



Trinity students help Hartford school kids manage their condition
With the Asthma Project, Trinity

Breathing Easy

BY CHRISTINE PALM · PHOTOS BY NICK LACY



Cristina Wheeler-Castillo '08 and John Oh '10 work with Hartford elementary school students to implement an asthma-management program.

“It was critical for our students to see firsthand that you can use science to solve people’s problems.”

In many of Hartford’s poorer neighborhoods, a new billboard looms above sidewalks, railroad tracks, and school playgrounds. It shows a small goldfish flopping on dry ground, and the message above the image belongs to Jesse, aged five: “When I have an asthma attack, I feel like a fish with no water.” Hartford’s asthma rates are among the highest in the nation, and now a group of Trinity students is doing something about it.

“As a future physician, I’m passionate about public health and preventing disease through education,” says Trinity junior Cristina Wheeler-Castillo, who, while in Tutorial College in the spring of her 2006 sophomore year, designed the Asthma Education Project. Working under the tutelage of Science

Center Director Alison Draper, and with the support of the Hartford Health and Human Services Department and the American Lung Association (A.L.A.), Wheeler-Castillo created the program as part of the Freshman Seminar so that Trinity science students would have firsthand experience with a health epidemic in their backyard.

Creating a connection between Trinity and the Hartford community

“The most important aspect of the Freshman Seminar for me has been mentoring Trinity students interested in science and connecting them to the Hartford community,” Wheeler-Castillo says. “As a junior, pre-med, and a neuroscience major, I can



Jon Quinn '10 at Hartford's Moylan Elementary School

pass on my experiences to the students and help them develop their academic and personal interests here at Trinity. Through the Asthma Project, I hoped not only to create a connection between Trinity and the Hartford community, but to make an impact on the lives of the elementary school children we've been working with.”

When Wheeler-Castillo first became aware that in Hartford, asthma affects an astonishing nine percent of school-aged

children (nearly double that of young people in wealthier suburbs) she began reading the research of Dr. Michelle Cloutier, an asthma specialist at Connecticut Children’s Medical Center, and Rita Kornblum, an environmental public health educator with the Hartford Health and Human Services Department. Instinctively, this highly motivated pre-med student knew she could do something constructive.

"I had learned about health inequalities in my classes and was disturbed to hear that many diseases disproportionately affect people of color and inner-city people," Wheeler-Castillo says. "I wanted to find a way to make a difference through education, so I began to look at programs of the A.L.A. I discovered that the A.L.A.'s 'Open Airways' program could be useful in training Trinity students to implement an asthma management curriculum in local elementary schools." Immediately, Wheeler-Castillo contacted A.L.A. Director of School Health Programs Angie Testa to refine the program, and by the fall of that same year, 10 Trinity students were in two local elementary schools, Moylan and MacDonough.

Learning to manage asthma

The Open Airways program is interactive, and uses role-playing and games to help students in grades three, four, and five learn to manage their condition by understanding what asthma is, how to recognize the symptoms, knowing "triggers" (at home and in school), becoming alert to warning signs, understanding their medications and how to take them, and finding ways to stay active while living with asthma.

According to Science Center Director Alison Draper, who was given a

2005 Mellon Foundation grant as part of Trinity's Urban/Global Initiative, asthma is skyrocketing among the city's Peruvian population. In May, some of these funds were used to take a group of Trinity students to Peru to research the disease there. Draper says that the Trinity students were encouraged to develop their own mini-projects on asthma, and among the creative solutions they came up with are a bilingual asthma Web site for kids, a documentary film, and an asthma coloring book.

"More important than studying the problem is finding educational interventions and ways to ameliorate it," Draper says. "It was critical for our students to see firsthand that you can use science to solve people's problems."

The A.L.A.'s Angie Testa says that in each school, the nurse identifies 10 to 15 of the most critical asthma cases for participation in the six-session Open Airways program. Typically, the school nurses themselves administer the program, but increasingly, according to Testa, they are called away to manage other problems ranging from routine vision screening to more urgent medical needs.

"Rather than have the nurses leave their offices for an hour to run the program, the Trinity students are able to handle it, which frees the nurses up," says Testa. "As a lot of

the students are pre-med, they're highly motivated to do this, and Cristina did a great job getting her colleagues at the College invested. Everyone, including the nurses, was very pleased with the outcome."

Perhaps no one was more pleased than Wheeler-Castillo herself.

"I discovered that teaching any group of eight-to-11-year-olds is difficult when you can't control them: it was challenging when the kids would run around or start talking out of turn," she recalls. "But despite one or two of these episodes, the final review day and party we had was very rewarding for me because the elementary school children had retained the information we were teaching them! They could identify asthma triggers, what they should do if they experience symptoms, whom to talk to about their asthma, and how to make up school work if they miss school for asthma. Another very satisfying moment for me was debriefing at the end of last semester with the Trinity students and listening to everything they had learned about their teaching experience. They thought that their teaching had made a difference. Although this was a class assignment, I felt like the students really took ownership of the project."

Students working on the Asthma Project include:

Val Barbier '10
Stanita Clark '10
Brittany Gay '10
Ghazy Hernandez '10
John Oh '10
Drew O'Savio '10
Jon Quinn '10
Diandra Smith '10
Connie Hernandez '10
Corazon Irizzary '09
Cristina Wheeler-Castillo '08

Hartford schools that partnered with Trinity students on the project include Moylan Elementary School, Nurse Maria Martinez; McDonough Elementary School, Nurse Maxine Victor; and Angie Testa from the A.L.A., who trained the Trinity students in the Open Airways program and helped in setting up the school interaction.