

# CWSF 2009 - Winnipeg, Manitoba



## Sofia Oke, Noorain Shethwala

### Chemotherapy Drugs: Less is More

**Division:** Biotechnology / None

**Category:** Senior

**Region:** Waterloo-Wellington

**City:** Guelph, ON

**School:** Centennial Collegiate & Vocational Institute

**Abstract:** Our experiment examined the use of BAX tumour suppressor gene and adenovirus as chemosensitizers, to induce apoptosis in colon cancer cells, thereby reducing the dosage of chemotherapy drug given to patients. We were able to conclude that the transfection of pEGFP-BAX worked best with the BAX (-/-) genotype, and the Adenovirus was effective in the (+/-) genotype. Thus, chemotherapy side effects can be lowered.

#### Biographies

Sofia - My name is Sofia Oke, and I am a grade 11 student at Centennial C. V. I Guelph. At WWSEF, my partner Noorain and I recieved Gold in Senior Biotech, Best of Category as well as an Award of Merit. Some of the many organizations I have been fortunate enough to volunteer with are Habitat for Humanity, Canadian Blood Services, St. Joseph's Hospital and the Canadian Red Cross. In my spare time I am a passionate member of Global Outreach, my school's humanitarian club, and the Red Cross Youth International Action Group. I am a Prefect (student leader) as well as a co-founding member of GAP, a new genocide awareness club at my school. Another cl...

Noorain - "Leadership helps in unlocking people's potential"?Noorain Shethwala  
Throughout my last three years at Centennial CVI I have done all that is possible to unlock my potential. Being an extremely curious child, I vied to join a lot of clubs and groups in order to expose myself to as many different experiences as I could. In order to fully gain an understanding of who I am I dabbled in many different areas. I explored the wonderful world of journalism by writing regularly for the city newspaper. I have participated in the Science Fair for two years in a row. I have also experiences different business competitions such as DECA and Skills ...

#### Awards

#### Value

Petro-Canada Peer Innovation Award - Senior - Ontario South Sponsor: Petro-Canada	\$200
Honourable Mention - Biotechnology & Pharmaceutical Sciences Senior Sponsor: Youth Science Canada	\$100
Total	\$300