

## **The world beyond academia**

### ***Ingenuity 601* and *Science to Society* expose scientists and engineers to the nuances of innovation, commercialization and entrepreneurship**

Jeff LaFrenz is no stranger to industry, having worked as a systems engineer, a salesperson in the telecommunications industry and even an entrepreneur (he recently sold a power system protection company he started a friend).

But when a colleague suggested he enroll in Ingenuity 601 -- a commercialization education program geared at scientists and engineers -- he took the leap. The program, which launched in 2008, blends face-to-face workshops and a half-dozen online sessions, and proved to be a good fit for the bio-nanotechnology PhD student. With so much industry experience and a PhD in civil engineering, LaFrenz had a unique perspective to offer, as did his fellow students, who generally came from academic backgrounds.

“To me, I had two roles there. One was to learn, and there was a lot of stuff I learned there, some of it was the fundamentals of the academic side behind innovation, which is what I didn’t have any experience in,” says LaFrenz. “I was also able to bring in a diversity of ideas into the group, and start conversations around things of that nature, which in turn I learned from.”

LaFrenz says the experience has given him a broader perspective which will help with any future tech ventures he takes on, as well as with his work as a development assistant for the University of Alberta’s CREATE (Centre for Research Entrepreneurship and Applied Technology Education).

Funded almost exclusively by Ingenuity Enterprise, Ingenuity 601 is run by The Centre for Innovation Studies (Thecis), a not-for-profit innovation research centre in Calgary. Peter Josty, executive director of Thecis, says the concept of the program emerged from a conversation between one of Thecis’ board members and some industry professionals. The idea struck a chord with Josty.

“I have a PhD in chemistry and when I was completing it in England, I had the opportunity to go on a course very similar to Ingenuity 601 and I found it to be a life-changing, career-changing event. It gave me much more interested in having a career in industry,” says Josty.

He says his situation is common. Many scientists don’t look beyond academia when they’re planning their careers.

“I think what (Ingenuity 601) does is really open their eyes to the ways in which their research can get used. Its not that we'll just do this biochemistry research or whatever it may be -- it can be commercialized and used by society.”

Ingenuity 601’s sister program, Science to Society, focuses more on entrepreneurship than innovation, offering information on everything from tech transfer organizations to patent applications. The program is also supported by Ingenuity Enterprise and includes

an introductory and an advanced stream. Both classes are held at the Banff Centre over a weekend and host speakers from the province's commercialization agencies -- University Technologies International (UTI) in Calgary and TEC Edmonton -- as well as lawyers, government officials, patent experts, venture capitalists and other experts.

The advanced course gives students the tools to take the first step towards creating their company. "We try to get them to the point where they could finish a business plan fairly quickly," says Ted Heidrick, a long-time entrepreneur who leads the program.

Both courses have helped engineering student Justin Waghray broaden and deepen his knowledge of commercialization. The U of C undergraduate has set his sights on entrepreneurship -- once he's completed graduate school.

"It was a good wake up call that there other factors to do with research beyond just the technology."