Science and engineering profile: Iowa

Characteristic	State	U.S.	Rank
Doctoral scientists, 2003	4,800	566,330	31
Doctoral engineers, 2003	560 *	118,540	36
S&E doctorates awarded, 2004	340	26,275	24
Engineering (percent)	28	22	na
Life sciences (percent)	27	27	na
Physical sciences (percent)	14	13	na
S&E and health postdoctorates in doctorate-granting institutions, 2003	559	46,807	23
S&E and health graduate students in doctorate-granting institutions, 2003	5,386	507,247	29
Population, 2004 (thousands)	2,954	297,550	31
Civilian labor force, 2004 (thousands)	1,624	148,769	30
Personal income per capita, 2004 (dollars)	30,970	33,041	28
Federal spending			
Total expenditures, 2003 (millions of dollars)	17,550	2,024,246	35
R&D obligations, 2003 (millions of dollars)	465	91,359	31
Total R&D performance, 2003 (millions of dollars)	1,451	277,577	34
Industry R&D, 2003 (millions of dollars)	833	198,244	33
Academic R&D, 2003 (millions of dollars)	499	40,055	26
Life sciences (percent)	67	59	na
Engineering (percent)	15	15	na
Physical sciences (percent)	6	8	na
Number of SBIR awards, 1999–2004	78	31,847	43
Utility patents issued to state residents, 2004	658	84,268	27
Gross state product, 2004 (billions of dollars)	111	11,744	29

*Coefficient of variation greater than 10% but less than 25%; na = not applicable; S&E = science and engineering; SBIR = small business innovation research.

NOTES: Rankings and totals are based on data for the 50 states, District of Columbia, and Puerto Rico. Reliability of estimates of industry R&D and of doctoral scientists and engineers varies by state, because sample allocation was not based on geography. Rankings do not take into account the margin of error of estimates from sample surveys. Data on doctoral scientists and engineers include only recipients of doctoral degrees from U.S. institutions in S&E and health fields. The field percentages represent the largest three fields within the state.

Federal obligations for research and development, by agency and performer: Iowa, FY 2003 (Thousands of dollars)

	Performer							
Agency	Federal			Industrial	Universities	Other	State and local	
	Total	intramural	All FFRDCs	firms	and colleges	nonprofits	government	Rank
All agencies	465,249	86,494	20,360	83,258	263,348	7,101	4,688	31
Department of Agriculture	60,151	40,687	0	0	19,390	74	0	8
Department of Commerce	803	123	0	476	204	0	0	46
Department of Defense	82,783	80	19	76,995	5,689	0	0	33
Department of Energy	28,529	0	19,408	0	5,284	3,837	0	21
Department of Health and Human Services	242,378	44,028	0	3,054	192,850	2,412	34	25
Department of the Interior	1,944	1,576	0	0	160	0	208	41
Department of Transportation	12,061	0	933	546	6,136	0	4,446	13
Environmental Protection Agency	1,674	0	0	0	1,624	50	0	31
National Aeronautics and Space Administration	10,915	0	0	1,785	8,402	728	0	35
National Science Foundation	24,011	0	0	402	23,609	0	0	32
Rank	31	35	16	34	25	38	28	na

FFRDC = federally funded research and development center.

na = not applicable.

NOTES: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 states, District of Columbia, and Puerto Rico.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Statistics. Data compiled from numerous sources; see the section, Data Sources for Science and Engineering (S&E) State Profiles.