NIH'S ROLE IN SUSTAINING THE U.S. ECONOMY

2015 Update Authored by Dr. Everett Ehrlich

The health benefits of the research supported by the National Institutes of Health (NIH) are clear: Investment in NIH directly leads to better medicines, procedures, treatments, equipment and delivery systems to prevent and cure disease. Less realized, however, is the notable role that NIH plays as an economic engine, helping maintain American output and employment.

NIH today, supports over 400,000 jobs all across the country and remains the largest funder of life sciences research in the United States. More than 80 percent of its budget directly funds "extramural" research performed by more than 300,000 scientists at more than 2,500 institutions in all 50 states and the District of Columbia.[1]

In 2011, United for Medical Research released the report "An Economic Engine: NIH Research, Employment, and the Future of the Medical Innovation Sector,"[2] which focused on the economic benefits of NIH extramural spending. As that report noted, spending on basic research triggers complementary private investment and contributes significantly to the competitive strength of the U.S. life sciences industry in an increasingly global market. Furthermore, NIH is an important source of employment in its own right.

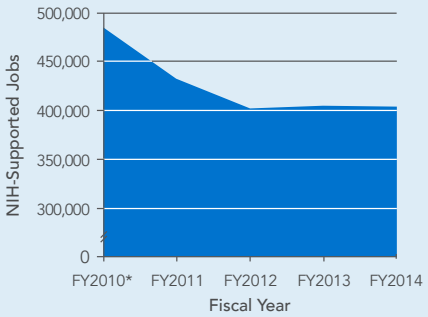
Using the Department of Commerce's RIMS II model, the original report projected that $26.6 billion in NIH extramural funding in FY2010 directly and indirectly supported 484,900 jobs nationwide, with 15 states having NIH-supported employment of 10,000 or more jobs. This paper provides updated employment estimates for FY2014.

In 2014, NIH remained an important driver of economic activity and jobs, but the lower level of investment in the agency resulted in fewer jobs supported than was the case several years ago. As seen in Table 1, the $22.0 billion spent by NIH extramurally[3] in the 50 states and the District of Columbia in 2014 directly and indirectly supported 404,226 jobs. Thirteen states showed NIH-supported employment of 10,000 or more, and the median state has just under 4,000 jobs supported by NIH research. States topping the list in terms of jobs supported were: California (60,448 jobs), New York (33,299 jobs), Massachusetts (32,632 jobs), Pennsylvania (24,751 jobs), and Texas (24,381 jobs).

In addition to the direct jobs impact, there is a broad and compelling literature demonstrating the dynamic role between NIH spending and the private sector as the discoveries NIH finances move to commercial applications involving new medicines, tests, procedures, and devices. NIH spending in 2014 supported $58.013 billion in economic activity, with 17 states experiencing NIH-supported economic activity of more than $1 billion.

This update underscores that NIH funding consistently generates substantial, positive returns, and that the benefits enabled by NIH funding extend well beyond research discoveries. Our nation's commitment to NIH has been, and will remain, an important factor in bolstering the nation's economy and driving U.S. global success. Whether the goal is to fuel new medical discoveries or to drive U.S. economic growth, investing in NIH should remain a top national priority.

Over the five years that United for Medical Research has tracked this data, NIH-supported employment has shifted from a high of 485,000 jobs in FY2010 to hovering just above 400,000 jobs for the past three years.



*Fiscal Year 2010 included some one-time Recovery Act funding.

[1] NIH Impacts on U.S. Economy June 2015 http://www.nih.gov/about/impact/impact_economy.pdf

[2] An Economic Engine 2011 http://www.unitedformedicalresearch.com/advocacy_reports/an-economic-engine/

[3] National Institutes of Health, NIH Awards by Location & Organization FY2014 http://www.report.nih.gov/award/index.cfm

United for Medical Research

Table 1 NIH-Supported Jobs and Economic Activity FY2014

State	NIH Awards ($M)	Jobs Created per $1M NIH Awards	Intrastate Jobs	Added Interstate Activity (%)	Interstate Jobs	TOTAL EMPLOYMENT	Economic Activity ($M)
Alabama	254.4	16.4688	4,189	21.1%	883	5,072	637.2
Alaska	10.8	16.4933	178	159.9%	285	463	50.9
Arizona	158.0	16.8668	2,664	48.0%	1,280	3,944	497.0
Arkansas	44.3	17.6449	781	80.8%	631	1,412	148.1
California	3,410.5	15.4256	52,609	14.9%	7,839	60,448	9,333.5
Colorado	310.9	16.0831	5,001	22.7%	1,134	6,135	895.6
Connecticut	464.4	11.6884	5,428	14.7%	796	6,224	1,083.2
Delaware	38.8	2.1467	83	124.0%	103	186	119.8
District of Columbia	189.5	9.5179	1,803	11.4%	206	2,009	389.6
Florida	473.0	17.8397	8,438	45.2%	3,814	12,252	1,508.2
Georgia	466.5	18.8058	8,773	24.1%	2,111	10,884	1,350.6
Hawaii	47.4	16.5609	785	46.0%	361	1,146	139.0
Idaho	10.7	14.6906	157	184.2%	289	446	54.3
Illinois	710.2	15.5708	11,058	24.4%	2,694	13,753	2,143.9
Indiana	208.1	16.5565	3,445	41.5%	1,431	4,876	614.8
Iowa	164.6	16.7338	2,754	31.4%	865	3,619	385.4
Kansas	101.1	13.8584	1,401	45.2%	634	2,035	269.6
Kentucky	151.0	17.6206	2,660	33.3%	885	3,545	419.7
Louisiana	130.0	18.1253	2,356	57.9%	1,365	3,720	400.7
Maine	71.7	19.5711	1,402	22.8%	320	1,722	174.5
Maryland	1,010.9	13.7702	13,921	9.0%	1,255	15,176	2,320.1
Massachusetts	2,364.8	13.1799	31,167	4.7%	1,465	32,632	5,435.8
Michigan	570.7	15.1784	8,662	19.6%	1,695	10,357	1,478.5
Minnesota	496.5	15.9403	7,915	16.5%	1,303	9,218	1,259.4
Mississippi	35.3	16.8082	593	95.4%	565	1,158	125.6
Missouri	467.8	13.4698	6,301	15.6%	986	7,287	1,155.6
Montana	30.9	17.8593	552	43.8%	242	795	80.1
Nebraska	88.6	14.9999	1,329	39.6%	526	1,855	212.2
Nevada	25.5	13.4166	343	165.7%	568	910	129.4
New Hampshire	96.3	12.7697	1,230	20.2%	249	1,479	232.2
New Jersey	228.5	13.4231	3,067	58.6%	1,796	4,862	831.0
New Mexico	92.9	15.267	1,419	27.5%	391	1,809	225.5
New York	2,069.3	13.7365	28,425	17.1%	4,874	33,299	4,977.9
North Carolina	991.9	17.2524	17,112	12.7%	2,171	19,283	2,446.8
North Dakota	15.9	14.565	231	105.7%	245	476	54.1
Ohio	633.2	17.3703	10,999	21.5%	2,360	13,359	1,742.3
Oklahoma	87.7	19.4316	1,705	54.6%	930	2,635	275.4
Oregon	301.1	16.9262	5,096	19.1%	974	6,070	748.3
Pennsylvania	1,496.9	14.9719	22,411	10.4%	2,340	24,751	3,840.3
Rhode Island	131.9	14.0565	1,854	12.1%	225	2,078	284.7
South Carolina	146.7	18.2123	2,672	34.6%	924	3,597	414.2
South Dakota	21.4	10.7603	230	79.8%	183	413	57.8
Tennessee	444.8	16.8648	7,502	16.5%	1,235	8,737	1,183.9
Texas	972.2	18.5485	18,032	35.2%	6,349	24,381	3,242.1
Utah	164.6	20.0964	3,308	20.8%	687	3,995	458.6
Vermont	57.7	17.1468	989	15.5%	153	1,142	123.0
Virginia	280.0	13.6819	3,832	44.6%	1,710	5,542	873.0
Washington	876.9	14.6601	12,856	11.9%	1,526	14,382	2,139.2
West Virginia	19.0	16.5945	315	122.4%	385	700	76.2
Wisconsin	383.0	16.5408	6,336	20.3%	1,283	7,619	938.3
Wyoming	7.5	15.3089	115	193.7%	222	337	35.2
50 states plus DC	22,026.0		336,485	20.1%	67,742	404,226	58,012.5

United for Medical Research is a coalition of leading research institutions, patient and health advocates, and private industry that have joined together to seek steady increases in funding for the National Institutes of Health. Coalition members include: AdvaMed, American Association for Cancer Research, American Association for the Advancement of Science, American Cancer Society Cancer Action Network, American Heart Association, Association of American Universities, Association of Public and Land Grant Universities, BD, Biotechnology Industry Organization, Boston University, Corning, FasterCures, Harvard University, Johns Hopkins University, Massachusetts Institute of Technology, Melanoma Research Alliance, PhRMA, Northwestern University, Pancreatic Cancer Action Network, PhRMA, Research!America, Stanford University, The Endocrine Society, Thermo Fisher Scientific, University of Pennsylvania, University of Southern California, Vanderbilt University and Washington University in St. Louis.