CANADA'S TOP 100 Corporate R&D Spenders

HEALTHY GAINS IN CORPORATE R&D SPENDING

Canada's Top 100 Corporate R&D Spenders expanded their spending on research and development by a healthy 6.9%, in Fiscal 2015 on the heels of a 1.6% reduction in Fiscal 2014. Total spending increased to \$12.8 billion from \$12.0 billion the year before, even though revenues fell by 5.1% to \$360.0 billion from \$379.3 billion, for the 84 Top 100 companies where figures were available. Research spending rose at

The \$100 Million Club					
2015	R&D	Spending			
Rank	Company	\$000			
1	Bombardier Inc.	2,293,988			
2	Magna International Inc.	\$639,350			
3	BlackBerry Limited	\$599,710			
4	BCE Inc.	\$530,300			
5	Canadian Natural Resources Limited	\$527,000			
6	Pratt & Whitney Canada Corp. (fs)	\$518,000			
7	IBM Canada Ltd. (fs)	\$477,000			
8	Valeant Pharmaceuticals				
	International, Inc.	\$427,597			
9	Rogers Communications Inc.	\$425,287			
10	Constellation Software Inc.	\$349,325			
11	Ericsson Canada Inc. (fs)	\$316,000			
12	Apotex Inc.	\$274,505			
13	CGI Group Inc.	\$257,177			
14	Open Text Corporation	\$251,253			
15	TELUS Corporation	\$206,000			
16	Suncor Energy Inc.	\$200,000			
17	Imperial Oil Limited	\$195,000			
18	General Motors of Canada				
	Limited (fs)	\$190,000			
19	AMD Canada (fs)	\$185,422			
20	Mitel Networks Corporation	\$168,021			
21	BRP Inc.	\$164,400			
22	CAE Inc.	\$138,900			
23	Sanofi (fs) ^(a)	\$133,300			
24	Hydro-Québec	\$130,000			
25	MDA	\$129,266			
26	Cisco Canada (fs)	\$114,926			
fs = Foreign subsidiary (included revenue and R&D spending for Canadian operations only) (a) Sanofi Pasteur Limited and Sanofi-Aventis Canada Inc.					

(including Genzyme Canada)

68 Top 100 companies and fell at 31 others, 1 company was flat.

For a fourth year, Bombardier Inc. held on to 1st place among the Top 100, with a 13.4% increase in research spending to \$2.3 billion. Bombardier was the only firm to record more than \$1 billion of research. Auto parts manufacturer Magna International expanded R&D spending to \$639.4 million to capture 2nd place on the Top 100 list. BlackBerry Limited fell to the third spot from second on the heels of a 23.6% drop in spending. BCE Inc. remained in 4th position with \$530.3 million of research investment and Canadian Natural Resources Limited advanced two positions to 5th overall with \$527.0 million of R&D, a year-on-year rise of 17.1%.

Research intensity – R&D spending as a percent of revenues – increased by 13.3% among the 84 companies that reported fully, as spending increased while revenues fell. The research intensity ratio averaged 3.0% for these firms, compared with 2.7% in Fiscal 2014.

THE \$100 MILLION CLUB

RE\$EARCH Infosource is pleased to showcase 26 companies (down from 30 last year) whose spending gained them membership in the \$100 Million Club – an elite group of firms that spend \$100 million or more on R&D. The Club includes 19 Canadian companies and 7 foreign subsidiaries.

\$100 Million Club members' Fiscal 2015 spending on research fell by 1.4% to \$9.8 billion, from \$10.0 billion the prior year. Club members accounted for 76.6% of total Top 100 spending, down from 81.2% in Fiscal 2014.

INDUSTRY PERFORMANCE

Five Aerospace companies on the Top 100 list increased their R&D spending by 8.4% and accounted for 23.2% of the Top 100 total, up from 22.4% in Fiscal 2014. With an R&D spending increase of 12.5%, 17 Software

Top 100 – Leading Industries	
Industry	% of Total
Aerospace (5)	23.2
Software & Computer Services (17)	14.5
Pharmaceuticals/Biotechnology (23)	13.3
Comm/Telecom Equipment (9)	11.7
Energy/Oil & Gas (10)	9.6
Telecommunications Services (3)	9.0
Automotive (4)	7.3
Energy/Oil & Gas (10) Telecommunications Services (3)	9.6 9.0

& Computer Services companies captured 14.5% of the Top 100 total, up from 13.2% last year. Twenty-three Pharmaceuticals/Biotechnology firms on the Top 100 list increased their combined R&D investments by 16.4% and represented 13.3% of the total. In contrast, 9 Communications/Telecom Equipment companies experienced a 5.4% decline in their R&D spending. Taking all its sub-industries into account (including Medical Devices and Instrumentation), the Information and Communications Technology sector still dominated the R&D scene, accounting for a total of 39.7% of all-industry spending.

R&D SPENDING GROWTH

A number of companies stood out in terms of their R&D spending growth. Against a backdrop of 6.9% total growth in the Top 100, UrtheCast Corp. increased spending by 414.7%, Cynapsus Therapeutics Inc. recorded 342.5% growth in R&D, followed by Titan Medical Inc. (314.3%), Transition Therapeutics Inc. (179.4%) and Amaya Inc. (169.1%).

RESEARCH INTENSITY

Available data allowed RE\$EARCH Infosource to calculate the R&D intensity – research spending as a percent of revenues – of 82 of the Top 100 firms (with over \$2 million of revenue). A number of companies posted very high intensity levels. Nymox Pharmaceutical Corporation recorded 313.3% R&D intensity followed by ProMetic Life Sciences Inc. (210.2%), Arbutus Biopharma Corporation (207.1%) and ViXS Systems Inc. (54.5%). Westport Innovations Inc. recorded a strong 51.3% R&D intensity.

LOOKING AHEAD

The growth of 6.9% in Fiscal 2015 Top 100 R&D spending comes as a welcome relief following a drop of 1.6% in last year's Top 100 total, and a decade of tepid results. (Note that the Top 100 composition changes from year to year and results are not strictly comparable.) Encouragingly, spending rose at 7 of the 10 largest spenders this year, compared with a decline at 7 of the 10 the year before. More impressive is that the spending gains countered a 5.2% drop in revenues. Of course, in the medium-long term, revenue gains will be required to fuel sustained R&D spending growth.

The three major drivers of corporate R&D spending are revenues and profitability, government policy (especially tax incentives and grants), and corporate strategy. Two of these – revenues and profitability, and corporate strategy

Top 10 Research Intensive Companies*						
2015 Rank						
Research			R&D as %			
Intensity	Overall	Company	of Revenue			
1	100	Nymox Pharmaceutical Corporation	313.3			
2	50	ProMetic Life Sciences Inc.	210.2			
3	39	Arbutus Biopharma				
		Corporation	207.1			
4	86	ViXS Systems Inc.	54.5			
5	38	Westport Innovations Inc.	51.3			
6	19	AMD Canada (fs)	49.8			
7	43	Atomic Energy of Canada				
		Limited	45.1			
8	91	UrtheCast Corp.	43.0			
9	78	Ballard Power Systems Inc.	. 28.7			
10	73	Novadaq Technologies Inc	27.5			
*Based on companies with \$2 million or more of revenue fs = Foreign subsidiary (included revenue and R&D spending for Canadian operations only)						

Top 10 Companies by Growth						
2015 Rank						
R&D		% (Change			
Growth	Overall	Company 201	4-2015			
1	91	UrtheCast Corp.	414.7			
2	70	Cynapsus Therapeutics Inc.	342.5			
3	53	Titan Medical Inc.	314.3			
4	52	Transition Therapeutics Inc.+	179.4			
5	37	Amaya Inc.	169.1			
6	55	Teck Resources Limited	135.0			
7	83	Clementia Pharmaceuticals Inc	c. 115.8			
8	100	Nymox Pharmaceutical				
		Corporation	110.3			
9	79	Aurinia Pharmaceuticals Inc.	102.2			
10	73	Novadaq Technologies Inc.	88.4			
+Not currer	nt name/acq	uired/merged				

- are within the control of the firm whereas government policy is not. The new federal government has promised to review innovation policy, although major changes that might result are at least one or two budget cycles away. In the meanwhile, corporate leaders will need to forge their own directions in the context of competitive forces and the existing policy environment.

One warm spring day does not signal a hot summer, but the 2016 Top 100 Corporate R&D results at least fuel hope for a warmer R&D climate to come.