

NIH's Role in Sustaining the U.S. Economy



Each year, researchers supported by the National Institutes of Health (NIH) are responsible for groundbreaking discoveries and innovations that change the trajectory of disease treatment locally and around the world. Even before discoveries are made, however, those same NIH research grants are supporting jobs and economic activity across the United States.

**EXPONENTIAL RETURN ON INVESTMENT** 





Every research dollar that leaves NIH does double duty. In Fiscal Year 2022, the \$36.68 billion awarded to researchers in the 50 U.S. states and the District of Columbia supported 568,585 jobs and \$96.84 billion in economic activity.

DISCOVERY

# THE NIH AND **BIOMEDICAL** INNOVATION

The National Institutes of Health sits at the center of the biomedical innovation ecosystem - funding, facilitating and conducting research through its 27 institutes and centers, as well as training the next generation of biomedical innovators. It is the power behind the global leadership of America's life sciences industry.

#### G **Scientific tools** and technologies companie<u>s</u>

#### **Patient** and disease advocacy organizations

other parts of the innovation ecosystem, sponsor research themselves and provide public

# researchers at more than

2.500 universities and organizations in all 50 states and D.C.

## Startups and spin-outs

DEVELOR

Academic

The research conducted at

academic institutions provides a foundation for private sector development of new drugs, treatments and technologies

that improve health.

research institutions

University research often leads to discoveries with commercial potential and the spinout of startup companies, which help fuel the biomedical innovation pipeline.

#### Bio, pharma and device companies

The life sciences industry funds and conducts most of the applied DISSEMINATION research and development in the U.S., often building upon knowledge and discoveries from federally funded basic research

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The National Institutes of Health is a catalyst for innovation and economic growth, which makes maintaining a strong NIH a national priority. Thanks to bipartisan congressional commitment to patients and families affected by disease and to keeping the United States at the forefront of biomedical innovation, the NIH budget has increased each year since FY2016. This steady growth in the NIH budget has helped it to regain critical ground lost during a long period of stagnant funding.





MORE ECONOMIC ACTIVITY



216,236

MORE JOBS

2022 compared to 2015

RECENT INCREASES TO THE NIH BUDGET							
	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Total NIH appropriations	\$32.311 billion	\$34.300 billion	\$37.311 billion	\$39.313 billion	\$41.636 billion	\$42.936 billion	\$45.182 billion
Total NIH research funds awarded in 50 states + D.C.	\$24.59 billion	\$26.10 billion	\$28.05 billion	\$30.82 billion	\$34.65 billion	\$35.73 billion	\$36.68 billion
Total NIH research grants awarded in 50 states + D.C.	52,470	54,128	57,110	59,421	61,993	62,996	64,657
Total jobs supported nationwide	379,471	402,816	433,011	475,905	536,338	552,444	568,585
Total economic activity nationwide	\$64.799 billion	\$68.795 billion	\$73.909 billion	\$81.220 billion	\$91.350 billion	\$94.180 billion	\$96.846 billion

A note about this data: Since 2011, UMR has provided an analysis of the employment and economic activity attributable to NIH extramural research spending. We rely on the RIMS II model maintained by the Bureau of Economic Analysis, which is part of the U.S. Department of Commerce. The analysis for this 2023 update was performed by Ronald Horst, Ph.D., Inforum.

As NIH funding is awarded to researchers in individual states, that funding supports employment and the purchase of research-related goods, services and materials. The income generated from these jobs and purchases cycles through the economy to produce new economic activity.

Researchers in every state receive NIH funding and every state benefits from the jobs and economic activity that result.

**42** states with **1,000+** jobs

**26** states with **5,000+** jobs

**16** states with **10,000+** jobs

NIH RESEARCH SUPPORTS JOBS



**568,585**TOTAL JOBS
IN FY2022

NIH RESEARCH FUELS THE ECONOMY

46 states with \$100M+
31 states with \$500M+
23 states with \$1B+



\$96.84

BILLION IN NEW ECONOMIC ACTIVITY IN FY2022

## STATES WITH THE LARGEST PERCENT INCREASES FY2021 TO FY2022

AWARD FUNDING		JO	OBS	ECONOMIC ACTIVITY		
South Dakota	41.4%	South Dakota	22.2%	South Dakota	22.2%	
New Jersey	21.3%	Minnesota	15.7%	Minnesota	15.7%	
Minnesota	17.9%	New Jersey	14.4%	New Jersey	14.4%	
Virginia	16.8%	Virginia	13.5%	Virginia	13.5%	
Wyoming	15.1%	Nebraska	11.8%	Nebraska	11.8%	

## South Dakota | Research Locations



For more information on NIH research in your state, visit our **DIGITAL TOOLKIT**.

# **Economic Impact of NIH Research by State FY2022**

State	NIH AWARDS (\$M)	Jobs Created per \$1M NIH Awards	Intrastate Jobs	Added Interstate Activity (%)	Interstate Jobs	TOTAL EMPLOYMENT	ECONOMIC ACTIVITY (\$M)
Alabama	385.1	12.9	4977	22.4	1115	6092	935
Alaska	16.7	11.8	197	137.4	270	467	70
Arizona	346.3	15.0	5185	36.0	1867	7052	1039
Arkansas	104.0	12.7	1322	52.8	698	2020	281
California	5477.7	13.5	73821	17.1	12649	86470	15366
Colorado	530.8	15.2	8064	22.8	1838	9902	1570
Connecticut	725.2	10.2	7368	14.6	1074	8442	1676
Delaware	78.2	8.0	622	39.0	243	865	203
District of Columbia	241.7	2.5	610	29.0	177	787	473
Florida	839.6	15.9	13389	43.9	5873	19262	2693
Georgia	842.4	16.6	14023	23.7	3317	17340	2464
Hawaii	57.5	13.3	766	60.3	462	1228	181
Idaho	18.4	11.8	216	182.4	394	610	95
Illinois	1198.0	14.3	17153	22.3	3820	20973	3608
Indiana	369.9	12.9	4781	37.9	1813	6594	1024
Iowa	211.2	12.2	2569	38.6	991	3560	519
Kansas	129.1	11.7	1515	52.5	795	2310	379
Kentucky	240.7	13.0	3119	34.6	1079	4198	628
Louisiana	227.1	13.8	3144	42.7	1343	4487	631
Maine	112.7	14.0	1575	23.8	376	1950	264
	2407.5	12.1	29203	5.9	1729	30932	5556
Massachusetts							7743
Massachusetts	3281.8	11.5	37708	6.0	2249	39957	
Michigan	925.2	13.6	12553	19.5	2450	15003	2407
Minnesota	760.0	13.0	9846	16.6	1639	11485	1988
Mississippi	61.5	12.6	774	77.5	600	1373	193
Missouri	802.7	12.1	9744	14.6	1424	11168	1926
Montana	41.0	13.5	556	52.8	293	849	111
Nebraska	155.3	13.1	2038	33.7	687	2725	386
Nevada	41.0	12.0	490	170.6	837	1327	213
New Hampshire	122.5	10.7	1314	26.8	352	1666	306
New Jersey	443.4	12.3	5457	46.0	2509	7966	1496
New Mexico	122.8	11.8	1445	33.4	483	1928	301
New York	3436.6	10.5	36205	18.3	6637	42843	8525
North Carolina	2164.6	14.6	31600	9.1	2873	34473	5271
North Dakota	26.7	10.8	287	97.2	279	566	89
Ohio	952.9	13.5	12910	24.4	3153	16063	2624
Oklahoma	136.7	14.5	1976	55.5	1096	3072	423
Oregon	399.7	13.7	5475	22.7	1241	6716	989
Pennsylvania	2193.6	12.4	27286	11.9	3234	30520	5577
Rhode Island	249.0	11.1	2770	9.9	274	3044	506
South Carolina	232.3	15.1	3510	37.4	1314	4824	667
South Dakota	29.4	12.1	357	80.3	287	643	90
Tennessee	711.7	13.3	9479	18.0	1707	11186	1840
Texas	1783.6	15.7	27972	31.3	8749	36721	5764
Utah	274.5	16.8	4598	23.1	1063	5662	773
Vermont	66.2	12.8	848	21.0	178	1026	146
Virginia	630.9	11.1	7033	30.8	2169	9202	1748
Washington	1460.1	12.4	18119	14.1	2548	20667	3567
West Virginia	49.0	11.4	560	69.9	392	952	142
Wisconsin	554.3	13.2	7327	23.7	1740	9067	1329
Wyoming	14.8	10.4	154	127.3	196	350	52
50 states plus D.C.	\$36,683	10.4	474,011	20.0	9,4574	568,585	\$96,846



UMR is a coalition of leading research institutions, patient and health advocates and private industry seeking strong and sustainable increases in funding for the National Institutes of Health to save and improve lives, advance innovation and fuel the economy. UMR members include: AdvaMed, Alzheimer's Association, American Association for the Advancement of Science, American Cancer Society Cancer Action Network, Association of American Cancer Institutes, Association of American Universities, Association of Public and Land-grant Universities, BD, Boston University, Corning, Harvard University, Johns Hopkins University, Johnson & Johnson, Massachusetts Institute of Technology, Northwestern University, Stanford University, Thermo Fisher Scientific, University of Pennsylvania, Vanderbilt University, Vanderbilt University Medical Center and Washington University in St. Louis.