

New Breast Cancer Diagnostic Tool Developed

by Jude Doble

Medical technology entrepreneur Cameron Piron (BASC 1998, Systems Design) has created a dedicated system for breast cancer screening and intervention, called the Vanguard System. Developed while Piron was working at Toronto's Sunnybrook Hospital during his graduate studies, this breast-specific magnetic resonance imaging (MRI) auxiliary table enables more patients to be scanned in a single day, helping physicians to quickly and accurately diagnose breast cancer while reducing patient wait times. This remarkably accurate and high-resolution device, designed, tested and manufactured by his company, Sentinelle Medical, will improve health outcomes for patients and reduce health care costs.

Piron's MRI work has drawn lots of attention and 2008 was a big year for him. He was awarded R&D Magazine's 2008 Innovator of the Year award for his creativity in design and development for technologically-significant products and the 2008 Premier's Catalyst Award as the Best Young Innovator of the Year—impressive accolades for the 34-year old entrepreneur. "I am certainly humbled by these awards," says Piron. "I feel like we are just getting started and to have such early recognition is highly motivating to both me and the entire team. It drives me to do bigger things."

As Sentinelle's founder and president, Piron is deeply involved with the research and development side of the company. "I love the process of defining a customer's problems, doing the research and delivering a solution," says Piron. "Every day at Sentinelle we get to work on the cutting edge of technology, developing and integrating new technologies while working collaboratively with researchers to create tools that help patients and their families. That is deeply satisfying work." Sentinelle has allowed him to marry his passion for medical science and mathematical problem solving to discover solutions to real-world problems that directly help people. "I couldn't imagine wanting to do anything else," he says.

Piron says the 95-person company is on a major growth spurt, doubling its staff every six months. They are growing into international markets, developing new partnerships and expanding their MRI work into prostate detection and screening. Piron is also establishing connections with UW researchers and is excited about applying UW's research excellence to medical imaging problems. He says, "It's a unique opportunity to engage with a pool of talented researchers from an early stage to help develop key health care solutions—a benefit to us all."

UW has had a strong influence on Piron's career. "Waterloo Engineering gave me a phenomenal set of tools I was able to apply to my passion: medicine," he says. And he wants those tools used in his company. This term, Sentinelle has hired nine co-op students and more than one third of their engineering department is staffed by Waterloo alumni.



[back to eWEAL cover »](#)