The Top American Research Universities

2015 Annual Report

The Center for Measuring University Performance

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## What's in a Name? The Classification of Research Universities

Over the years since the first Top American Research Universities report appeared in 2000, we have had a constant conversation about what elements of complex multi-location universities should be included under the name of the main campus. Although most observers spend little effort on this subject, institutional leaders, trustees, and others who worry about identity, ranking, and visibility, and public and especially legislative perception, engage this topic with some intensity.<sup>1</sup>

Much depends on the purpose of the discussion. If we need to explain the value of a public higher education institution to a legislature, the total activity of a multi-location institution with some type of central management becomes relevant. In this case, we will want to show what all the academic units within, for example, the University of Massachusetts produce in the way of student graduates, research productivity, community service, and economic development to the state of Massachusetts, especially if we are seeking additional state funding (or in our current world, trying to hold on to the state funding available). If we are prospective students, graduate students, or faculty, our interest may well be much more tightly focused. We want to know whether we will find the right match for our talents and interests at Indiana University-Bloomington or IUPUI-Indianapolis.

There are university systems such as the University of California or the State University of New York that include many institutions, some research powerhouses, and some less research intensive. Within these large systems, few people doubt that the UCLA is a different academic institutional entity than Berkeley, UC San Francisco, or UC Davis. At the same time, other state university institutions are less obviously differentiated. Is Indiana University-Bloomington a different academic institution than Indiana University-Purdue University Indianapolis? Is Penn State-College Station a different academic institution than the Penn State Medical Center-Hershey? Is Louisiana State University-Baton Rouge a different academic institution than Louisiana State University-Medical Center New Orleans? Public universities, whose histories reflect the shifting interests and priorities of legislators and other public leaders over the years, often have variable administrative and organizational histories, with institutions combined in different ways, with different management structures, at different times. This often reflects the expectation of greater efficiency or better state control with different organizational frameworks. Sometimes state legislators believe that the consolidation of institutional control within the purview of a single governing board and a chief executive for multiple academic units will produce better coordination and efficiency. Sometimes states see advantages in a decentralized model that provides each academic institution with its own governing board and CEO, but assigns coordination and overall supervision to a commission or overarching board. Multiple variations on these themes exist and have existed throughout the American public higher education industry, and many states have seen fit to create and recreate organizational structures of different types over the years.

Private universities are much less prone to these organizational variations as they tend to have stable governing boards that maintain a coherent organizational structure over time. Most observers of higher education are clear about what we mean when we say Stanford or MIT, Duke or the University of Southern California.

At the Center for Measuring University Performance (MUP), our interest has always been in the performance of research universities. After some careful consideration at the outset of this project, the MUP Center chose to focus its attention on the performance of research university campuses. These of course are always universities, but because the term university has come to apply to practically any academic institution that chooses to use the name, we have defined our domain by focusing on campuses, that is campus-based units whose faculty, students', and staff's research and education depends in large part on the collection of resources, both human and material, that reside within a coherent and coordinated institutional

<sup>1 &</sup>quot;The Myth of Number One: Indicators of Research University Performance," *The Top American Research Universities (TARU)*, 2000 and "In Pursuit of Number One," *TARU*, 2010.

structure with a reasonable geographic identity. We think that the success of research universities comes from the investments made by campuses in constructing successful competitive academic clusters of high performing people who come primarily to a place even if their work extends across the nation and the world. We see institutional structures with separately located medical centers as constituting two or more research campuses for the purposes of our data and analysis.<sup>2</sup>

This method works reasonably well for most universities, but a few institutions find the distinctions we make between a main campus and a geographically and organizationally distinct medical campus unsatisfactory. This concern relates to a related conversation about the presence or absence of a research oriented medical school within a single research university campus. Because of the significance of externally funded medically related research within the total research funding available to academic institutions, those universities that include research competitive medical schools often show higher research productivity than campuses that do not include a research intensive medical school. Of course the mere presence of a medical school does not indicate significantly greater research performance because many medical schools focus on the preparation of medical professionals rather than on externally funded medically related research.

A few public universities with related medical centers separate from their main campuses would like to include the research productivity of their medical centers along with the research productivity of their main campuses to produce a higher number on the various measures included within our annual Top American Research Universities report. This often reflects the intense interest in ranking that has become a constant feature of university life in America and abroad. If a campus has a research ranking of perhaps 100, its leadership can clearly see that if they included the research productivity of a related medical school the ranking might improve to perhaps 95. From our perspective this is not particularly helpful. If a measure of research competitiveness or any other institutional measure of performance reflects different organizational definitions at different times, the real changes the data show become obscured by the changing definitions. This is especially so with public institutions where modifications of organizational structure and governance occur with some frequency.

Moreover, IPEDS, a key national source for institutional data, has not maintained standard classification systems over time. Institutions are free to report their data relative to any organizational model they believe useful, and consistency over time is not required. Another significant classification effort, the Carnegie Classifications, use institutional definitions derived from IPEDS and then adds a variety of statistical measures based on data from other sources to produce its categories. There have been various changes in the definitions over the years, each seeking an improved method of describing the complex universe of American higher education.<sup>3</sup>

Our solution to this dilemma is relatively simple. From the beginning, we have organized our institutional definitions around the notion of academic campuses and coherence. We defined some medical centers that exist as part of larger university organizational constructs but not part of main campuses as separate entities. In these cases we report the data in our annual reports for both the main campus and the medical campus separately. If for some purpose, an institution with two campuses needs to report its own data as if the two campuses were together, our data easily permit that institution to combine the information and report its own results. Recognizing the competitive issues associated with the presence or absence of a medical school within a campus, beginning with the 2007 report, each year we also provide a separate table that shows the research performance of institutions with and without the component related to medical schools.4

In our own view of research competition, we find the intense focus on single list university rankings of little value in understanding the performance of these remarkable institutions. Universities rise and fall in single list rankings due to many circumstances, only some of which reflect individual university performance. For example, a

<sup>2 &</sup>quot;Quality Engines: The Competitive Context for Research Universities," TARU, 2001.

<sup>3 &</sup>quot;University Organization, Governance, and Competitiveness," *TARU*, 2002; *Carnegie Classifications*. http://carnegieclassifications.iu.edu/

<sup>4 &</sup>quot;Deconstructing University Rankings: Medicine and Engineering, and Single Campus Research Competitiveness," *TARU*, 2005 and "Rankings, Competition, and the Evolving American University," *TARU*, 2007.

university may improve its ranking on a measure such as federal research expenditures not because it did better but because the institution above them in the ranking last year did less well. That provides an opportunity for some public relations good news, but does not necessarily reflect a higher achievement by the institution this year as compared to last year. In addition, many commercial rankings modify and perhaps improve their lists by periodically changing the methodology used to combine different measures to produce a single ranked list. This practice of course reshuffles the single list rank order without necessarily reflecting any real change in performance.<sup>5</sup>

We think that research performance requires long-term, sustained investment by institutions and their many sponsors from public funds, private donations, student tuition, endowment earnings, and other sources of revenue. Not only do high quality research institutions require strong financial support, they also require rigorous processes to identify the best faculty and staff, the best students, and support their performance within a highly competitive national and international context.

While we focus on the research performance of research university campuses, we know that these institutions, no matter how they are categorized, have quite different research profiles. Some have more physical and mathematical science and others have more biologically related sciences. Some have strong programs in engineering. For this reason, we and many others have sought methods for measuring the research productivity of disciplines and even individuals within those disciplines. This effort, while it has produced some interesting results, offers considerable additional classification and measurement difficulties, given the wide range of disciplines and sub-disciplines that characterize high performing research institutions around the world.<sup>6</sup>

As one of many possible illustrations of the effect of combining university campus results on the measure of federal research expenditures, we have produced the following table. In this table we have taken the top 200 research universities in 2013 federal research expenditures and combined the medically related campuses of various institutions with the main campus. In this illustration, we have combined institutions that share a common administrative context and whose main campus and medical center fall within reasonable geographic proximity. Other illustrations using different criteria for combining medical centers with main campuses are of course possible, but this exercise demonstrates the challenges involved. The illustrative table shows the impact of this way of organizing the data, which in every case, to greater or lesser extent, increases the rank of the main campus when a related medical center is included with the main campus results. Indeed, the range of improvement is quite wide ranging from an improvement of 2 rank positions to 138 across national and public/private lists. In reviewing these combined entities, highlighted in black in the table, informed observers will surely question the appropriateness of combining one or another medical center with a related main academic campus. Such questions make clear the difficulty of creating unambiguous criteria to define the unit we call a research university. Also, of course, sometimes a single institution may want to include a far distant medical center not recognizing that when this is done for all similar cases, the rankings change for all in complex ways.

The illustration table also demonstrates the value of providing all the data in a publicly available format that permits anyone to construct an analysis that meets whatever purpose is appropriate for their task.

Each year when the advisory board of the Measuring University Performance center meets, we review our methods and results to determine what changes or modifications might be helpful. To date, we have consistently found that the current method of identifying and classifying research universities better than other alternatives we have explored.

The Center for Measuring University Performance Staff

<sup>5 &</sup>quot;Measuring and Improving Research Universities: TheCenter at Five Years," TARU, 2004.

<sup>6 &</sup>quot;Measuring Research Performance: National and International Perspectives," TARU, 2012.

		MUP Or Federal Resea	iginal Orc arch Expe	ler nditures	er Reordered with Combined Institutions Iditures Federal Research Expenditures			Change in Rank of 'Main' Campus with Combined Data		Change in Rank of 'Medical' Campus with Combined Data	
Control	Original Institutions and Combined Institutions Highlighted	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	Change in Natl Rank	Change in Ctrl Rank	Change in Ctrl Rank	Change in Natl Rank
Private	Johns Hopkins University	1,881,959	1	1	1,881,959	1	1				
Public	University of Washington - Seattle	869,623	2	1	869,623	2	1				
Public	University of Michigan - Ann Arbor	802,114	3	2	802,114	3	2				
Public	University of California - San Diego	630,009	4	3	630,009	4	3				
Private	Stanford University	625,144	5	2	625,144	5	2				
Private	Columbia University	619 557	7	4	619 557	7	4				
Public	University of North Carolina - Chapel Hill	614,627	8	4	614,627	8	4				
Public	University of Pittsburgh - Pittsburgh	601,358	9	5	601,358	9	5				
Private	Duke University	580,416	10	5	580,416	10	5				
Private	Harvard University	575,868	11	6	575,868	11	6				
Public	University of California - San Francisco	566,117	12	6	566,117	12	6				
Public	Penn State Univ Pk + Hershey Medical Ctr.	F00.000	10	7	556,186	13	7	3	2	133	93
Public	Coorgia Institute of Technology	520 754	13	/	533,220	14	0				
Private	Vale University	520,754	14	0	502 / 39	15	9				
Public	Pennsvlvania State University - Univ. Park	500.567	16	9	502,455	10	'				
Public	University of California - Los Angeles	489.820	17	10	489.820	17	10				
Public	University of Minnesota - Twin Cities	489,318	18	11	489,318	18	11				
Private	Massachusetts Institute of Technology	487,647	19	8	487,647	19	8				
Public	University of Illinois - Urbana-Champaign	459,791	20	12	459,791	20	12				
Private	Cornell U + Weill Cornell Medical College	1			444,303	21	9	14	7	58	22
Private	Vanderbilt University	432,752	21	9	432,752	22	10				
Public	Ohio State University - Columbus	425,547	22	13	425,547	23	13				
Private	Butgers II New Brunswick + HMDNJ	423,700	23	10	423,708	24 25	14	15	8	63	42
Private	Washington University in St. Louis	402.702	24	11	402,702	26	12	10	Ū	00	72
Private	Northwestern University	389,757	25	12	389,757	27	13				
Private	Emory University	364,136	26	13	364,136	28	14				
Public	University of Texas - Austin	352,788	27	14	352,788	29	15				
Private	Case Western Reserve University	347,628	28	14	347,628	30	15				
Public	University of California - Davis	344,632	29	15	344,632	31	16				
Public	University of Maryland - College Park	341,942	30	16	341,942	32	17				
Public	University of Arizona	334,680	31	1/	334,680	33	18				
Public	University of Colorado - Boulder	309,072	32	18	309,072	34	19				
Privale	Scripps Research Institute	308,628	33	10	308,628	30	20				
Public	Texas A&M + Texas A&M HSC	305,932	34	19	302,356	37	20	10	4	138	104
Private	Cornell University	299.951	35	16	,						
Private	University of Rochester	298,781	36	17	298,781	38	17				
Public	University of Utah	297,099	37	20	297,099	39	22				
Private	University of Chicago	294,862	38	18	294,862	40	18				
Public	U Massachusetts Amherst + Worcester				292,392	41	23	63	45	27	19
Public	University of Colorado - Denver	290,443	39	21	290,443	42	24				
Public	Rutgers University - New Brunswick	288,374	40	22	000 070	40	05				
Public	University of Alabama - Birmingnam	286,873	41	23	286,873	43	25				
Private	Baylor College of Medicine	285 230	43	19	285 230	45	19				
Private	New York University	283,382	44	20	283 382	46	20				
Private	Icahn School of Medicine at Mount Sinai	277.517	45	21	277.517	47	21				
Private	California Institute of Technology	272,223	46	22	272,223	48	22				
Public	Texas A&M University - College Station	270,334	47	25							
Private	Boston University	265,476	48	23	265,476	49	23				
Public	Purdue University - West Lafayette	258,596	49	26	258,596	50	27				
Public	University of Cincinnati - Cincinnati	256,816	50	27	256,816	51	28				
Public	University of Iowa	252,161	51	28	252,161	52	29				
Public	Wichigan State University	246,131	52	29	246,131	53	30				
Public	University of Manyland - Baltimore	244,867	53	30	244,867	54	31				
1 0010	Shirolony of Maryland - Datimore	201,140	54	01	201,143	55	52				

#### Top 200 Institutions–Federal Research Expenditures Showing Impact of Combined University Campus with Related Medical Center

#### Top 200 Institutions–Federal Research Expenditures Showing Impact of Combined University Campus with Related Medical Center (cont.)

		MUP Or Federal Resea	iginal Ord arch Expe	ler Inditures	Reordered with Combined Institutions Federal Research Expenditures			Change in Rank of 'Main' Campus with Combined Data		Change in Rank of 'Medical' Campus with Combined Data	
Control	Original Institutions and Combined Institutions Highlighted	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	Change in Natl Rank	Change in Ctrl Rank	Change in Ctrl Rank	Change in Natl Rank
Public	Indiana U Bloomington + IUPUI				233,967	56	33	64	49	20	13
Public	U Texas Dallas + UT SW HSC Dallas				230,017	57	34	121	93	6	4
Public	University of Hawaii - Manoa	225,263	55	32	225,263	58	35				
Private	Carpegie Mellon University	219,473	57	24	219,473	59 60	24				
Public	Colorado State University - Fort Collins	213,300	58	34	213,300	61	37				
Public	University of Virginia	212.051	59	35	212.051	62	38				
Public	University of South Florida - Tampa	207.441	60	36	207,441	63	39				
Private	University of Miami	204,315	61	25	204,315	64	25				
Public	University at Buffalo	200,212	62	37	200,212	65	40				
Public	University of Texas SW Medical Ctr Dallas	198,114	63	38							
Public	Virginia Polytechnic Institute and State Univ.	197,462	64	39	197,462	66	41				
Public	University of California - Irvine	196,256	65	40	196,256	67	42				
Private	Yeshiva University	193,831	66	26	193,831	68	26				
Public	Arizona State University	190,066	67	41	190,066	69	43				
Public	Univ. of Massachusetts Med. Sch Worcester	189,159	68	42	100.071	70					
Public	University of Texas MD Anderson Cancer Ctr.	182,971	69	43	182,971	70	44	07	00	50	
Public	U Nebraska Lincoln + Medical Center	174 440	70	4.4	176,927	70	45	37	26	50	38
Private	Woods Hole Oceanographic Institution	158 672	70	44 27	158 672	72	40 27				
Private	Wake Forest University	156 506	72	28	156 506	74	28				
Private	Princeton University	156,070	73	29	156,070	75	29				
Public	University of New Mexico - Albuquerque	155,684	74	45	155,684	76	47				
Private	Dartmouth College	154,917	75	30	154,917	77	30				
Public	Indiana Univ Purdue Univ Indianapolis	151,962	76	46							
Public	University of Kentucky	148,758	77	47	148,758	78	48				
Public	Oregon State University	148,174	78	48	148,174	79	49				
Public	U Kansas Lawrence + Medical Center				147,557	80	50	25	19	73	57
Public	U Tennessee Knoxville + HSC				146,827	81	51	22	16	81	64
Public	U Connecticut Storrs + Health Center	111.050	70	01	146,400	82	52	34	27	56	42
Private	Welli Cornell Medical College	144,352	79	31	1// 235	83	53				
Public	Florida State University	132 583	81	<del>4</del> 0 50	132 583	84	54				
Public	University of California - Santa Barbara	131.392	82	51	131.392	85	55				
Public	Louisiana St Baton Rouge + N. Orleans HS	С			130,167	86	56	23	16	112	120
Public	University of Georgia	127,487	83	52	127,487	87	57				
Public	Medical University of South Carolina	127,472	84	53	127,472	88	58				
Public	U Texas San Antonio + HSC San Antonio				127,264	89	59	103	79	17	11
Public	Temple University	124,764	85	54	124,764	90	60				
Private	Brown University	120,977	86	32	120,977	91	31				
Public	Iowa State University	120,934	87	55	120,934	92	61				
Public	University of Medicine & Dentistry of NJ	119,944	88	56		~~					
Public	Washington State University - Pullman	119,921	89	57	119,921	93	62	26	25	57	40
Public	Uniformed Services University of the HS	119 647	90	58	119,762	94	64	30	20	5/	42
Private	George Washington University	119,441	91	33	119,441	96	32				
Public	Virginia Commonwealth University	119.293	92	59	119,293	97	65				
Public	Stony Brook University	118,432	93	60	118,432	98	66				
Public	Wayne State University	118,217	94	61	118,217	99	67				
Private	Medical College of Wisconsin	116,765	95	34	116,765	100	33				
Public	University of Delaware	114,048	96	62	114,048	101	68				
Public	University at Albany	113,736	97	63	113,736	102	69				
Private	Georgetown University	113,703	98	35	113,703	103	34				
Private	Tutts University	112,495	99	36	112,495	104	35				
Public	University of Ivissouri - Columbia	108,305	100	04 6E	108,305	105	70				
Public	Litah State University	106,207	102	20	106,207	107	70				
Public	University of Tennessee - Knoxville	104,558	102	67	100,074	107	12				
Public	University of Massachusetts - Amherst	103,233	104	68							
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Top 200 Institutions–Federal Research Expenditures
Showing Impact of Combined University Campus with Related Medical Center (cont.)

		MUP Or Federal Resea	riginal Ore arch Expe	der enditures	Reordered with Combined Institutions Federal Research Expenditures			Change in Rank of 'Main' Campus with Combined Data		Change in Rank of 'Medical' Campus with Combined Data	
Control	Original Institutions and Combined Institutions Highlighted	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	Change in Natl Rank	Change in Ctrl Rank	Change in Ctrl Rank	Change in Natl Rank
Public	University of Kansas - Lawrence	99,374	105	69							
Public	University of Texas HSC - San Antonio	99,198	106	70							
Private Public	U. of Arkansas Favetteville + UAB for Med. So	97,873 si.	107	37	97,873 95,418	108 109	36 73	74	58	26	19
Public	University of Nebraska - Lincoln	96,177	108	71	00,110	100					
Public	Louisiana State University - Baton Rouge	93,281	109	72							
Public	University of New Hampshire - Durham	92,778	110	73	92,778	110	74				
Public	University of Alaska - Fairbanks	92,602	111 112	74 75	92,602 88,600	111 112	75 76				
Public	University of South Carolina - Columbia	87,562	113	76	87,562	113	70				
Public	New Mexico State University - Las Cruces	86,546	114	77	86,546	114	78				
Public	Naval Postgraduate School	86,538	115	78	86,538	115	79				
Public	University of Connecticut - Storrs	86,471	116	79							
Public	University of Vermont	85,028	117	80	85,028	116	80				
Public	Northeastern University	82 587	110	38	82 587	118	37				
Public	Indiana University - Bloominaton	82.005	120	82	02,507	110	57				
Public	University of Nebraska Medical Center	80,750	121	83							
Private	Rockefeller University	80,384	122	39	80,384	119	38				
Private	Rice University	79,742	123	40	79,742	120	39				
Private	University of Notre Dame	79,268	124	41	79,268	121	40				
Private	Drexel University	74,047	125	42	74,047	122	41				
Public	Wississippi State University	73,834	120	85	73,834	123	82				
Public	University of Louisville	72,077	127	86	72.047	124	84				
Public	University of Rhode Island	70,900	129	87	70,900	126	85				
Public	University of Oklahoma - Norman	68,902	130	88	,						
Public	University of Central Florida	68,691	131	89	68,691	127	86				
Public	Kansas State University	67,524	132	90	67,524	128	87				
Public	Montana State University - Bozeman	66,451	133	91	66,451	129	88				
Private	University of Dayton	66,396	134	43	66,396	130 131	42	43	35	54	44
Public	University of Arkansas for Medical Sciences	64.856	135	92	02,010	101	05		00		
Public	University of Oregon	61,856	136	93	61,856	132	90				
Private	Rensselaer Polytechnic Institute	60,765	137	44	60,765	133	43				
Public	University of Connecticut - Health Center	59,929	138	94	57.050	10.1	04				
Public	Florida International University	57,858	139	95	57,858	134	91				
Public	Coorgo Mason University Park	57,569	140	96	57,569	135	92				
Private	Bush University	57,154	141	45	57,154	130	44				
Public	University of California - Riverside	57,032	143	98	57,032	138	94				
Public	Auburn University	56,809	144	99	56,809	139	95				
Private	Thomas Jefferson University	56,247	145	46	56,247	140	45				
Public	Pennsylvania State Univ Hershey Med. Ctr.	55,619	146	100							
Public	New Jersey Institute of Technology	55,017	147	101	55,017	141	96				
Public	University of Nevada - Reno	52 /30	140	102	52,698	142	97				
Public	University of Wyoming	52,430	149	103	52,430	143	99				
Public	University of Oklahoma HSC	50,860	151	105	- ,						
Public	Cleveland State University	50,002	152	106	50,002	145	100				
Public	University of Kansas Medical Center	48,183	153	107							
Public	Georgia Health Sciences University	47,913	154	108	47,913	146	101				
Public	Ciemson University	47,825	155	109	47,825	147	102				
Public	San Diego State University	45.175	157	111	45.175	140	103				
Public	University of Maryland - Baltimore County	44,257	158	112	44,257	150	105				
Public	Oklahoma State University - Stillwater	44,200	159	113	44,200	151	106				
Private	Brandeis University	43,963	160	47	43,963	152	46				
Public	U.S. Air Force Academy	42,303	161	114	42,303	153	107				

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		MUP Or Federal Rese	riginal Or arch Expe	der enditures	Reordered with Combined Institutions Federal Research Expenditures			Change in Rank of 'Main' Campus with Combined Data		Change in Rank of 'Medical' Campus with Combined Data	
Control	Original Institutions and Combined Institutions Highlighted	2013 Federal Research x \$1,000	2013 Nati Rank	2013 Ctrl Rank	2013 Federal Research x \$1,000	2013 Natl Rank	2013 Ctrl Rank	Change in Natl Rank	Change in Ctrl Rank	Change in Ctrl Rank	Change in Natl Rank
Public	University of Tennessee HSC	42,269	162	115							
Private	Cold Spring Harbor Laboratory	41,002	163	48	41,002	154	47				
Public	City University of NY - City College	39,756	164	116	39,756	155	108				
Public	University of Texas - El Paso	37,741	165	117	37,741	156	109				
Public	University of Toledo	37,539	166	118	37,539	157	110				
Public	North Dakota State University	37,128	167	119	37,128	158	111				
Public	Louisiana State University HSC - New Orleans	36,886	168	120							
Private	Morehouse School of Medicine	34,511	169	49	34,511	159	48				
Public	University of Maine - Orono	33,903	170	121	33,903	160	112				
Public	University of Montana - Missoula	33,825	171	122	33,825	161	113				
Private	Howard University	33,403	172	50	33,403	162	49				
Public	South Dakota State University	33,226	173	123	33,226	163	114				
Public	University of Mississippi - Oxford	32,453	174	124							
Public	Texas A&M Health Science Center	32,022	175	125							
Private	Loyola University Chicago	32,008	176	51	32,008	164	50				
Public	State Univ. of New York - Downstate Med. Ctr.	31,972	177	126	31,972	165	115				
Public	University of Texas - Dallas	31,903	178	127							
Public	Michigan Technological University	31,734	179	128	31,734	166	116				
Public	Colorado School of Mines	31,585	180	129	31,585	167	117				
Private	Saint Louis University - St. Louis	31,230	181	52	31,230	168	51				
Public	University of Puerto Rico - Medical Sciences	31,037	182	130	31,037	169	118				
Public	University of Arkansas - Fayetteville	30,562	183	131							
Public	Old Dominion University	30,478	184	132	30,478	170	119				
Public	University of Mississippi Medical Center	30,363	185	133							
Public	Eastern Virginia Medical School	28,728	186	134	28,728	171	120				
Public	University of Texas - Arlington	28,588	187	135	28,588	172	121				
Public	Florida A&M University	28,446	188	136	28,446	173	122				
Public	University of Southern Mississippi	28,324	189	137	28,324	174	123				
Private	Illinois Institute of Technology	28,255	190	53	28,255	175	52				
Public	Georgia State University	28,216	191	138	28,216	176	124				
Public	University of Texas - San Antonio	28,066	192	139							
Public	University of Alabama - Tuscaloosa	27,963	193	140	27,963	177	125				
Public	Portland State University	27,899	194	141	27,899	178	126				
Public	Jackson State University	27,285	195	142	27,285	179	127				
Public	Wright State University - Dayton	26,888	196	143	26,888	180	128				
Public	Missouri University of Science and Tech.	25,551	197	144	25,551	181	129				
Public	University of Massachusetts - Lowell	25,441	198	145	25,441	182	130				
Public	Texas Tech University	25,153	199	146	25,153	183	131				
Private	Loma Linda University	24,991	200	54	24,991	184	53				

### Top 200 Institutions–Federal Research Expenditures Showing Impact of Combined University Campus with Related Medical Center (cont.)

# The Top American Research Universities





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