CWSF 2011 - Toronto, Ontario

Clarence Lam

Can Photons Make A Good Bandage?

Challenge: Innovation
Category: Intermediate
Region: Toronto
City: Markham, ON
School: Marc Garneau Collegiate
Abstract: Photons are a form of energy. Living organisms require energy to repair wounds. It is hypothesized that photons promote wound healing in living organisms. A prototype device has been designed to supply photons to pre-defined cuts in plants using both infrared and green lights. Preliminary data tend to support the hypothesis that absorption of photons by living cells at the cut site stimulates wound healing.

Biography

Clarence Lam is a Grade 9 student in the TOPS Program at Marc Garneau Collegiate Institute. Besides his great enthusiasm in math and science, he is also into music and arts. In fact, Clarence graduated from the Integrated Arts Program at Baythorn Public School with numerous awards won including the Highest Academic Achievement Award, Citizenship Award, and the Principal's Award. Outside school, Clarence actively participates in community work and extracurricular activities involving science fair, music festivals, and charity event set-ups. He helped tutored math and music at a local community center and also taught an elementary class for a Scientist-in-School workshop. In addition, Clarence has been learning piano for years and is currently completing the Royal Conservatory Music ARCT Performer's level. Some of Clarence's accomplishments to-date include: Gold Medal winner at TSTF 2011, CWSF Participation Award 2011, and several Gold and Silver Awards won at both the Davenport and Kiwanis Music Festivals for the Piano Solo Competition. Clarence intends to study life science and medicine in university. His career plan is to be able to contribute to the well-being of the community by helping the people who are in need through his skills in science, arts and music.