Working to make the **Return Unused Medicines** event a success are: from left, bottom row, Susan Eckert (aide to Suffolk Co. Legislator Lynne Nowick), Jeannene **Strianse (Stony Brook University Hospital's Director of Pharmacy)**, **Carol Malley (Stony Brook University Medical** Center), Larissa Graham (NYSG, Long Island Sound outreach coordinator and event committee chair), Barbara Branca (NYSG communications manager); top row: **Jeffrey Carter (SBU Environmental Health and** Safety), Police Officer **Robert Jones, Suffolk Co.** Legislator Lynne Nowick, **Yvonne Spreckels** (Director Community **Relations, Stony Brook** University Hospital), and **Stony Brook University Police Officer Edward** Lazzaro. Photo by Paul C. Focazio



Associate Pharmacy Director Edmund Hayes identifies some of the 88,000 pills collected at the event. Photo by Barbara A. Branca



RETURN UNWANTED MEDICINES EVENT A SUCCESS

A fter months of planning, everything and everyone was in place: the greeters at the door of the Setauket Firehouse, the volunteer pharmacists, the security and disposal teams. And a few minutes before the 10 am start, the first participant checked in his bag of unwanted and expired medications, kicking off the largest one-day collection of its kind on Long Island.

Why hold a *Return Unwanted Medicines* event? Conventional wisdom of the past has been to flush leftover medicine down the toilet. But that action only exacerbates the growing problem of pharmaceuticals in the nation's waterways. Says **Dr. James Ammerman**, Director of New York Sea Grant, the lead organization for the event, "Drugs and other synthetic chemicals are increasingly found in surface and groundwater sources, and can contaminate drinking water supplies and disrupt natural ecosystem processes." According to a 2008 Associated Press national investigative team, pharmaceutical drugs - including antibiotics, mood stabilizers, and sex hormones - have been found in the drinking water of over 41 million Americans.

Suffolk County Legislator Lynne Nowick had growing concerns about the potential for pharmaceuticals

entering Long Island's waterways. Said Legislator Nowick, "About a year and half ago, I reached out to hospital officials throughout Suffolk County with the idea of implementing a program to take back unwanted and expired medicines from the community. The intent is to reduce human and environmental risk by protecting the water supply as medications flushed down the drain can seep into our groundwater."

Stemming from that concern evolved a concerted effort to plan a one-day collection event by several key organizations: New York Sea Grant, EPA's Long Island Sound Study, Stony Brook University, Stony Brook University Hospital, Suffolk County Legislator Lynne C. Nowick's office, Triumvirate Environmental, Inc., NYS Department of Environmental Conservation, Suffolk County Department of Health Services and Suffolk County Water Authority.

The all day event, held in conjunction with Stony Brook University's annual EarthStock, was held at the nearby Setauket Firehouse. Event chair **Larissa Graham** noted that there were 140 participants who brought with them an astonishing number of unused medications. "At the end of the day," according to Stony Brook University Hospital's Director of Pharmacy **Jeannene Strianse**, "approximately 88,000 pills had

Watch

been collected as well as nearly 4 liters of liquids and 8 kilograms of powder." What happened to them? Triumvirate Environmental, Inc. of Astoria, NY, expertly packaged the 500 pounds of waste into Department of Transportation (DOT) approved containers for transport to a facility for safe and controlled incineration. "We want to thank Triumvirate for the great job and for donating their services for this important first-time event in this area," said **Jeffrey Carter** of Stony Brook University's Department of Environmental Health and Safety.

But the real heroes of the day were the pharmacists. As people walked in with their medicines, volunteers obscured their names on prescription bottles and brought bags of medications to the pharmacists' tables. There, the pills were laboriously counted and identified. What happened when pills were loose and not identified? Making an ID of pills fell to pharmacy resident **Samuel Chin** who spent the day using the Internet to classify them. A caution to anyone who would like to participate in this kind of event...always keep medicines in their original containers!

People returned prescription and over-the-counter drugs, uncontrolled as well as controlled substances. **Scott Law**, Director of Stony Brook University Police's East Campus Operations, and his associates made sure that such substances were properly handled.

Throughout the day, a parade of Long Islanders came with their medicines: a couple celebrating their 50th anniversary, young families, people with pets and their unused medicines. With the help of local papers, radio stations and magazines, people came from up to 50 miles away. Television cameras whirred to document participants and local elected officials like Legislator Nowick as well as NYS Assemblyman **Steve Englebright** and Suffolk County Legislator **Vivian Viloria-Fisher**.

In an exit survey, about a third of the participants said that they had flushed unwanted drugs in the past and 100% said they would come to this kind of event again. Since the event, several municipalities and other interested groups have asked how they could hold a similar event. So look for events that might be coming up in your area and until that time, don't flush unwanted pharmaceuticals. Check **www.nyseagrant.org** for more information.

Pictured from left are volunteer pharmacists from Stony Brook Medical Center: *Caesar Alaienia*, (Pharmacy Resident), *Alireza Hayatshahi*, (Pharmacy Resident), *Melinda Monteforte*, (Infectious Diseases Specialist), *Madhuwanti Chhettry*, (Oncology Pharmacist), *Jeannene Strianse*, (Director of Pharmacy), and *Edmund Hayes* (Associate Pharmacy Director). Photo by Barbara A. Branca

When pharmaceuticals are flushed, they enter household septic systems or sewage treatment plants and can make their way into our waterways or even water supply. Follow the diagram to see how. Information courtesy of *Dr. Henry Bokuniewicz* and SBU graduate student *Ruth Coffey.* Illustration by Anita Kusick



- Barbara A. Branca

Groundwater is water that is stored in the pore spaces of the ground and is replenished by water percolating through the unsaturated soil above. This includes rainwater and other sources. Half of the United States get drinking water from groundwater.