



Photo by Erica Benson

Young scientist travels to Israel

By Joel Cressman
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Elmhurst resident Amy Maduram went to Israel over the summer for a science program.

ELMHURST, IL - Amy Maduram has come a long way from inspecting ant hills in her backyard garden.

Not many doctors, let alone college freshmen, could say they have made a contribution to the fight against cancer. But the Elmhurst woman, fresh out of high school, spent a month recently assisting in cutting-edge research into B-Cell leukemia.

Maduram was one of 19 American students to qualify for the 39th annual Dr. Bessie F. Lawrence International Summer Science Institute at the Weizmann Institute of Science in Israel. A freshman at the University of Illinois at Chicago, Maduram earned a spot in the program by competing with more than 300 math and science standouts from across the country.

Altogether, 60 students from around the world were selected for a monthlong stay at the institute, where they were able to put their zeal for mathematics and sciences into action. Maduram, who's enrolled in UIC's MD/Ph.D program, chose cancer research.

"It really inspired me," she said. "It was the first time I saw that research could directly help a person. Before, I was in research that was kind of abstract. I now see medicine and research as two very compatible fields."

Maduram worked in a lab where scientists were investigating why certain proteins, CD74 and CD84, cause B-Cells to live longer than they should, eventually clumping in the spleen and bone marrow. They injected B-Cells into mice, extracted spleens and bone marrow from the rodents and examined them. Among their findings?

"B-Cell Leukemia is a phase-dependent disease, which is pretty surprising," Maduram said.

At first, the 18-year-old doesn't elaborate as to why that's surprising.

"Because," she continued, "now that we know that, we can have treatment for people in Stage 1 that more aggressively targets the spleen. For those in Stage 4, we can target the bone marrow."

Some of the team's findings, which are a little complex to put in laymen's terms, were published in August, Maduram said.

The program has got her thinking more seriously about pediatric oncology, she said.

"I'm one of the lucky few that hasn't (known someone with cancer)," she said. "But I've seen cancer patients, and I know that helping to ease the pain and working with children is something I look forward to."

The trip wasn't all work and no play. She spent a week touring the Judean desert, swimming in the Dead Sea and eating with Bedouins.

"I saw an Israel that was very different from what you see in the news," Maduram said. "(Before) I saw myself dodging bullets and hiding behind buildings. But it was a very beautiful country, and people were very friendly." Maduram always has had a penchant for left-brain activities, said her mother, Ida.

"She was always into science ever since she was very small. Everybody else was reading storybooks; she was reading information books," said Ida. "She always wanted to know how things worked."



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