

## Canada's Top 100 Corporate R&D Spenders 2005

Rank		R&D Expenditures				Revenue	Research Intensity	Industry Costor
		Company	FY2004	FY2003	% Change	FY2004	R&D as % of	<b>Industry Sector</b>
2004	2003		\$000	\$000	2003-2004	\$000	Revenue**	
1		Nortel Networks Corporation*	\$2,549,639	\$2,746,940	-7.2	\$12,791,142		Comm/telecom equipment
2		Bell Canada	\$1,451,000	\$1,490,000	-2.6	\$16,787,000		Telecommunications services
3		Magna International Inc.*	\$689,795	\$630,675	9.4	\$26,879,880		Automotive
4		Pratt & Whitney Canada Corp. (fs)	\$465,000	\$423,000	9.9	\$2,200,000		Aerospace
5		ATI Technologies Inc.*	\$389,063	\$328,959	18.3	\$2,598,727		Computer equipment
6		IBM Canada Ltd. (fs)(e)	\$334,000	\$322,400	3.6	\$5,500,000		Software and computer services
7	8	Alcan Inc.*	\$311,059	\$196,210	58.5	\$32,387,828	1.0	Mining and metals
8		Ericsson Canada Inc. (fs)	\$235,000	\$232,000	1.3	\$600,000	39.2	Comm/telecom equipment
9	9	Bombardier Inc.*	\$192,622	\$188,000	2.5	\$20,614,459		Aerospace
10		Alcatel Canada Inc. (fs)	\$190,000	nd		nd		Comm/telecom equipment
11		Apotex Inc.	\$172,363	\$153,621	12.2	\$836,600		Pharmaceuticals/biotechnology
12	14	Pfizer Canada Inc. (fs)	\$159,617	\$146,332	9.1	\$2,393,967	6.7	Pharmaceuticals/biotechnology
13	10	Atomic Energy of Canada Limited	\$150,280	\$155,785	-3.5	\$476,995	31.5	Primary energy
14	15	GlaxoSmithKline Inc. (fs)	\$140,317	\$131,718	6.5	\$987,099	14.2	Pharmaceuticals/biotechnology
15	13	Creo Inc.*	\$138,288	\$144,768	-4.5	\$827,492		Software and computer services
16	36	EnCana Corporation*	\$123,175	\$56,060	119.7	\$16,181,550	0.8	Oil and gas
17	12	Ballard Power Systems Inc.*	\$119,396	\$145,564	-18.0	\$105,907	112.7	Primary energy
18	21	Cognos Incorporated*	\$118,692	\$109,461	8.4	\$889,077	13.4	Software and computer services
19	18	Merck Frosst Canada Ltd. (fs)	\$117,673	\$116,063	1.4	\$786,445	15.0	Pharmaceuticals/biotechnology
20	28	Tembec Inc.	\$111,100	\$76,000	46.2	\$3,664,800	3.0	Forest and paper products
21	24	MDS Inc.	\$100,000	\$92,000	8.7	\$1,764,000	5.7	Health services
22	16	Zarlink Semiconductor Inc.*	\$97,743	\$124,453	-21.5	\$258,348	37.8	Comm/telecom equipment
23	22	PMC Sierra, Ltd. (fs)	\$96,309	\$99,072	-2.8	\$212,007	45.4	Electronic parts and components
24	20	Sanofi Pasteur Limited (fs)	\$95,000	\$112,000	-15.2	\$111,600	85.1	Pharmaceuticals/biotechnology
25	26	AstraZeneca Canada Inc. (fs)	\$94,786	\$90,569	4.7	\$1,158,634	8.2	Pharmaceuticals/biotechnology
26	17	Biovail Corporation*	\$94,359	\$121,328	-22.2	\$1,153,836	8.2	Pharmaceuticals/biotechnology
27	19	CAE Inc.	\$93,600	\$115,033	-18.6	\$1,093,200		Aerospace
28	27	Honeywell Canada (fs)	\$90,285	\$77,980	15.8	\$1,402,142	6.4	Aerospace

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2004	2003	Company	FY2004 \$000	FY2003 \$000	% Change 2003-2004	FY2004 \$000	R&D as % of Revenue**	Industry Sector
29		Hydro-Québec	\$87,000	\$99,000	-12.1	\$10,698,000		Electrical power and utilities
30	25	Research In Motion Limited*	\$84,210	\$91,030	-7.5	\$773,893	10.9	Comm/telecom equipment
31		sanofi-aventis*** (fs)	\$79,000	\$80,000	-1.3	\$612,000	12.9	Pharmaceuticals/biotechnology
32		QLT Inc.*	\$77,690	\$62,871	23.6	\$242,173	32.1	Pharmaceuticals/biotechnology
33	29	Geac Computer Corporation Limited*	\$76,535	\$68,256	12.1	\$579,522	13.2	Software and computer services
34	31	Imperial Oil Limited	\$70,000	\$63,000	11.1	\$22,408,000	0.3	Oil and gas
35	33	Wyeth Pharmaceuticals (fs)	\$68,963	\$61,652	11.9	\$521,198	13.2	Pharmaceuticals/biotechnology
36	30	NOVA Chemicals Corporation*	\$62,472	\$63,068	-0.9	\$6,858,905	0.9	Chemicals and materials
37	49	Open Text Corporation*	\$56,766	\$41,098	38.1	\$378,812	15.0	Software and computer services
38	41	TELUS Corporation	\$56,700	\$47,500	19.4	\$7,581,200	0.7	Telecommunications services
39		Genpharm Inc. (fs)	\$56,137	\$50,338	11.5	\$506,523	11.1	Pharmaceuticals/biotechnology
40		Novartis Pharmaceuticals Canada Inc. (fs)	\$55,000	\$50,053	9.9	nd		Pharmaceuticals/biotechnology
41		Vasogen Inc.	\$52,131	\$21,930	137.7	\$0		Pharmaceuticals/biotechnology
42		Janssen-Ortho Inc. (fs)	\$50,819	\$58,593	-13.3	\$703,816		Pharmaceuticals/biotechnology
43		Hummingbird Ltd.*	\$49,423	\$52,991	-6.7	\$286,622		Software and computer services
44		Precision Drilling Corporation	\$48,759	\$42,419	14.9	\$2,325,216		Primary energy
45		Eli Lilly Canada Inc. (fs)	\$48,601	\$39,995	21.5	\$549,605		Pharmaceuticals/biotechnology
46	56	ID Biomedical Corporation	\$48,543	\$31,568	53.8	\$53,662		Pharmaceuticals/biotechnology
47		Mitel Networks Corporation*	\$47,114	\$57,742	-18.4	\$443,421	10.6	Comm/telecom equipment
48	45	MacDonald, Dettwiler and Associates Ltd.	\$43,274	\$45,124	-4.1	\$751,386	5.8	Aerospace
49	53	Gennum Corporation	\$43,153	\$35,285	22.3	\$136,741	31.6	Electronic parts and components
50	46	Motorola Canada Limited (fs)	\$43,000	\$45,000	-4.4	\$946,000	4.5	Comm/telecom equipment
51	88	Cardiome Pharma Corp.	\$38,715	\$17,004	127.7	\$26,403	146.6	Pharmaceuticals/biotechnology
52	66	ConjuChem Inc.	\$38,443	\$24,204	58.8	\$8		Pharmaceuticals/biotechnology
53		Emergis Inc.	\$37,800	\$46,200	-18.2	\$218,500		Telecommunications services
54		Inco Limited*	\$37,744	\$37,841	-0.3	\$5,567,817		Mining and metals
55		Sierra Wireless, Inc.*	\$37,651	\$23,084	63.1	\$274,883		Electronic parts and components
56		Westaim Corporation	\$35,489	\$25,678	38.2	\$32,241		Electronic parts and components
57	77	Angiotech Pharmaceuticals, Inc.*	\$35,312	\$21,027	67.9	\$170,210	20.7	Pharmaceuticals/biotechnology
58	38	Syncrude Canada Ltd.	\$34,200	\$50,400	-32.1	\$4,566,000	0.7	Oil and gas
59	44	Westport Innovations Inc.	\$34,140	\$45,329	-24.7	\$32,430	105.3	Transportation
60	64	Cangene Corporation	\$32,411	\$24,600	31.8	\$156,903	20.7	Pharmaceuticals/biotechnology
61		SR Telecom Inc.	\$32,272	\$31,499	2.5	\$123,936	26.0	Comm/telecom equipment

Rank		G	R&D Expenditures			Revenue	Research Intensity	In Landaus Condans
2004	2003	- Company	FY2004 \$000	FY2003 \$000	% Change 2003-2004	FY2004 \$000	R&D as % of Revenue**	Industry Sector
62		Leitch Technology Corporation	\$32,243	\$36,760	-12.3	\$154,586		Comm/telecom equipment
63		AEterna Zentaris Inc.	\$31,713	\$45,347	-30.1	\$233,248		Pharmaceuticals/biotechnology
64	84	GSI Lumonics Inc.*	\$31,203	\$19,474	60.2	\$429,511	7.3	Electronic parts and components
65	85	Neurochem Inc.	\$31,152	\$18,782	65.9	\$132		Pharmaceuticals/biotechnology
66	55	Husky Injection Molding Systems Ltd.*	\$31,106	\$33,216	-6.4	\$1,006,969	3.1	Machinery
67	155	Cascades Inc.	\$30,000	\$10,800	177.8	\$3,254,000	0.9	Forest and paper products
68	59	Bayer Inc. (fs)	\$28,172	\$28,971	-2.8	\$885,345	3.2	Pharmaceuticals/biotechnology
69	125	Shell Canada Limited	\$28,000	\$10,000	180.0	\$11,228,000		Oil and gas
70	58	Inex Pharmaceuticals Corporation	\$27,189	\$31,024	-12.4	\$14,630	185.8	Pharmaceuticals/biotechnology
71		Lorus Therapeutics Inc.	\$26,785	\$12,550	113.4	\$608		Pharmaceuticals/biotechnology
72		CGI Group Inc.	\$26,710	\$22,036	21.2	\$3,243,612	0.8	Software and computer services
73	74	Psion Teklogix Inc. (fs)	\$26,535	\$21,408	23.9	\$321,691	8.2	Software and computer services
74	83	DALSA Corporation	\$25,953	\$19,874	30.6	\$168,606	15.4	Electronic parts and components
75	80	Stressgen Biotechnologies Corporation	\$25,913	\$20,865	24.2	\$700		Pharmaceuticals/biotechnology
76	89	Axcan Pharma Inc.*	\$25,856	\$16,955	52.5	\$317,090	8.2	Pharmaceuticals/biotechnology
77	73	Aastra Technologies Limited	\$24,847	\$21,713	14.4	\$256,119	9.7	Comm/telecom equipment
78	70	Tundra Semiconductor Corporation	\$24,237	\$22,745	6.6	\$69,213	35.0	Electronic parts and components
79	82	Rogers Wireless Inc.	\$22,744	\$20,000	13.7	\$2,783,525	0.8	Telecommunications services
80	95	Suncor Energy Inc.	\$22,000	\$18,500	18.9	\$8,618,000	0.3	Primary energy
81		Xerox Canada Inc. (fs)	\$21,826	\$21,137	3.3	\$1,199,970	1.8	Machinery
82	78	Ontario Power Generation Inc.	\$21,000	\$21,000	0.0	\$4,918,000	0.4	Electrical power and utilities
83	67	EXFO Electro-Optical Engineering Inc.*	\$20,392	\$24,012	-15.1	\$97,131	21.0	Comm/telecom equipment
84		Celestica Inc.*	\$20,303	\$33,636	-39.6	\$10,765,487	0.2	Electronic parts and components
85	115	Isotechnika Inc.	\$18,503	\$11,666	58.6	\$1,531	1,208.6	Pharmaceuticals/biotechnology
86	65	Theratechnologies Inc.	\$18,439	\$24,255	-24.0	\$269		Pharmaceuticals/biotechnology
87	102	SNC-Lavalin Group Inc.	\$18,110	\$14,633	23.8	\$3,447,421	0.5	Engineering services
88	110	Hydrogenics Corporation*	\$17,936	\$12,957	38.4	\$21,678	82.7	Primary energy
89	106	MethylGene Inc.	\$17,038	\$13,623	25.1	\$8,470	201.2	Pharmaceuticals/biotechnology
90	95	Petro-Canada	\$17,000	\$15,000	13.3	\$14,687,000		Oil and gas
91	86	Financial Models Company Inc.	\$16,743	\$18,519	-9.6	\$72,401	23.1	Software and computer services
92	114	ALTANA Pharma Inc. (fs)	\$16,511	\$12,241	34.9	\$165,865	10.0	Pharmaceuticals/biotechnology
93	172	ratiopharm inc. (fs)	\$16,481	\$5,316	210.0	\$314,348	5.2	Pharmaceuticals/biotechnology
94	81	CMC Electronics Inc.	\$16,400	\$20,700	-20.8	\$194,000		Comm/telecom equipment

Rank		Common.	R&D Expenditures			Revenue	Research Intensity	Industria Conton
2004	2003	Company	FY2004 \$000	FY2003 \$000	% Change 2003-2004	FY2004 \$000	R&D as % of Revenue**	Industry Sector
95	98	Royal Group Technologies Limited	\$16,157	\$14,985	7.8	\$2,335,131	0.7	Other manufacturing
96	60	Labopharm Inc.	\$16,037	\$26,005	-38.3	\$1,394	1,150.4	Pharmaceuticals/biotechnology
97	63	Noranda Inc.*	\$15,618	\$25,227	-38.1	\$9,081,867	0.2	Mining and metals
98	107	ProMetic Life Sciences Inc.	\$15,569	\$13,501	15.3	\$8,183	190.3	Pharmaceuticals/biotechnology
99	95	Rio Tinto Iron & Titanium Inc. (fs)	\$15,000	\$15,000	0.0	\$830,000	1.8	Mining and metals
100	108	Xantrex Technology Inc.*	\$14,871	\$13,431	10.7	\$186,260	8.0	Primary energy

## Notes

- 1. We have attempted, wherever possible, to provide gross R&D expenditures before deduction of investment tax credits or government grants.
- 2. FY2003 R&D expenditure figures may have been adjusted, as more accurate information became available.
- 3. Canadian-owned company results include worldwide R&D expenditures; foreign subsidiaries (fs) include R&D expenditures for Canadian operations only.
- 4. We have attempted, wherever possible, to provide revenue figures net of interest and investment income.
- \* = Converted to CDN\$ at average 2004 = \$1.3015, 2003 = \$1.4015 (Bank of Canada)
- fs = Foreign subsidiary (includes R&D expenditures for Canadian operations only)

e = RE\$EARCH Infosource Inc. revenue estimate

nd = Not disclosed

RE\$EARCH Infosource Inc. is Canada's source of R&D intelligence. Data used for this table were extracted from our Canadian Corporate R&D Database, a proprietary database. Companies wishing to be included in future editions of the Top 100 List and Database, or who wish to adjust their figures should contact us directly. Additional copies of the Top 100 List are available online at <a href="https://www.researchinfosource.com">www.researchinfosource.com</a> or by calling or faxing us: Telephone (416) 481-7070 ext. 21; Fax (416) 481-7120.

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