

### **2021 UPDATE**

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



# Saving Lives and Boosting the Economy

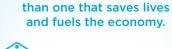
The National Institutes of Health (NIH) is the world's premier health research agency, driving life-changing discovery that enhances health, reduces illness and disability and offers hope to people the world-over.

In addition to improving and saving lives, NIH research also helps fuel our economy. More than 80 percent of NIH's annual budget is awarded through competitive grants to researchers in every state.

In Fiscal Year 2020 (Oct. 1, 2019-Sept. 30, 2020), the NIH awarded 61,933 grants totaling \$34.65 billion to researchers in all 50 states and the District of Columbia. This research funding supported 536,338 jobs and drove \$91.35 billion in economic activity, making the NIH a research and economic powerhouse.

test, Northwestern University There is no better investment

COVID-19 antibody





**536,338** JOBS



**\$91.35** BILLION

Supported by NIH research in FY2020



#### **Because of NIH Research**

- Babies are born healthier
- People are living longer
- Conditions like heart disease, stroke and diabetes are less deadly
- ✓ Infections like HIV/AIDS, hepatitis and meningitis can be successfully prevented and treated
- More and more people today are cancer survivors



diabetes



heart disease





#keepNIHstrong



NOW, MORE THAN EVER, we must ensure that the NIH budget continues to grow - ensuring the agency's ability to support the life-changing discovery that also fuels American output, employment and a globally competitive life sciences industry.







## **Every State Benefits**

NIH-funded research supports jobs and fuels new economic activity in every state and D.C. -536,338 jobs and \$91.35 billion last year alone.

The income generated by these jobs, as well as by the purchase of research-related equipment, services and materials, when cycled through the economy, produces new economic activity.

Chaudhuri Lab Washington University School of Medicine in St. Louis

#### **NIH RESEARCH SUPPORTS JOBS**



**536,338** TOTAL JOBS IN FY2020

**26** states with **5,000+** jobs 15 states with 10,000+ jobs

#### NIH RESEARCH FUELS ECONOMIC ACTIVITY



\$91.35 BILLION IN TOTAL NEW

30 states with \$500M+ 23 states with \$1B+



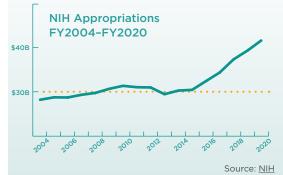
## **Congressional Commitment to a Strong NIH**

Thanks to bipartisan support in the House and Senate, strong, annual increases to the NIH budget over the past five years have led to substantial growth in grants for medical research, jobs and economic activity.

RECENT INCREASES TO THE NIH BUDGET										
	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020				
Total NIH Appropriations	30.311 billion	32.311 billion	34.300 billion	37.311 billion	39.311 billion	41.636 billion				
Total NIH research funds awarded in 50 states + DC	\$22.8 billion	\$24.6 billion	\$26.1 billion	\$28.05 billion	\$30.82 billion	\$34.65 billion				
Total number of research grants awarded in 50 states + DC	50,808	52,470	54,128	57,110	59,421	61,993				
Total jobs supported nationwide	352,349 jobs	379,471 jobs	402,816 jobs	433,011 jobs	475,905 jobs	536,338 jobs				
Total economic activity nationwide	\$60.717 billion	\$64.799 billion	\$68.795 billion	\$73.909 billion	\$81.220 billion	\$91.35 billion				

#### **REVERSING A NEGATIVE TREND**

For FY2016, Congress provided the NIH its first significant budget increase in 12 years, beginning the process of putting the agency back on an upward path after years of stagnant funding. Between 2004 and 2015, the NIH budget, adjusted for inflation, fell 22%





# NIH and COVID-19

Today, NIH research is at the very center of the treatments, vaccines and knowledge that will help bring the COVID-19 pandemic to an end, saving lives and enabling our economy to recover.

- ✓ NIH-funded research discoveries building on discoveries forms the basis of the mRNA technology at work in the first two COVID-19 vaccines to receive U.S. Food and Drug Administration emergency use authorization.
- ✓ Experts at the NIH Vaccine Research Center were studying coronaviruses and how to protect against them years before our current pandemic.
- ✓ Two NIH-led initiatives in partnership with industry ACTIV and RADx are speeding development of vaccines, treatments and diagnostics for COVID-19.
- ✓ In labs across the country, researchers are exploring the many different angles of this pandemic to not only help us recover but to help improve disease detection and better understand how it spreads — preparing us for the next public health crisis.



### **Learn More**

About the unprecedented impact of COVID-19 on biomedical research and of the biomedical research community's response to help prevent, diagnose and treat the disease, and efforts to support the global rollout of the vaccine.

Bushman Lab Pennsylvania









\$3.6+

### billion

In supplemental funding has been allocated to the NIH since the start of the coronavirus pandemic to support important COVID-19 research on diagnostic tests, vaccines, and treatments.

In FY2020, this funding supported an additional 563 grants to researchers across the U.S., totaling \$1,925,835,229

### COMPARED TO FY2015, INCREASES IN THE NIH BUDGET IN FY2020 RESULTED IN



MORE GRANT FUNDING TO RESEARCHERS

\$30.6B

MORE **ECONOMIC ACTIVITY**  183,989 **MORE JOBS** 

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**THANK YOU CONGRESS!** 

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. This model was last updated by BEA in December 2016. This 2021 update, and each of the previous analyses, was conducted by Dr. Everett Ehrlich of ESC Company.

For more information on the state-level impact of NIH research visit

NIH IN YOUR STATE

### **Economic Impact of NIH Research by State FY2020**

State	NIH AWARDS (\$M)	Jobs Created per \$1M NIH Awards	Intrastate Jobs	Added Interstate Activity (%)	Interstate Jobs	TOTAL EMPLOYMENT	ECONOMIC ACTIVITY (\$M)
Alabama	383.5	12.926	4,957	21.2%	1,051	6,008	922
Alaska	15.9	11.796	187	140.4%	263	450	67
Arizona	282.4	14.971	4,229	40.4%	1,707	5,935	874
Arkansas	77.3	12.712	982	68.3%	671	1,653	230
California	4,996.3	13.477	67,333	17.9%	12,051	79,384	14,107
Colorado	504.6	15.194	7,667	21.8%	1,674	9,341	1,481
Connecticut	683.6	10.160	6,945	14.4%	1,002	7,947	1,578
Delaware	54.9	7.957	437	53.3%	233	670	157
District of Columbia	240.1	2.524	606	28.2%	171	777	467
Florida	738.4	15.946	11,775	45.6%	5,371	17,146	2,397
Georgia	778.7	16.647	12,963	23.3%	3,015	15,979	2,271
Hawaii	63.6	13.315	847	53.3%	452	1,298	191
daho	18.8	11.761	221	161.9%	358	579	90
Illinois	1,130.3	14.319	16,184	22.5%	3,643	19,828	3,411
Indiana	375.4	12.926	4,852	35.7%	1,734	6,586	1,023
lowa	223.2	12.165	2,715	34.9%	946	3,661	534
Kansas	119.6	11.736	1,404	51.9%	729	2,133	350
Kentucky	243.5	12.958	3,156	32.4%	1,022	4,178	625
_ouisiana	193.8	13.844	2,682	48.3%	1,296	3,979	559
Maine	104.4	13.967	1,458	23.8%	347	1,805	244
Maryland	2,254.9	12.130	27,353	6.2%	1,683	29,036	5,216
Massachusetts	3,295.9	11.490	37,870	5.7%	2,143	40,013	7,754
Michigan	895.8	13.567	12,153	19.9%	2,419	14,572	2,338
Minnesota	682.8	12.955	8,845	17.3%	1,530	10,375	1,795
Mississippi	46.4	12.584	583	100.7%	587	•	165
						1,171	
Missouri	687.2	12.139	8,341	16.1%	1,340	9,681	1,670
Montana	54.8	13.536	741	37.3%	276	1,018	133
Nebraska	133.6	13.125	1,754	36.2%	635	2,388	339
Nevada	44.2	11.968	529	143.7%	761	1,290	207
New Hampshire	120.7	10.729	1,295	26.3%	340	1,635	300
New Jersey	352.3	12.308	4,336	56.2%	2,436	6,772	1,271
New Mexico	115.8	11.774	1,363	33.7%	460	1,823	285
New York	3,187.2	10.535	33,578	18.3%	6,144	39,722	7,904
North Carolina	2,204.2	14.599	32,178	8.4%	2,697	34,876	5,332
North Dakota	24.7	10.761	266	96.5%	257	523	82
Ohio	983.0	13.548	13,317	22.5%	3,001	16,319	2,666
Oklahoma	132.1	14.457	1,910	55.4%	1,058	2,968	409
Oregon	423.6	13.698	5,803	20.4%	1,183	6,985	1,028
Pennsylvania	2,040.3	12.439	25,379	12.4%	3,150	28,528	5,213
Rhode Island	229.5	11.126	2,553	10.5%	269	2,822	469
South Carolina	222.1	15.112	3,357	36.2%	1,215	4,572	632
South Dakota	27.4	12.134	332	81.6%	271	603	84
Tennessee	704.4	13.318	9,381	17.3%	1,620	11,000	1,809
Гехаѕ	1,509.2	15.683	23,668	34.5%	8,160	31,828	4,996
Jtah	260.2	16.752	4,359	21.5%	938	5,298	723
<b>Vermont</b>	71.6	12.821	918	18.7%	172	1,090	155
/irginia	493.0	11.147	5,496	37.2%	2,046	7,543	1,433
Washington	1,630.6	12.410	20,235	11.7%	2,363	22,598	3,900
West Virginia	45.5	11.437	521	72.7%	379	900	135
Wisconsin	533.4	13.219	7,051	23.7%	1,670	8,721	1,278
Wyoming	12.8	10.427	134	148.6%	198	332	49
50 states plus DC	34,647.3		447,200	19.9%	89,138	536,338	91,350



UMR is a coalition of leading research institutions, patient and health advocates and private industry seeking steady 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 Universities, Association of Public and Land-grant Universities, BD, Biotechnology Innovation Organization, Boston University, Corning, Harvard University, Johnson Louiversity, Johnson & Johnson, Massachusetts Institute of Technology, Northwestern University, PhRMA, Stanford University, Thermo Fisher Scientific, University of Pennsylvania, Vanderbilt University, Vanderbilt University Medical Center and Washington University in St. Louis.