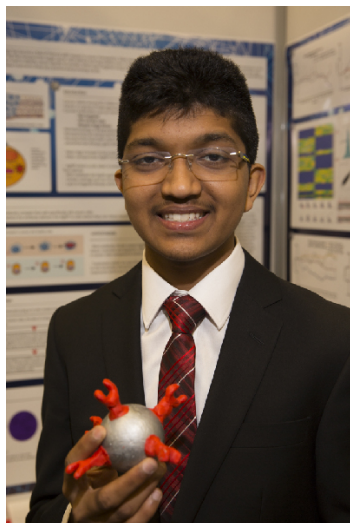


## CWSF 2016 - Montreal, Quebec



### Bhavya Mohan

#### The Silver Bullet: A Novel Antibody-AgNP Complex for Cancer Treatment

**Challenge:** Health

**Category:** Junior

**Region:** Ottawa

**City:** Ottawa, ON

**School:** Earl of March S.S.

**Abstract:** Silver nanoparticles have been demonstrated to kill cancer cells, however, the biggest limitation in nanoparticle-therapy is ensuring that nanoparticles target cancer cells without harming healthy ones. In this project, new mechanisms are explored to target silver nanoparticles to overcome this challenge. Bioinformatic tools were used to identify cancer-specific-biomarkers which were targeted using antibody conjugation methods. These treatments show very exciting and promising results.

#### Biography

I am Bhavya Mohan and a Grade 7 student at Earl of March, Ottawa. Whether it is designing a treatment for cancer or building "stuff" with lego, as a kid I have always been creative. This trait has allowed me to explore many different topics which introduced me to Science. The fact that Cancer remains a problem and that Science can solve the toughest problems motivated me and 2 years ago I began to do cancer research at Dr. Willmore's lab. I am very fortunate to have been able to do research at a young age. Apart from science, I enjoy playing music. I also like computers which I was able to incorporate into my project and learned bioinformatics and learnt the program "R studio" by myself. I enjoy leadership roles as I am part of my school's Student Council and I had also successfully secured sponsorship from Deloitte on my own. I plan to continue nanoparticle research by exploring new targeting mechanisms. For me, my motivation is creativity though my recommendation for future scientists would be to look at your interests, find a problem and then just research.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000