RE\$EARCH Infosource Inc.















Canada's Top 100 Corporate R&D Spenders 2002

Ra	ank		R8	R&D Expenditures			R&D Ratio	
001	2000	Company	FY2001 (\$million)	FY2000 (\$million)	%Change 2000-2001	FY2001 (\$million)	R&D as % of Revenue	Industry
1	1	Nortel Networks Corporation*	\$4,992.0	\$5,948.2	-16.1	\$27,114.0	18.4	Comm/telecom equipment
2	8	JDS Uniphase Corporation*	\$504.6	\$168.4	199.6	\$5,005.7	10.1	Comm/telecom equipment
3 4	23	Pratt & Whitney Canada Corp.(fs) Magna International Inc.*	\$440.0 \$359.2	\$331.0 \$246.5	32.9 45.7	\$2,600.0 \$17,072.7	16.9 2.1	Aerospace Automotive
5	4	Ericsson Canada Inc. (fs)	\$270.0	\$237.8	13.5	\$696.0	38.8	Comm/telecom equipment
6	5	ATI Technologies Inc.*	\$255.4	\$224.3	13.9	\$1,606.9	15.9	Computer equipment
7 8	13	IBM Canada Ltd.(fs)(e) Alcan Inc.*	\$250.0 \$209.0	\$220.0 \$120.3	13.6 73.8	\$5,250.0 \$19,550.1	4.8	Software and computer services Mining and metals
9	7	Atomic Energy of Canada Limited	\$178.9	\$173.4	3.2	\$602.4	29.7	Energy
10	6	PMC Sierra, Ltd. ^(fs)	\$157.0	\$203.0	-22.7	\$345.0	45.5	Electronic parts and components
11 12	21 16	Tembec Inc. Creo Inc.*	\$152.1 \$146.7	\$74.6 \$96.5	103.8 52.1	\$2,990.8 \$1,016.6	5.1	Forest and paper products Software and computer services
13	35	Pfizer Canada Inc. ^(fs)	\$132.2	\$43.8	202.1	\$1,059.5	12.5	Pharmaceuticals/biotechnology
14	9	Zarlink Semiconductor Inc.	\$131.0	\$152.9	-14.3	\$674.0	19.4	Comm/telecom equipment
15 16	18 10	Ballard Power Systems Inc.* Bombardier Inc.	\$128.0 \$123.4	\$88.5 \$132.2	44.7 -6.7	\$56.1 \$16,100.6	228.4 0.8	Energy Aerospace
17	11	CAE Inc.	\$122.3	\$126.4	-3.3	\$1,191.4	10.3	Aerospace
18	12	Geac Computer Corporation Limited	\$119.2	\$120.4	-1.0	\$834.8	14.3	Software and computer services
19 20	14	Merck Frosst Canada Ltd.(fs) Apotex Inc.	\$119.0 \$115.0	\$109.0 \$110.0	9.2 4.5	\$776.8 \$600.0	15.3 19.2	Pharmaceuticals/biotechnology Pharmaceuticals/biotechnology
21	19	Cognos Incorporated*	\$104.2	\$80.6	29.3	\$767.5	13.6	Software and computer services
22	15	Hydro-Québec	\$103.1	\$103.0	0.1	\$12,500.0	0.8	Electrical power and utilities
23 24		GlaxoSmithKline Inc.(fs) Mitel Networks	\$101.4 \$95.0	\$113.3 \$80.0	-10.5 18.8	\$931.1 \$607.0	10.9 15.7	Pharmaceuticals/biotechnology Comm/telecom equipment
25		Aventis Pasteur Limited ^(fs)	\$83.0	\$70.0	18.6	\$211.0	39.3	Pharmaceuticals/biotechnology
26	20	Biovail Corporation*	\$79.0	\$78.2 \$70.6	1.0	\$903.1	8.7	Pharmaceuticals/biotechnology
27 28	23 29	AstraZeneca Canada Inc.(%) Imperial Oil Limited(%)	\$75.0 \$71.0	\$70.6 \$55.0	6.2 29.1	\$820.0 \$17,153.0	9.1 0.4	Pharmaceuticals/biotechnology Oil and gas
29	28	MDS Inc.	\$68.0	\$56.0	21.4	\$1,636.0	4.2	Health services
30	24	Motorola Canada Limited ^(ts)	\$64.0	\$67.0	-4.5	\$1,100.0	5.8	Comm/telecom equipment
31 32	26 27	NOVA Chemicals Corporation* Hummingbird Ltd.*	\$61.9 \$61.5	\$60.9 \$57.2	1.7 7.5	\$4,945.6 \$322.0	1.3 19.1	Chemicals and materials Software and computer services
33	33	724 Solutions Inc.*	\$60.5	\$48.5	24.8	\$67.8	89.1	Comm/telecom equipment
34	53	BCE Emergis Inc.	\$58.3	\$28.0	108.2	\$656.4	8.9	Telecommunications services
35 36	31 38	Bayer Inc.(fs) C-MAC Industries Inc.+**	\$56.2 \$53.4	\$50.7 \$41.5	10.8 28.8	\$1,560.3 \$1,900.0	3.6 2.8	Pharmaceuticals/biotechnology Electronic parts and components
30 37		Aventis Pharma Inc.(s)	\$52.0	\$41.5	18.2	\$1,900.0	13.9	Pharmaceuticals/biotechnology
38	30	QLT Inc.	\$49.9	\$50.8	-1.9	\$129.5	38.5	Pharmaceuticals/biotechnology
39 40	41 55	Syncrude Canada Ltd. Alberta Energy Company Ltd.+	\$48.3 \$48.1	\$37.0 \$27.4	30.5 75.5	\$3,200.0 \$6,272.0	1.5 0.8	Oil and gas Oil and gas
40		PanCanadian Energy Corporation+	\$40.1	\$27.4	-8.3	\$0,272.0	0.8	Oil and gas
42	36	DuPont Canada Inc.(fs)	\$45.1	\$42.1	7.2	\$2,191.1	2.1	Chemicals and materials
43	37	Biomira Inc. Ontario Power Generation Inc.	\$42.1 \$42.0	\$42.1 \$45.0	0.1 -6.7	\$7.3 \$6,239.0	574.1 0.7	Pharmaceuticals/biotechnology
44 45	40	Husky Injection Molding Systems Ltd.*	\$40.3	\$45.0	-o.7 5.1	\$0,239.0	4.1	Energy Machinery
46	73	Research In Motion Limited*	\$39.8	\$18.2	118.8	\$342.7	11.6	Comm/telecom equipment
47	32	GSI Lumonics Inc.*	\$39.7	\$50.4	-21.2	\$383.9	10.3	Electronic parts and components
48 49	25 45	Corel Corporation* Janssen-Ortho Inc. ^(fs)	\$39.1 \$38.8	\$65.2 \$36.4	-40.0 6.5	\$208.0 \$429.2	18.8 9.0	Software and computer services Pharmaceuticals/biotechnology
50	57	Open Text Corporation*	\$37.6	\$26.4	42.8	\$228.7	16.5	Software and computer services
51	44	Eli Lilly Canada Inc. ^(fs)	\$37.4	\$36.5	2.4	\$347.6	10.8	Pharmaceuticals/biotechnology
52 53	34 56	Noranda Inc. Leitch Technology Corporation	\$37.0 \$37.0	\$48.0 \$26.6	-22.9 38.9	\$6,152.0 \$219.6	0.6	Mining and metals Comm/telecom equipment
54	65	Stressgen Biotechnologies Corporation	\$35.9	\$22.4	60.4	\$5.4	662.6	Pharmaceuticals/biotechnology
55	58	MOSAID Technologies Incorporated	\$35.2	\$23.5	49.6	\$81.6	43.1	Comm/telecom equipment
56 57	46 72	Novartis Pharmaceuticals Canada Inc.(%) World Heart Corporation	\$34.1 \$33.6	\$33.7 \$18.4	1.2 82.6	nd \$8.3	407.1	Pharmaceuticals/biotechnology Medical devices/instrumentation
58	12	Precision Drilling Corporation	\$32.4	\$20.3	59.9	\$1,953.6	1.7	Energy
59	43	CMC Electronics Inc.	\$32.0	\$36.7	-12.9	\$340.0	9.4	Comm/telecom equipment
60 61	47 77	Inco Limited* Sierra Wireless, Inc.*	\$31.0 \$30.8	\$32.7 \$16.9	-5.2 82.6	\$3,199.0 \$92.4	1.0 33.3	Mining and metals Electronic parts and components
62	59	Hemosol Inc.	\$30.2	\$10.7	29.1	\$0.0	33.5	Pharmaceuticals/biotechnology
63	63	AEterna Laboratories Inc.	\$29.2	\$22.6	29.1	\$43.8	66.8	Pharmaceuticals/biotechnology
64 65		Pivotal Corporation* EXFO Electro-Optical Engineering Inc.*	\$29.0 \$27.3	\$13.2 \$13.9	119.5 95.8	\$147.5 \$226.1	19.7 12.1	Software and computer services Comm/telecom equipment
66	92	AltaRex Corp.	\$26.9	\$12.0	123.9	\$0.0		Pharmaceuticals/biotechnology
67		Delano Technology Corporation*	\$26.9	\$5.4	396.8	\$47.0	57.2	Software and computer services
68 69	51 52	Celestica Inc.* SR Telecom Inc.	\$26.5 \$26.0	\$29.0 \$28.3	-8.7 -7.8	\$15,490.8 \$161.5	0.2	Electronic parts and components Comm/telecom equipment
70	52 68	COM DEV International Ltd.	\$25.9	\$20.5	25.9	\$101.5	21.1	Comm/telecom equipment
71	75	Psion Teklogix Inc.(fs)	\$25.6	\$17.9	43.0	\$283.2	9.1	Software and computer services
72 73	39 66	Schering Canada Inc. ^(fs) Descartes Systems Group Inc.*	\$25.2 \$25.0	\$38.7 \$22.3	-34.8 12.3	\$282.7 \$103.2	8.9 24.2	Pharmaceuticals/biotechnology Software and computer services
74	74	Gennum Corporation	\$22.5	\$18.0	25.2	\$93.1	24.2	Electronic parts and components
75	62	Xerox Canada Inc.(fs)++	\$21.6	\$22.8	-5.0	\$1,520.0	1.4	Machinery
76 77	79	Inex Pharmaceuticals Corporation Westport Innovations Inc.	\$21.2 \$21.0	\$15.3 \$8.1	38.9 157.5	\$5.5 \$0.1	385.5	Pharmaceuticals/biotechnology Transportation
78	42	Genpharm Inc.(fs)	\$20.9	\$36.8	-43.1	\$210.5	9.9	Pharmaceuticals/biotechnology
79	67	Accelio Corporation+	\$20.1	\$20.7	-2.9	\$100.6	20.0	Software and computer services
79 81	91	MGI Software Corp. Certicom Corp.*	\$20.1 \$19.9	\$12.6 \$6.6	59.4 201.0	\$47.1 \$41.3	42.7 48.2	Software and computer services Comm/telecom equipment
82	49	Westaim Corporation	\$19.4	\$30.1	-35.4	\$68.9	28.2	Electronic parts and components
83		Royal Group Technologies Limited	\$19.0	\$19.1	-0.3	\$1,669.0	1.1	Other manufacturing
84 85	88	Cognicase Inc. ConjuChem Inc.	\$19.0 \$17.8	\$14.5 \$7.9	31.3 123.9	\$405.5 \$1.1	4.7 1,551.5	Software and computer services Pharmaceuticals/biotechnology
86		Tundra Semiconductor Corporation	\$17.7	\$7.9	70.6	\$1.1	27.4	Electronic parts and components
87		Teck Cominco Limited	\$17.0	\$23.0	-26.1	\$2,380.0	0.7	Mining and metals
88	54 70	Falconbridge Limited	\$16.9	\$28.0 \$18.0	-39.5	\$2,138.2 \$68.1	0.8	Mining and metals
89 90	70 78	Cangene Corporation Visible Genetics Inc.*	\$16.8 \$16.8	\$18.9 \$15.8	-11.1 6.5	\$68.1 \$21.0	24.7 79.8	Pharmaceuticals/biotechnology Pharmaceuticals/biotechnology
90 91	81	Financial Models Company Inc.	\$16.2	\$14.6	11.5	\$78.9	20.6	Software and computer services
	82	Wescam Inc.	\$15.6	\$14.5	7.9	\$166.4	9.4	Comm/telecom equipment
92	48	Moore Corporation Limited* Ceyba Corp.*	\$15.5 \$15.5	\$31.4	-50.7	\$3,336.1 \$0.0	0.5	Other manufacturing Comm/telecom equipment
92 93	10	cejua cuip.		nc			101/1	
92 93 93		Angiotech Pharmaceuticals, Inc.	\$15.1	\$9.6	57.3	\$1.1	1,346.6	Pharmaceuticals/biotechnology
92 93 93 95 96		Global Thermoelectric Inc.	\$15.1	\$2.7	452.4	\$15.4	1,346.6 98.2	Energy
92 93 93 95 96 97		Global Thermoelectric Inc. NSI Global Inc.	\$15.1 \$15.1	\$2.7 \$6.2	452.4 144.6	\$15.4 \$91.9	98.2 16.4	Energy Comm/telecom equipment
92 93 93 95 96 97 98 99		Global Thermoelectric Inc.	\$15.1	\$2.7	452.4	\$15.4	98.2	Energy









R&D Expenditures: We have attempted, wherever possible, to provide gross R&D expenditures before deduction of investment tax credits or government grants. Apparent tied rankings are due to rounding of R&D expenditures. FY 2000 R&D expenditures figures may have been adjusted, as more accurate information became available.

Fr 2000 R&D experiations injures may have been adjusted, as those accurate information became available. Revenue: We have attempted, wherever possible, to provide revenue figures net of interest and investment income. * = converted to CDN\$ at average 2000 = \$1.4852, 2001 = 1.5484 (Bank of Canada) fs = foreign subsidiary nc = new company nd = not disclosed + = current name is different ** financial information for 9 months only ++ = revenue provided is from FY 2000, FY 2001 revenue not available in time for publication e = Research Infosource Inc. estimate Numbers do not always add due to rounding or missing information.

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