



Tech Futures:
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By [Michael Volker](#)

Invest in Spin-Offs, Misc Musings, Capital Pool Corps Update and Events Update

Invest in a University Spin-Off

Why not invest in a University Spin-off? Chances are that you already have. Indeed, if you're a taxpayer, that's a fact.

If it weren't for you, the taxpayer, our local universities would not be nearly as innovative as they are. Thanks to your investment in research and development, these universities produce not only B.C.'s best natural resource - its talented people - but knowledge that benefits us all as well as numerous spin-off companies which contribute to our Province's GDP and economic well-being.

Indeed, some recent reports have noted that within this decade, the tech sector contribution to National GDP will be comparable to that of the resource sector. I suspect B.C. is not far behind.

Not only are the universities prolific in their entrepreneurial quests, but I see literally hundreds of new tech startups each year. Of course, many of these won't make it, but that's OK, because if we don't keep the hopper full, we won't get many dropping through. The New Ventures BC business competition that was recently launched received over 100 startup entries!

Not only can we benefit indirectly from these spin-offs - we can make further direct investments in many of them - either as sophisticated investors or as angels supporting pre-public ventures or as Joe Street-investor once they hit the public markets.

In the mid-1980s, universities across Canada and the U.S. set up technology transfer offices in order to commercialize their intellectual property and take new discoveries to the marketplace. At first this was done by finding suitable business partners who would acquire a license to a technology by paying a royalty to the university and its inventors.

However, royalties flowing back to universities were minimal. On average, a return of less than one percent of R&D expenditures was realized. By setting up a company to commercialize some specific intellectual property, the likelihood of success and the potential return to an institution are greatly increased. This is because a raw technology requires a great deal of development (and capital) beyond the research stages in order to make it commercially viable. A corporation, properly financed with good management, will also be able to seize new market opportunities and acquire and develop its own know-how.

An executive from a large pharmaceutical company once commented, "We big companies are very bad at commercializing early-stage technology. But if your spin-off company is a success, and the technology is relevant to our business, we will buy out your spin-off company at almost any price."

The **University of B.C. (UBC)** and **Simon Fraser University (SFU)** have created over 150 spin-off companies some of which are now substantial corporations which, in turn, spawn other new ventures. Last year alone, these universities formed some 20 new companies. Based on new companies created per million dollars of research expended, these institutions have ranked in the top 10 in North America for several years running.

Together with the **University of Victoria**, the **University of Northern BC** and the **Technical University of B.C.**, they are actively drumming up new initiatives on the innovation front. The University of Victoria's **Innovation Development Corp** is working with more than a dozen spin-offs to commercialize their technologies and the Technical University has created **TechBC Corp** as its business "front end".

By collaborating with each other and in partnering with organizations such as the **B.C. Advanced Systems Institute**, the **Science Council of B.C.**, and the **Vancouver Enterprise Forum's Angel Network**, these schools fuel the growth and development of their spin-off companies by attracting both the human and financial capital to these ventures. The [angel network](#) is a good way to connect with these at the formative stages.

Last year, these collaborations resulted in the establishment of new research and development centres such as the **New Media Innovation Centre** which will provide a pipeline of technologies for new business opportunities.

So, what do some of these spin-offs look like? Here are a few recent pre-public examples. I believe that these may represent good ground floor investment opportunities.

Cogent Chipware Inc., one of SFU's most recent spin-offs, based on 15 years of research at the "Very Large Scale Integration Computer Design Laboratory", was formed by researchers and students to specialize in voice-coding technologies for the telecommunications industry. These guys are really pushing the state-of-the art in putting systems on silicon.

Another SFU company, **NeuroStream Technologies Inc.**, recently received venture backing from the **Working Opportunity Fund** and the **Business Development Bank of Canada** to develop and produce "nerve cuffs" – a patented surgically implanted electrode which monitors messages from a patient's nerves in order to control prosthetic devices or to bypass neurologically damaged pathways to facilitate bodily functions - something many of us will need as we approach our golden years.

BandGap Photonics Inc. is one of UBC's latest spin-offs. Founded in 2000 and backed with \$5 million in venture capital from **Ventures West**, the **Working Opportunity Fund** and angel investors, BandGap intends to use photonic crystals for the fabrication of next generation optical telecom devices.

UBC has also spawned many life sciences companies such as **NeuroMed Technologies Inc.**, **Inphogene Biocom Inc.**, and **Kinexus Bioinformatics Corp.**

Since 1984, UBC has contributed \$12.3 million towards the technologies which it has licensed to the spin-off companies which, in turn, have obtained an additional \$29.1 million from government support programs. The private sector has invested \$663.1 million in these companies representing a 16:1 leverage in investment made by the private sector against public support.

Here's a list of some publicly listed spin-offs in case you want to get in on the action. Although any

micro-cap stock investment is risky (synonymous with big rewards), there's a major advantage in betting on a University style venture. That advantage relates to due diligence. If you hear about an aerosol-spray AIDS cure produced by a relatively unknown OTC-BB company, versus a QLT-like (i.e. UBC spin-off) company listed on the CDNX (remember - that's how **QLT Inc.** got its start), which one is likely to be more credible? You can rest assured that an institutional association has intrinsic value brought about by internal processes such as peer review, sponsored research, and high professional standards.

Many on this list got started on the CDNX (or the VSE or ASE). Many are inter-listed, i.e. also trade on the Nasdaq market.

Company	Origin	Exchange: Ticker
Forbes Medi-Tech Inc.	UBC	TSE:FMI
ID Biomedical Corporation	UBC	TSE:IDB
Prescient Neuro (IGT Pharma Inc.)	UBC	CDNX:PRE
Immune Network Research Inc.	UBC	CDNX:INR
Inex Pharmaceutical Corp.	UBC	TSE:IEX
Micrologix Biotechnology Inc.	UBC	TSE:MBI
Nortran Pharmaceuticals Inc.	UBC	CDNX:NRT
Westport Research, Inc.	UBC	TSE:WPT
Meteor Technologies (i.e. Thoughtshare Communications)	SFU	CDNX:MMI
Tri-Vision Intl (V-Chip licensee)	SFU	TSE:TVL

With regard to spin-off success rates, there are relatively few failures. That's because these deals are usually based on solid technology, good management and are adequately funded (though never enough). The downside, if any, may be that the company is acquired for either its team and/or its technology. Liquidation events are rare.

Misc Musings

In a recent column, I suggested that readers might become more active in their investments by keeping an eye out for notices about upcoming AGMs (Annual General Meetings). Just after mentioning this, I received a flurry of annual reports and AGM notices from some of the local companies in which I own shares. Since the majority of companies use the calendar year as their fiscal year-end, and due to the requirement that an AGM be held within 6-months of year-end, naturally there are many June meetings - so keep on the lookout.

I noted that there's no easy way to find out which companies have upcoming AGMs. Indeed, many prefer not to be too open about this. Today's issue of **USA Today** emphasizes this point. It notes that some companies, e.g. software developer Net-Sol has scheduled its AGM in Pakistan! The article also gives shareholders some comfort in noting that proxy fights can be worthwhile in that

shareholders do have a voice.

I attended a very informative session at **Canaccord Capital** recently at which **Nick Majendie** provided his assessment of the market and his prognosis. I liked his approach: he interviewed management in 53 companies in order to glean some investment insights.

Majendie noted that whenever the Fed has dropped interest rates in past years, market gains of 20-25% occur during the first 12 months after such cuts. With regard to tech picks in his portfolio, he likes **Telus** (TSE:T). He notes that it has the best, i.e. lowest, PEG ratio of 0.34 due to a very low (less than 5) P/E ratio. Now in the \$30's, he targets a 2003 price of \$60.

Just two weeks ago I mentioned that **360Networks** (TSE:TSX) was trading at \$1.93. Now, it's a third of that price trading in the \$.60 range. I can't recall a high profile, high flying, credibly credentialed stock suffering so badly so quickly since its IPO just last year. The stock traded as high as C\$35.90. It's a local company that really looked promising. So...is it a buy? It's a gamble. Maybe the debt holders, with their U\$2.5Bn in loans will end up owning the company. At least the company is building an asset, i.e. network capacity, so when broadband demand increases (as I'm sure it will - remember Gates wondering why anyone would ever need more than 64K? Or Ken Olsen of DEC wondering why anyone would ever want a PC?) you can bet that this physical plant will gain in value. In the meantime, it's amusing how management (remember Maffei was a CFO) can play around with financial statements to tell a good story. But, before you speculate on this one, you should know that cash on hand a month ago was around \$600M and the burn rate is \$150M per month. Hey, you can't even play Blackjack in Vegas for less than a buck!

Here's a little **Nasdaq** trivia - 142 Canadian firms trade on Nasdaq. Last year, the dollar volume of Canadian stocks trading on Nasdaq was U\$765Bn - \$100Bn higher than all trading on the TSE. The Nasdaq accounts for more than 60% of all trading on US markets - both in dollars and shares.

So far, as we know, the TSE has shied away from making any deals with Nasdaq - seeing it more as a competitor than an ally. Since the TSE is taking over the CDNX, wouldn't it make sense for Nasdaq to make a bid for the TSE? I still think it would have been good for the Nasdaq to make a competing bid for the CDNX! Someone was sleeping at the wheel.

Hungry for an IPO? **Kraft Foods Inc** completed its IPO of U\$8.7 bn this week - the second largest next to **ATT Wireless** which raised U\$10.6 bn last year. That should satisfy a few appetites. Can't live without those Kraft dinners.

CryptoLogic Inc (TSE:CRY), a Toronto based company with a quarterly \$8M profit on \$16M sales (Wow!) is trading at a trailing P/E of only 20. The company makes on-line gaming software for the gambling industry. I only mention this because I noticed that Canadian players, such as **Chartwell Technology Inc** (CDNX:CWH) of Calgary and **Total Entertainment Inc** of Montreal dominate this space. Known as a conservative nation, I guess we Canadians like to make it easy for others to fritter away their money. This is a hot area because Nevada is expected to allow on-line internet gaming. On-line gambling presently accounts for only \$1.6Bn of the \$40Bn gambling industry in the U.S. In Vancouver, an emerging player, **Jenosys Enterprises Inc** (CDNX:JET) is getting in on the action, specializing in the Bingo-player niche. Let's hope for a bingo on this stock. You can roll the dice for two-bits.

So what do you think **Bill Gates** invests in? This week's edition (June 18) of **Business Week** (BW) shows that he's up about 11% on his 14 major holdings (which require public disclosure). His best pick? **Canadian National Railways** (TSE:CNR). Bill's half a billion dollar investment is up 42% year-to-date!

The same BW issue features the Info-Tech 100 report. You'll be surprised when you see who's in the top 10. And, you'd never guess that Canada's **Celestica Inc.** (NYSE:CLS), a contract manufacturer, is the #1 pick. Celestica was an **IBM** spin-off (IBM is #6 on the list) aiming for U\$20 billion in revenue by 2003. Chances are you haven't even heard of the other 8 in the top 10.

One other item you can read about in Business Week (no, I don't own shares in BW) is what's happening with respect to income taxation in the USA. We, in high tech circles, have often blamed our loss of talent to the U.S. on high local taxes. In view of our new Provincial government's making good on its election promise to substantially cut personal income taxes (giving British Columbians a top marginal rate of 43% - B.C. cut its take by 25% - from 19% to 14%. The 14% gets added to the Federal government's 29% top rate), knowing what the U.S. is doing should be of importance to all local high tech CEOs. You'll find that although the U.S. is doing something substantially, it is only doing this for a temporary period of time - 10 years. It's actually a helluva mess down there - something they must have learned how to do from us. In any event, note that the U.S. federal piece of the pie, presently at 39% is dropping to 35%. But, you've got to add State taxes to that. So, the grass is no longer greener down there. In fact, they've even got a little crabgrass mixed in with the turf.

Since Fathers Day is approaching, and in the (wishful) hope that my kids might be reading this column, here are a few tech gadgets that any Dad can use: **Compaq's** "internet appliance", the **IA2**, is a nice 15" internet terminal priced at only U\$299 (U\$399 for the **IA1** sexy flat screen version). So far, I've only seen these in the U.S. **Vtech** has announced its **E-mail PostBox** for a mere U\$69! That comes with an LCD display which pops out of a full-size, trim keyboard. Just what I need! Soon, you'll be able to pick up little email devices in the checkout line at the drugstore (RIM - watch out!).

And if you're thinking about digital video and photography, **Sony's** latest Handycams offer both modes with pretty good capabilities in either mode (usually a product is either Video with a minimal photo capability or vice-versa). One "must-have" feature which Sony offers is an analog input which allows you to feed in all your old technology home videos and convert them over to digital tapes which you can then easily transfer to, and edit on, your PC and/or transfer to a CDROM or DVD. On this point, there are a number of companies which will take your 2-hour home movies and transfer them to a DVD for you for less than \$50 per tape.

For the road-warriors among you, I've notice that some airports (e.g. Chicago's O'Hare) now have "Cyber Concierges" with internet-ready booths with T-1 speed ports. We can use more of these. It's amusing how many travelers now pound away on their laptops while waiting in airport lounges (guess where this column was written? The lucky guesser gets a free restaurant coupon from me).

Capital Pool Corporation (CPC) Update

In this column, I keep track of **Capital Pool Corporation** ("CPC") companies (see chart below) as defined by the CDNX because they may provide funding and management to, and in the process acquire, technology companies. They provide companies with an alternative to traditional venture capital financing. CPCs are the continuation of the former VCP and JCP programs on the Vancouver (VSE) and Alberta Stock Exchanges.

Since the program was launched, more than 250 CPCs have been formed and more than 30 have completed their so-called Qualifying Transactions (QT). It takes at least a year - usually longer - for a CPC to find a suitable takeover candidate and another six months to a year for a deal to be finalized. One way to expedite the process is to eliminate the need for a special shareholders

meeting to approve the deals - leave it up to the CPC boards.

Check our [Capital Pool Corporation chart](#) (in .pdf format) for a complete list of the CDNX's CPC and VCP companies, thanks to **David Ing** of **Pacific International Securities**. This list is updated on a monthly basis.

An introductory article explaining CPCs may be found at <http://www.bctechnology.com/statics/mvolker-jun0200.html>.

Local Happenings

Next week, the [Vancouver Enterprise Forum](#) will be holding its end-of season Annual Celebration Dinner wrap-up event on June 19th. The subject is: **Wireless Data in BC: Twenty Five Years to Overnight Success**. The keynote speaker this year is **David B. Sutcliffe**, President, Chief Executive Officer and Director of **Sierra Wireless** (TSE:SW). Mr. Sutcliffe has been the President and Chief Executive Officer of Sierra Wireless since 1995. He has over 20 years of experience in the high technology industry. Prior to joining Sierra Wireless he was a President and Chief Executive Officer of **Xillix Technologies** (TSE:XLX) Corp. and prior to that was the Vice-President and Business Unit Manager at the Mobile Data Division of Motorola.

Sierra Wireless is a leading provider of wireless data communications hardware and software products. The company's mission is to be the world leader in wireless data modems and enabling software. In this global, high growth industry, Sierra Wireless is the wireless enabler for laptops and Personal Digital Assistants (PDAs), providing wireless access to the Internet for people using these portable information devices. Details and registration information on the event are at www.vef.org.

For a complete calendar on technology events, check [T-Net's Events page](#).

SFU's **TIME Centre** is open for business - business folks, that is. TIME is an acronym for Technology, Innovation, Management, and Entrepreneurship. TIME supports the growth and development of the tech industry in B.C. TIME features a "BusinessCentre" (looks like an airport business lounge) which is open to technology entrepreneurs and business people to use as a drop-in downtown office facility. Need to plug-in? Make some calls? Do some work? Hold a meeting? Why hang out at MacDonald's when you can work productively at the TIME Centre? Drop by and check it out! It is located at SFU's downtown Harbour Centre campus at 515 West Hastings St. More information can be found at www.sfu.ca/time. PS - there are some great facilities for holding your company's AGM.

For a convenient printable, pdf version of this column, [click here](#).

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What Do You Think? Talk Back To Mike Volker

Tech Futures is a bi-weekly column that focuses attention on new and emerging BC publicly

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