



SCIRE and VALBHS Support Program for Discovery, Innovation, and Advancement for High School Students of Our Local Community

By Daniel Donchev

The SCIRE Summer Scholars Research Program is an eight week VA Long Beach Healthcare System (VALBHS) research laboratory experience for high school students. The program's objective is to stimulate high school students' interest in a career of Research Science.

I had the absolute pleasure of being selected to be a participant in this year's program. Never having done something like this before, I presumed that I would sit in on lectures and observe researchers in action. I did not anticipate that I would be the one to perform experiments and to engage in hands-on laboratory work.

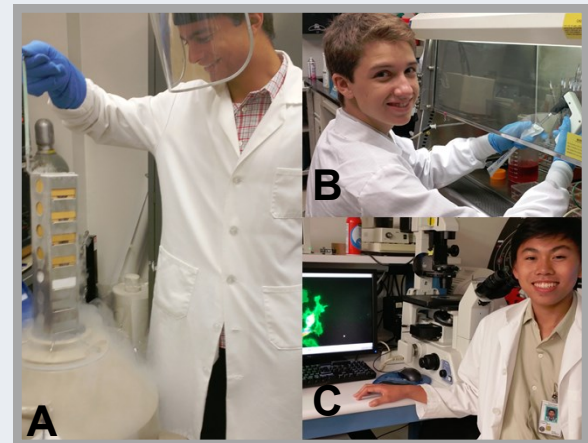
Scholars were assigned to different projects and, during their breaks, were eager to share what had been accomplished in the days before. Throughout the program, they learned from each other. Because of the immense focus and precision involved, the two months flew by rapidly. My objective was to observe strategies for Gastric-Specific Gene Editing & Gene Expression with the guidance of my Principal Investigator, Dr. Jones. By the end of the program, I was well-versed in various procedures including the Polymerase Chain Reaction (PCR) and gel electrophoresis.

After two laborious months, filled with discoveries and cooperation, the three teenage scholars were given the task of presenting their newly acquired research alongside a distinguished Researcher, Dr. Moti L. Kashyap, to an audience composed of VA doctors, faculty members, and research staff. Each student had ten minutes to tour the gathered spectators through their summer journey in the laboratory and to share their understanding of complex concepts and techniques.

It is an honor to have had such an incredible opportunity and we would like to thank Mr. Neil Hoa (the program coordinator), the participating investigators (Dr. Ahluwalia, Dr. Jadus, and Dr. Jones), as well as everyone else who shared their expertise with us and who always assisted us in times of confusion and uncertainty. Coming out of this program, we have a much better understanding of the every day life of a researcher and are inspired to pursue our own careers as Research Scientists.



From Left to Right: Dr. Chris Reist (ACOS), Dr. Martin Jadus, Daniel Donchev, Timothy Schaeffer, Christian Lapitan, and Dr. Moti L. Kashyap. (2015 Summer Scholars Research Program)



(A) Daniel Donchev is safely handling cryogenic cells stored in liquid nitrogen (-195.79 °C) with personal protective equipment (PPE). (B) Timothy Schaeffer is feeding cancer cells using aseptic technique. (C) Christian Lapitan is performing fluorescence microscopy.



From Left to Right: Nathan Vo, John Andrews, Mai Le, Valerie Sisino, Florence Butler, Michael Magdangal, Audrey Poole-Brown. (2014 Summer Scholars Research Program)