

Table 5-20
Total intramural research and development expenditures by field of science or technology

	2010	2011 ^P
	millions of dollars	
Total	15,467^A	15,960^A
Natural and formal sciences	1,632^A	1,905^A
Mathematics	42 ^A	61 ^B
Computer and information sciences	737 ^A	810 ^A
Physical sciences	107 ^A	83 ^B
Chemical sciences	326 ^A	282 ^A
Earth and related environmental sciences	213 ^A	485 ^A
Biological sciences	196 ^A	166 ^B
Other natural sciences	11 ^A	17 ^A
Engineering and technology	11,783^A	12,081^A
Civil engineering	157 ^A	142 ^B
Software engineering	1,259 ^A	2,543 ^A
Electrical engineering, electronic engineering and information technology	4,352 ^A	3,222 ^A
Mechanical engineering	2,652 ^A	2,698 ^A
Chemical engineering	333 ^A	389 ^A
Materials engineering	814 ^A	762 ^A
Medical engineering	71 ^A	76 ^A
Environmental engineering	957 ^A	689 ^A
Environmental biotechnology	15 ^A	14 ^D
Industrial biotechnology	77 ^A	26 ^C
Nano-technology	15 ^A	15 ^B
Other engineering and technologies	1,082 ^A	1,505 ^A
Medical and health sciences	1,755^A	1,684^A
Basic medicine	663 ^A	504 ^A
Clinical medicine	529 ^A	508 ^A
Health sciences	74 ^A	92 ^A
Medical biotechnology	201 ^A	335 ^A
Other medical sciences	288 ^A	245 ^A
Agricultural sciences	296^A	290^A
Agriculture, forestry, and fisheries	167 ^A	135 ^B
Animal and dairy science	60 ^A	53 ^B
Veterinary science	6 ^A	4 ^B
Agricultural biotechnology	34 ^A	54 ^B
Other agricultural sciences	30 ^A	44 ^A