

Bruce Schmidt profile

Early-stage presence: Influential in the development of Genome BC, Bruce Schmidt has returned to the private sector to take genomics research out of the lab and into the global health-care marketplace

Mission: Create genomics tools that could save the health-care system millions of dollars

Assets: Experience in developing more than a dozen early-stage high-tech firms

Yield: A founder of one of B.C.'s most influential research centres

By Curt Cherewayko

Bruce Schmidt thinks the world has a relatively well-run health-care system – for now. But the CEO of Vancouver's GenomeDx Biosciences Inc. believes rising health-care costs are going to catch up to us. "Something fundamentally has to change," said Schmidt during an interview with BIV.

He sees two major drivers for that change: "No. 1, people will start taking care of themselves better, and No. 2, the power of genomics will allow us to much better understand how and with what to treat people."

Eighteen months ago, Schmidt left Genome BC, the Vancouver-based genomics research centre that he helped found in 2000, to join the newly formed GenomeDX. Elai Davicioni is the company's CSO. He developed the company's intellectual property in United States before bringing it to Vancouver to form GenomeDX and remains its intellectual force. But Schmidt is the experienced point man assigned with setting the company on a trajectory that will take its genomics research out of the lab and into the patient. It's a challenge he's familiar with, although GenomeDX is working in a unique space, even for the biotech sector.

Sirius Genomics and Boreal Genomics are the only other two biotech companies in B.C. focused on exploring how the genomic code can explain why certain people – or, in the case of Boreal, trees – have or don't have certain diseases or react to external forces, like drugs, the way they do.

Born in Kelowna, but a Vancouverite since 1983, Schmidt worked as corporate marketer for Nabisco in the early '80s after graduating from UBC with a physics degree. By the latter half of the 1980s, aside from a stint as manager of the Vancouver office of public relations giant Burston-Mueller, Schmidt had become an independent consultant helping develop high-tech startups, most of which were publicly traded.

While some of the companies didn't take off, such as plastics-compound -maker Radical Elastomers, of which Schmidt was a president, he helped build some winners.

He founded and was CEO of IGT Pharma, which was developing a cancer treatment using alkaloids from the periwinkle plant when it merged with a Toronto firm to become Prescient NeuroPharma Inc. "There are people who run startup businesses really well and those that run mature business really well," said Schmidt.

He considers himself in the latter category. "What I do know how to do is spend money carefully and wring every bit of value out of every dollar." The fact that many of the companies that Schmidt helped found and develop were university spinoffs reflects his interest in working with schools to develop intellectual property into private companies.

Schmidt's also a seasoned angel investor and active in the Vantec angel network, through which he became a co-founder and director of **GreenAngel Energy Corp. (TSX-V: GAE)** – an angel fund with six early-stage B.C. clean-tech companies in its portfolio.

According to GreenAngel CEO Bob de Wit: "When we first started GreenAngel, we wanted that public company experience that [Schmidt] has and the early-stage angel investor experience he has."

"He's the only one who has been a public-company CFO among the group. He also has a network of contacts in the life-sciences areas that the rest of us don't have."

While Schmidt was chairman of LifeSciences BC, he became involved with an initiative led by the late Michael Smith to establish a genome research centre in Vancouver. Schmidt committed to the project and ended up being an integral member of the team that developed Genome BC.

"That was where I just got tweaked by genomics."

Schmidt doesn't question the intellect and skill set of health professionals, but he noted that people are frequently given incorrect or unnecessary treatments.

For example, he noted that 250,000 North Americans a year are screened for thyroid cancer. In 5% of those cases, cancer is detected. The results from 25% of screened cases come back indeterminate: the tumour receives neither a benign nor malignant indication. But in health care, indeterminates often become positives, "when in doubt cut it out," said Schmidt.

As a result, tens of thousands of North Americans have had their thyroid removed unnecessarily. GenomeDX thinks it can solve that problem. Schmidt said the company is becoming "a resource for pathologists and specialists to make better decisions for patients." It partners with organizations that hold large and well-preserved banks of tissue samples. GenomeDX analyzes the genomes of hundreds and sometimes thousands of samples from such banks to discover the genomic signature or expression of a disease.

For example, the company is using UBC's extensive bank of thyroid cancer tissue samples to create a profile of thyroid cancer that could be used to diagnose benign or malignant tumours in the 25% of North American patients whose thyroid tumours can't be diagnosed using conventional pathological methods.

"What's really amazing is that the cost and time of doing this is fractional compared to drug development," said Schmidt. And given that genomics tools could drastically reduce the number of unnecessary operations and adverse drug reactions that occur in today's health-care system, they have large potential markets.

There are only a few genomics-based indication tools that have made it to market. But to Schmidt, "genomics is the possible emancipator of the biotechnology industry." •