

The Innovation Factor: Innovative Minds

Innovation: Part II September 2002

By Emily Barker

Corinna Lathan's company, AnthroTronix, has created a toy that helps little kids who have cerebral palsy learn how to feed themselves. Her company is also developing a way for soldiers in combat to send messages or to control remote devices using wrist-worn computers. Same technology, vastly different uses. Lathan doesn't like to be boxed into doing just one thing.

That's one big reason why she's an entrepreneur now. In 1999 she took a leave of absence from teaching biomedical engineering at Catholic University in Washington, D.C., to launch AnthroTronix, based in College Park, Md. When she returned to her teaching post a year later, she was on the brink of getting tenure. Yet Lathan lasted just one month before handing in her resignation and heading back to AnthroTronix full-time.

"I never wanted to do research on one thing for the rest of my life, which tends to be the academic model," says the 34-year-old Lathan. "It's more fun as an entrepreneur because as a small company, I get to do more hands-on research. I don't have to worry about being the best in one narrow area and doing the same experiments over and over with a twist."

Still, it's Lathan's academic credentials and skills that made AnthroTronix possible. While earning a Ph.D. in neuroscience at MIT, Lathan worked at the school's Center for Space Research and became interested in how technology can enhance human performance. Then, while working at Catholic, she became inspired by a physician friend who worked with disabled kids. She got grants to explore medical applications of virtual-reality and telecommunications technology, then decided to start a company to develop a therapeutic toy.

"I was appalled at the lack of technology available for disabled kids," says Lathan. "We're taking advantage of the revolution in consumer electronics and communications, and that has not been done in the medical field."

Her progeny, CosmoBot<sup>™</sup>, is a short, metallic-colored humanoid that would be at home on The Jetsons. A child wearing an ordinary-looking glove and cap embedded with hidden sensors can raise her arms or waggle her head to make CosmoBot<sup>™</sup> do the same. CosmoBot<sup>™</sup> can also be programmed to speak to a child or respond to a child's voice. It's a whiz at Simon Says. The system records

a child's movements, making it possible to track progress over time, and it's Internet-enabled, allowing new software to be downloaded easily. Rehabilitation experts who are familiar with CosmoBot™ say it's a fun, painless way of getting kids with disabilities to concentrate on developing physical and language skills.

"It's not a matter of gee-whiz-bang technology. It's how you engage the mind. If you get the mind engaged, the body heals faster," says Dave Warner, a doctor who specializes in rehabilitative engineering.

Lathan is enjoying the diversity of projects she's pursuing outside academia. AnthroTronix, which now has eight employees, is developing gesture-controlled devices for the deadly serious game of warfare: for instance, sensor-equipped gloves that allow soldiers to send wireless communications to one another with hand motions. Lathan has won roughly \$1 million in grants and research-and-development contracts from the Defense Advanced Research Projects Agency and other federal agencies to fund those efforts as well as CosmoBot™, which is still in the prototype stage.

With an additional \$3 million in funding, Lathan estimates, CosmoBot™ could be on the market within a year. She aims to sell a professional version of CosmoBot™ to clinics and therapists for about \$2500 and eventually offer a simpler home model for \$500. Lathan has found that dealing with venture capitalists isn't so different from life in academia. In both there's pressure to specialize: the R&D side of the business often comes across to VCs as a lack of focus. But diversity is not something she wants to give up. "I love working with new technologies and new applications," she says. "It's the learning curve that turns me on."