100% | 100% |
| Total | | 345,455,836 | 38.7% | 1,524,307,856 | | | 337,696,516 | 39.6% | 1,476,141,536 | | |
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