Science and engineering profile: Iowa

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 2001	4,500	542,940	32	Total R&D performance, 2002 (millions of dollars)	1,346	255,707	34
Doctoral engineers, 2001	560	112,760	36	Industry R&D, 2002 (millions of dollars)	753	182,403	33
S&E doctorates awarded, 2002	354	24,558	22	Academic R&D, 2002 (millions of dollars)	486	36,314	25
life sciences (percent)	31	27	na	life sciences (percent)	67	59	na
engineering (percent)	25	21	na	engineering (percent)	15	15	na
social sciences (percent)	14	16	na	physical sciences (percent)	6	8	na
S&E postdoctorates, 2002				Public higher education current-fund			
in doctorate-granting institutions	564	45,171	23	expenditures, 2001 (millions of dollars)	2,603	170,024	24
S&E graduate students, 2002				Number of SBIR awards, 1999-2002	45	19,383	42
in doctorate-granting institutions	5,145	482,211	28	Utility patents issued to state residents, 2002	630	86,971	27
Population, 2003 (thousands)	2,944	294,688	31	Gross state product, 2001 (billions of dollars)	91	10,206	30
Civilian labor force, 2003 (thousands)	1,612	2 147,569 30 agriculture (percent)		4	1	na	
				manufacturing, mining, construction (percent)	26	20	na
Personal income per capita, 2003 (dollars)	29,043	31,632	32	transportation, communication, utilities (percent)	8	8	na
				wholesale and retail trade (percent)	16	16	na
Federal spending				finance, insurance, real estate (percent)	16	20	na
Total expenditures, 2002 (millions of dollars)	18,839	1,896,317	32	services (percent)	18	22	na
R&D obligations, 2002 (millions of dollars)	405	83,764	32	government (percent)	12	12	na

na = not applicable.

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 the estimates of industry R&D and of doctoral scientists and engineers varies by state, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

Data on graduate students, doctoral scientists, doctoral engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields.

Data on S&E doctorates awarded do not include health fields.

Federal obligations for research and development by agency and performer: lowa, fiscal year 2002

(Thousands of dollars)

Agency	Performer								
	Total	Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State and local government	Rank	
All agencies	404,545	77,770	21,119	45,538	249,494	5,703	4,921	32	
Department of Agriculture	56,708	38,089	0	0	18,587	25	7	9	
Department of Commerce	1,107	122	0	788	197	0	0	41	
Department of Defense	49,580	457	16	33,567	15,540	0	0	36	
Department of Energy	33,390	0	20,516	0	8,817	4,057	0	19	
Department of Health and Human Services	212,596	37,490	0	3,013	168,490	1,613	1,990	26	
Department of the Interior	2,583	1,612	0	2	753	8	208	43	
Department of Transportation	10,061	0	587	4,733	2,152	0	2,589	16	
Environmental Protection Agency	1,960	0	0	0	1,833	0	127	29	
National Aeronautics and Space Administration	12,981	0	0	3,435	9,546	0	0	34	
National Science Foundation	23,579	0	0	0	23,579	0	0	29	
Rank	32	36	15	37	25	43	30	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.