

# CWSF 2015 - Fredericton, New Brunswick



## Aisha Parven

### Combining Gold Nanoparticles with Indium and Panitumumab to Inhibit Cancer

**Challenge:** Innovation

**Category:** Senior

**Region:** Toronto

**City:** Toronto, ON

**School:** Notre Dame C.S.S.

**Abstract:** Gold nanoparticles were conjugated with indium and panitumumab, and were tested on the breast cancer cell line MDA-MB-468. After being treated for a week, the cancer being treated with indium decreased by 52% and the panitumumab decreased by 30%. This method is more efficient and can be used for chemo treatment, since it could kill 67% of the tumor within a week and half.

#### Biography

My name is Aisha Parven, and I am a grade 11 student at Notre Dame Catholic Secondary School. I enjoy reading, drawing doodles at the bottom of my notes and questioning scientific theories. I am an active member in my school community. I founded the DECA chapter at my school this year. I have been participating at the Catholic Students United Nations Assembly since 2012, and I am the builder and designer for the Cardboard Boat Team at my school since 2012. I also had my art work published in the Wings of Hope official book in 2014. I have been participating at the Toronto Science Fair for the past two years, with projects involving the study of the breast cancer cell line, MDA MB 468. My chemistry teacher, Dr. Ayyavoo, encouraged me to move forward with my research regarding the MDA MB 468 cell line. I was inspired by my peers, my teachers and the world of science to do this project. I would like to study this cancer cell line in more depth in order to get an even better understanding. I would advise other students, to never underestimate themselves!

#### Awards

#### Value

The Manning Innovation Achievement Award - Senior Sponsor: Ernest C. Manning Awards Foundation	\$500
Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick	\$2 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$11 500</b>