

## White House honors Bers for work with hospitalized children

Marina Umaschi Bers left her home in La Plata, Argentina, in 1994 to begin a master's degree program in the United States, studying with Seymour Papert, Sherry Turkle and others who saw computers as a tool that children could employ to enrich their learning and creativity. She could hardly have imagined that 12 years later, she'd be at the White House, accepting from President George W. Bush the highest award the U.S. government gives to promising young researchers for her own groundbreaking work in the field.



Marina Bers with her virtual world, Zora © JOANIE TOBIN

Bers, an assistant professor in the Eliot-Pearson Department of Child Development, was one of 20 scientists to receive the Presidential Early Career Award for Scientists and Engineers (PECASE) at the White House on July 26.

"This award is, for me, a recognition of four different things," she said, "that women can do good science; that women can be spouses and mother of three little kids and still do good science; that Latin American immigrants to this country can make a career and contribute to their own discipline and society...even though our accent may never go away; and that the above can't be done alone...but with the help and support of many wonderful mentors, colleagues, students, friends and...of course... family."

The daughter of professor and Judge Héctor Umaschi, Bers was one of the first students enrolled in the Department of Communication Sciences at Buenos Aires University, where she became interested in the complexities of

human/computer interactions.

With the goal of studying at the MIT Media Lab, Bers completed her master's degree at Boston University and then was accepted to the doctoral program at the Massachusetts Institute of Technology.

Bers investigates how virtual worlds can help promote the health of hospitalized children. She created a language for children to program a robotic stuffed animal. "While I was working one summer at Mitsubishi, they had me use it with kids who were to go for heart transplants," she said.

For her doctoral thesis, she developed a virtual world called Zora, which allows children to create, chat, navigate and live in a three-dimensional virtual city, and populate these cities with personal artifacts, rooms and stories. Children can create characters to represent themselves and develop their profiles, which correspond to their heroes and villains, values and biographies. Users can interact and communicate in real time via a chat system.

"We implemented Zora at Children's Hospital in Boston for patients who had to undergo dialysis and lay for 12 hours without being able to speak to others in the same room," she said.

At Tufts, Bers and her students are researching whether these "identity construction environments" can help these young patients with their personal and social development as well as with their adherence to medical treatment and ability to manage strategies for coping.

"I am interested in studying what children can do with machines, more from the point of view of context, anthropology and technology," said Bers, who also holds an adjunct appointment in Tufts' Department of Computer Science. "Many things function in the laboratory, but not when you take them into [another] setting. This is because context is very powerful. For example, if the nurses felt that Zora would interfere with medical routine, they would not have used it. It had to integrate with the hospital."

She is currently expanding the work to children who have received organ transplants.