

CWSF 2010 - Peterborough, Ontario



Rohan Bhalla

Photodynamic Therapy: The Golden Cure for Cancer

Division: Earth & Environmental Sciences

Category: Senior

Region: Peel

City: Mississauga, ON

School: Mentor College

Abstract: One study in Photodynamic Therapy (PDT) is investigating the applications of nanotechnology. Gold nanoparticles are being studied for their properties, which could potentially improve PDT. They are non-toxic, can penetrate deep into tissue, and their surface can be functionalized for photosensitizers. This study attaches a bacteriochlorin photosensitizer to gold nanoparticles, which will be characterized and tested for PDT efficacy through in vitro studies.

Biography

I am very enthusiastic about sports and I have been an active member of my high school's volleyball and track and field team for four years. For the past two years I was the captain of the track and field team. I am also interested in music and theatre arts. I have participated in the performing arts such as acting and singing in 6 musical productions and playing the alto saxophone in numerous band performances. This past summer I worked as an intern in Roswell Park Cancer Institute's summer program. I was one of 26 aspiring seniors to participate in this internship. For seven weeks I was a part of the renowned team at Roswell Park, contributing my efforts to the universal goal of conquering cancer. I have participated for four years in my high school's annual culture show as a dancer as well as a head of a pavilion. Student government is also an interest of mine. As class representative for a year, I was recently elected this year for the position of student council Vice President. I also volunteer my time at Trillium Hospital every week and have been an active volunteer there for the past 3 years.

Youth Science Canada
PO Box 297
Pickering ON L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040