

CWSF 2012 - Charlottetown, Prince Edward Island



Ankita Saxena

Understand-ING Replicative Senescence

Challenge: Health

Category: Intermediate

Region: Calgary Youth

City: Calgary, AB

School: Westmount Charter School

Abstract: Cellular Senescence, is in many ways a tumor suppressor mechanism- cells stay metabolically active, but cannot proliferate. ING1a, a protein, functions in replicative senescence by inducing the formation of Senescence Associated Hetrochromatin Foci (SAHF). In this study, I conducted experiments to see which domains of ING1a are needed for SAHF formation along with bioinformatics analysis to determine possible interacting partners of ING1a.

Biography

Hi! I'm Ankita Saxena and I love to read, play tennis, talk politics and occasionally try my hand at photography. I moved from New York to Calgary five months ago and have really grown to like and appreciate Canada (but perhaps not the cold). Back there, I used to be on the staff of my school newspaper and won an award from the state press association for a news article. I was also involved in the Future Business Leaders, Science Olympiad and especially Model UN clubs. I became interested in science research after studying biotechnology and biochemistry in my grade 9 biology class and it all went from there! I chose to work on my project because senescence is an important tumor suppressor mechanism. By better understanding it, we can understand how cancerous cells circumvent this barrier. As far as future plans go, I'd like to study molecular biology for my undergraduate degree and then enter a MD-PhD program so I can both see patients and work on basic science research in cancer or immunology.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 700