



Montauk Nets Science Award

By Christine Sampson | June 23, 2016 – 4:28pm

What was expected to be a routine eighth-grade science fair at the Montauk School ended with a third-place finish for Samantha Prince in a New York State Science Congress competition earlier this month thanks to a partnership with Concerned Citizens of Montauk.

Her project, “Montauk Waters — The Effect of Salinity on the Growth of Enterococcus,” had won high honors and second place in the earth, space, and energy division of a Long Island Science Congress competition in May, which qualified her for the state round. It’s the second year Samantha has performed well in the competition; she also received high honors as a seventh grader.

Enterococcus is a bacteria that has been linked to health problems such as urinary tract infections, diverticulitis, and meningitis. C.C.O.M., through its four-year-old water-testing program, had previously found the bacteria in several Montauk waterways. Joe Malave, Samantha’s science teacher and head of the Montauk School’s research program, connected his student with C.C.O.M. when she expressed interest in a chemistry-related project.

“I liked the idea of tying projects into community need . . . and Sam’s project is sort of the result of this synergy” between the school and C.C.O.M., Mr. Malave said.

Jessica James, C.C.O.M.’s vice president and outreach committee co-chairwoman, who had worked with the Montauk School’s greenhouse and the science fair, taught Samantha how to take water samples and perform the tests.

“Samantha is a young woman who really loves to use her brain,” Ms. James said. “She is analytical, curious, diligent, and a really quick study. I never had to explain anything

twice. The work that she did was really pretty painstaking and required repeating many procedures over and over. She never flagged in her dedication or enthusiasm.”

Samantha tested waters in East Creek, West Creek, Surfside Place Creek, and Little Reed Pond Creek, all of which are near Lake Montauk. She also tested the outfall pipe at the mobile home park, which does not flow into the lake. “What I was able to prove,” she said, “was that the growth of enterococcus increases as salinity increases, so we have to figure out how to keep runoff from cesspools and ponds containing enterococcus out of Lake Montauk, where it would flourish.” Even though she is graduating from the Montauk School, she hopes to continue her work.

“What I want to do now is try to figure out how to either divert the runoff or install biological filters,” she said. “I would also like to apply for a grant and even fix cesspool systems so bacteria from them could not get into Lake Montauk, and then the beaches won’t have to be closed.”