

External Research Support for Ohio's State-Supported Universities

Question: What is the research productivity of Ohio's state-supported universities? Does the productivity vary by university?

Why ask research productivity of universities? High quality education occurs as a result of many factors. The scholarly basis of almost all college subjects has been formed by many years of research. While some of this research may have been conducted decades ago, other areas of study are being shaped and reshaped by the ongoing research efforts of faculty. Research does not just occur in university settings. It can and does occur on two-year campuses, however universities are places where expectations of scholarly productivity are the most deeply established and well documented. In addition to the contributions research makes to the quality of students' education, increasingly research efforts are resulting in discoveries and advances that have immediate and long-term benefits for the state and country through contributions to the economy. There have been important advances in the past decade in biotechnology, information technology, and nano-technology, just to name three areas on the cutting edge of research and economic development. Prospective students and their families may view the research productivity of a university as a measure of the quality of faculty scholarship as well as a measure of faculty involvement in issues on the forefront of their disciplines.

National Answers: *There are several measures of national research productivity. The most well established of these is published by the National Science Foundation and it is a measure of the amount of research funding received by a state from the federal government, from industrial sources, and from other sources (e.g. independent foundations). Comparing 1985 to 1998, the federal government has increased its external research funding from \$5,970,230,000 to \$14,766,184,000. Ohio's statewide share of this funding increased from .60 cents per resident in 1985 to .72 cents per resident in 1998. During the same period, federal industrial support for research increased from \$550,863,000 to \$1,843,232,000. Ohio's statewide share of funding from national industrial sources increased from .69 cents per resident to \$1.15 per resident.*

Statewide Answers: *There are thirteen state-supported universities and two independent universities which engage in external research using funds from the federal government and industrial sources. In 1985, the state-supported universities accounted for sixty-one percent of all federal funds in Ohio and this increased to sixty-two percent by 1998. In 1985, state-supported universities accounted for seventy-one percent of all industrial external funds and this increased to eighty-five percent by 1998. A great deal of research collaboration is occurring between universities in Ohio, including collaboration between state-supported and independent universities. In 1998, a total of \$440,358,000 in external federal funds and \$88,067,000 in external industrial funds were received by Ohio's state supported and independent universities. The state of Ohio has encouraged universities to increase their share of federal funding through Research Challenge funds offered as a match for federal funds. Looking back at fifteen years of investment, the data indicate that every \$1 provided to campuses in Research Challenge funding returns \$8-10 to the state in the form of increased external support.*

Campus Answers: *Colleges and universities vary in their research productivity.*

External Research Productivity of Ohio's Universities

	FISCAL YEAR 1985			FISCAL YEAR 1998		
	Federal Funds	Industry Funds	Other Funds	Federal Funds	Industry Funds	Other Funds
U.S. Total	\$ 5,970,230,000	\$ 550,863,000	\$ 686,950,000	\$ 14,766,184,000	\$ 1,843,232,000	\$ 1,823,007,000
	% Increase since 1985			147.3%	234.6%	165.4%
Ohio Total	\$ 161,058,000	\$ 17,048,000	\$ 25,442,000	\$ 442,078,000	\$ 87,999,000	\$ 49,335,000
	% Increase since 1985			174.5%	416.2%	93.9%
National Rank	9	10	6	10	7	10
Per-Capita Share Index	0.598	0.686	0.821	0.72	1.148	0.651
State-Supported Institutions						
The Ohio State University	\$ 53,240,000	\$ 7,140,000	\$ 13,637,000	\$ 124,177,000	\$ 40,401,000	\$ 23,207,000
	% Increase since 1985			133.2%	465.8%	70.2%
National Rank	31	20	10	35	5	24
University of Cincinnati	\$ 24,924,000	\$ 1,880,000	\$ 5,050,000	\$ 90,307,000	\$ 24,388,000	\$ 5,503,000
	% Increase since 1985			262.3%	1197.2%	9.0%
National Rank	74	87	40	53	17	84
Wright State University	\$ 2,956,000	\$ 1,077,000	\$ 1,284,000	\$ 10,832,000	\$ 1,325,000	\$ 385,000
	% Increase since 1985			266.4%	23.0%	-70.0%
National Rank	187	123	110	180	187	196
Ohio University	\$ 2,295,000	\$ 180,000	\$ 111,000	\$ 10,323,000	\$ 1,948,000	\$ 1,247,000
	% Increase since 1985			349.8%	982.2%	1023.4%
National Rank	197	211	197	183	161	150
Kent State University	\$ 2,225,000	\$ 63,000	\$ 53,000	\$ 8,251,000	\$ 856,000	\$ -
	% Increase since 1985			270.8%	1258.7%	-100.0%
National Rank	199	234	219	196	202	N/A
Medical College of Ohio	\$ 5,145,000	\$ -	\$ 1,522,000	\$ 8,107,000	\$ 361,000	\$ 708,000
	% Increase since 1985			57.6%	N/A	-53.5%
National Rank	161	N/A	103	198	231	172
University of Toledo	\$ 1,005,000	\$ 100,000	\$ 127,000	\$ 5,366,000	\$ 934,000	\$ 382,000
	% Increase since 1985			433.9%	834.0%	200.8%
National Rank	226	225	195	217	199	197
University of Akron	\$ 1,350,000	\$ 1,056,000	\$ -	\$ 4,042,000	\$ 2,767,000	\$ 2,933,000
	% Increase since 1985			199.4%	162.0%	N/A
National Rank	215	126	N/A	225	135	118
Cleveland State Univ.	\$ 1,498,000	\$ 235,000	\$ 103,000	\$ 3,696,000	\$ 1,330,000	\$ -
	% Increase since 1985			146.7%	466.0%	-100.0%
National Rank	212	197	199	232	186	N/A
Miami University	\$ 945,000	\$ 167,000	\$ -	\$ 2,687,000	\$ 186,000	\$ 142,000
	% Increase since 1985			184.3%	11.4%	N/A
National Rank	230	212	N/A	244	247	216
Bowling Green State U.	\$ 1,060,000	\$ 186,000	\$ -	\$ 2,029,000	\$ 151,000	\$ -
	% Increase since 1985			91.4%	-18.8%	N/A
National Rank	222	209	N/A	258	251	N/A
Youngstown State University	N/A	N/A	N/A	\$508,000	N/A	\$68,000
	% Increase N/A			N/A	N/A	N/A
National Rank				400	N/A	N/A
Northeast Ohio University College of Medicine	\$ 673,000	\$ -	\$ 143,000	\$ 1,430,000	\$ 83,000	\$ 253,000
	% Increase since 1985			112.5%	N/A	76.9%
National Rank	239	N/A	191	268	259	207

External Research Productivity of Ohio's Universities - (continued)

	FISCAL YEAR 1985			FISCAL YEAR 1998		
	Federal Funds	Industry Funds	Other Funds	Federal Funds	Industry Funds	Other Funds
Independent Institutions						
Case Western Reserve	\$ 42,182,000	\$ 2,408,000	\$ 3,216,000	\$ 132,274,000	\$ 6,984,000	\$ 14,196,000
% Increase since 1985				213.6%	190.0%	341.4%
National Rank	42	70	65	30	81	38
University of Dayton	\$ 21,272,000	\$ 2,556,000	\$ 196,000	\$ 36,329,000	\$ 6,285,000	\$ 125,000
% Increase since 1985				70.8%	145.9%	-36.2%
National Rank	81	65	179	109	89	219