

Robots get the kids' attention to open way for therapist

BY KAREN BUCKLEW

Daily Record Business Writer

Dr. Corinna Lathan is a rocket scientist who works with children.

Well, not exactly. As president and CEO of College Park-based AnthroTronix Inc., Lathan is using her degrees in aeronautics, astronautics and neuroscience to develop interactive, rehabilitative technologies for disabled children.

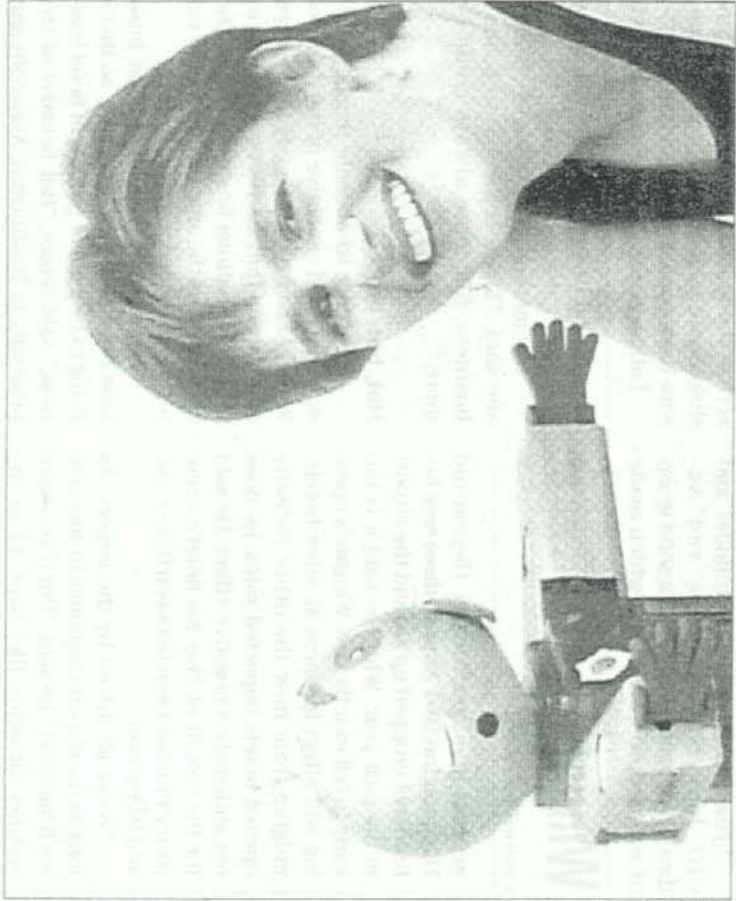
Specifically, Lathan — a human performance engineering specialist — is creating interactive robots to break down the barriers between the therapist and the disabled child and to help track a patient's progress along the difficult path to rehabilitation.

"I saw an opportunity to leverage the revolution that had been happening in consumer electronics and telecommunication," Lathan said of AnthroTronix's founding in 1999.

The company's goal is to "create a scaffolding technology [for] therapists and teachers to build on to reach different goals as kids reach different levels," she explained.

Most rehabilitative technology as of a few years ago was developed for the specific needs of children at various levels of progress in their therapy, Lathan said. AnthroTronix's idea was to create a sort of platform technology that could be useful to patients at various stages of rehabilitation.

The company started three years ago with three employees at the Technology Advancement Program at the University of Maryland — one of the many incubators in the state intended to nurture tech



FILE PHOTO
Dr. Corinna Lathan and friend. Lathan says her interactive robot gets the child's attention, motivates them and then lets the therapist move on with the therapy.

companies to adulthood.

Now, with eight full time employees, Lathan said the company could be just one year away from commercializing its first product, the CosmoBot.

That's if AnthroTronix can raise the \$3 million in funding it needs to finish its clinical testing and develop a manufacturable version of the product.

The company also is a finalist for two of the second annual Maryland Incubator Companies of the Year Awards — best biotech/life sciences company and most-promising tech transfer — sponsored by

the Maryland Technology Development Corp. and set to be announced June 12.

Lathan isn't doing too badly for herself, either — she recently was chosen as one of the world's 100 Top Young Innovators by Technology Review, known as the Massachusetts Institute of Technology's magazine of innovation.

Good future

Ed Sybert, TAP's manager, said he has expects good things from Lathan and AnthroTronix in the future.

"They look to be developing very

rapidly and positively, and I expect that will continue," Sybert said.

It may seem as though Lathan's educational background is a far cry from her current work in pediatric rehabilitation, but, she said, AnthroTronix is just a different application for the technology she has studied all her career.

It began when, in her Ph.D. thesis at MIT, Lathan examined the physiological aspects of space flight and, consequently, became interested in technology that enables astronauts to perform in space.

"I realized, when I started looking for a job, that this was called 'biomedical engineering,'" Lathan laughed.

She found work as an associate professor at the Catholic University of America and saw that her skills and ideas in biomedical engineering were just as useful for application in rehabilitation as they were in space flight.

"I think as an engineer, I'm interested in problem solving and the interesting problems that can be solved using technology," Lathan said. "They're all human performance problems — how can you enable an astronaut to walk in space and [enable] a person with a disability to complete an activity of daily living. I saw the greatest need in the area of disabilities."

At Catholic University, Lathan worked in the Home Care and Telerehabilitation Technologies Center and at the National Rehabilitation Hospital, studying the problems in rehabilitative therapy and how technology can intervene.

"Therapists spend an inordinate

SEE ROBOTS PAGE 15A

Robots

Continued from page 5A

amount of time just trying to get the child's attention and motivate them and then move on to therapy," Lathan said. "This interactive robot gets the child's attention, motivates them and then lets the therapist move on with the therapy."

CosmoBot and its predecessor, JesterBot, imitate the gestures and sounds made by the child, using sensors the patient wears — a process called gestural interface — and joy stick-type tools. The idea is to make a game out of tasks of daily living that often are difficult for disabled children.

Lathan decided to commercialize her discoveries through her own company after taking a look at the market.

"Twenty-five percent of our population has a disability," she said. "But the business community doesn't recognize that as a market. I saw a huge opportunity in rehabilitation."

And work at a private company, Lathan added, seemed to be the most effective way for her to get things done.

"I wanted to bring the technology to market, not sit in a lab and do research," she said.

Robot testing

The National Rehabilitation Hospital and a federal Small Business Innovation Research grant are funding development of AnthroTronix's robots. The company also supports itself through diverse research projects with organizations like the Department of Defense and the U.S. Army, exploring Lathan's gestural interface ideas for use in war.

The contract research is intended to fortify AnthroTronix as a company and allow it to successfully advance its own products, Lathan said.

"All of these [projects] have different goals and applications," she said. "We're essentially bootstrapping our product development so [when we reach] maturity we'll be a more lucrative investment and in a stronger position for investors," Lathan explained.

Director of Business Development Carl Pompei is working to best position the company and, right now, to find funding for clinical testing of the CosmoBot.

The product is in beta testing at Mt. Washington Pediatric Hospital in Baltimore and the Claremont Academy in Virginia, but still must be perfected before reaching the market.

Sybert said Lathan, co-founder and CIO Jack Maxwell Vice and AnthroTronix have always had a solid grasp of where they were going, which made

the company a good fit for TAP. "We saw a knowledge of the market space they were aiming at, and an ability to articulate a business model that would result in profitability," Sybert said of his first look at the company's business plan.

He said the University of Maryland College Park's resources made the campus an ideal location for AnthroTronix.

"There is a tremendous resource base of faculty knowledge, access to specialty labs and instruments and machine shops — all of the things that [need to] fall into place for a company like AnthroTronix to develop its product," Sybert said. "They can literally walk across the street and use the machine shop facilities and interact with faculty who have similar research interests."

Lathan already has developed and li-

Wingate

Continued from page 9A

general manager for the 15-year-old Hampton Inn BWI Airport, three new hotels have cropped up around the airport in the past year. While he said it is too early to tell exactly how Wingate's opening will affect business at other hotels, judging from how the other recently opened hotels impacted sales, he does not anticipate a negative effect. He said for the month of May his hotel's occupancy rate has been between 92 percent and 94 percent.

"We're all driven by the airport. As long as the airport continues to succeed, we'll succeed," he said. "But if you have another situation like Sept. 11 or the economy taking another nosedive, it's going to affect all of us."

Likewise, Cynthia Lynn, director of sales for Homewood Suites by the Hilton, said the addition of another hotel could actually benefit existing hotels because if there is more total room space in a given

enced some technology with university faculty. AnthroTronix itself has submitted one patent application on the CosmoBot technology, she said, which eventually should result in four patents.

For now, the company is comfortable in its quarters at TAP, further developing its products, working on contract research and looking for the funding it needs to bring CosmoBot to market.

"TAP was a great opportunity," Lathan said of the incubator, adding that the company has about a year and a half before its time there expires.

Sybert said AnthroTronix has the promise to become one of the incubator's successful graduates sometime soon.

"They look to be on track to do that," he said.

first Wingate to open in Maryland, it won't be the last, said Michael J. LaCosta, a spokesman for Parsippany, N.J.-based Wingate Inns International. A second location is set to open in Aberdeen the week of June 10, followed by locations in Hagerstown and Frederick.

He said the company recently began expanding to the East Coast and boasts 116 franchise-owned properties in the United States and Canada, of which the lion's share are located in the Southeast and Midwest.

"When you are in a development phase of new construction, the basic development cycle you'll see for any new construction hotel chain is typically in the order Southeast, Midwest, West Coast and finally the Northeast.

"The obvious reason is the Southeast and Midwest have more available land that's less expensive. On the West Coast and definitely in the Northeast, there is less land and it's much more expensive. The whole Northeast is an incredibly difficult market to tap into."

area, it will likely spur larger groups to consider it as a location.

"The market is hot and very strong," she said. "There is enough to sustain business, but there always could be more."

Hot, hot, hot

According to Melanie Suggs, president and chief executive of the Annapolis and Anne Arundel County Conference and Visitors Bureau, BWI's proximity to other destinations has been one of the main reasons the area has seen such extensive growth.

"This market is really a great business destination for one thing, so that's going to be a major portion of hotel business," said Suggs. "But because of the proximity to Washington, Annapolis and Baltimore you're able to capture travelers who are on their way to all of those destinations. It's really in the center of things, and the growth in the hotel industry is a very positive thing for Anne Arundel County."

While the Lanthicum location is the