

January 11-17, 2013

St. Raymond participates in internship program

St. Raymond seniors Andre Stephenson and Sebastian Yumiseba recently participated in a Phage Phinders internship at the Price Research Center, which is part of the Albert Einstein Medical Center. The seniors gained invaluable experience that they have been able to apply to their work as seniors this year and that they will take with them when they go off to college next year.

The program was headed by Dr. Bill Jacobs, who has devoted his life to finding a cure for Tuberculosis by finding phages. Phages are microorganisms that infect bacteria and reproduce inside the bacteria, similar to the way the HIV virus works. Tuberculosis is one of the leading causes of death in the world, infecting one-third of the world's popula-

tion. Dr. Jacobs set up his own lab at Albert Einstein in 1987 and the first phage he discovered called the "Bronx Bomber" has now been featured in 13 scientific publications.

Andre and Sebastian were among eleven high school students from New York to participate in this program.

Dr. Jacobs and lab team member Oren Mayer helped these students understand the wonders of genetics and phages through hands-on projects and experiential learning.

The seniors were taught basic research and lab procedures and then were exposed to more difficult procedures including how to find phages, making a lawn of bacteria, calculating the numbers of bacteria to phage and finding colony forming units.

"The highlight of this experience was finding phages from places such as our own backyard, from the rivers, parks and the Bronx Zoo," Andre said. "We got to learn how they identify new phages, resistance to phages, how to map them, and about mutations."

Students in the program spent six weeks following the footsteps of lab workers, learning to do exactly as they did. "The experience we gained from this has increased our interest in the medical field and helped us focus on a major for college," Sebastian said.

Both Andre and Sebastian live in the Bronx. After graduating from St. Raymond in May 2013, Andre hopes to attend Boston University while Sebastian would like to go to Amherst College. Both



St. Raymond seniors (l-r) Sebastian Yumiseba and Andre Stephenson.

students are interested in obtaining a degree in medicine. In recent years, St. Raymond students have also participated in internships through the Einstein Enrichment Program and the ACE Mentor Program.