

CWSF 2014 - Windsor, Ontario



Joy Wang, Kendra Fu

Targeting Glycolysis in Prostate Cancer Using ASO against MCT4

Challenge: Health

Category: Intermediate

Region: Greater Vancouver

City: Vancouver, BC

School: York House School

Abstract: Prostate cancer is the second most commonly diagnosed cancer in men, and there is currently little effective therapy. The protein MCT4, which pumps acid out of the cell to prosper, was targeted. We used different ASOs, synthetic DNA strands that complement genetic sequences, as treatment. We hoped to identify an ASO that decreases MCT4 levels, cause a decrease in lactate generation, ultimately inhibiting cancer growth.

Biographies

Joy - Hello! My name is Joy Wang, and I am a student attending York House School in Vancouver, BC. Throughout my life, I have always loved fine arts, sports, and science. I hope to have a career in the science field in the future. I have been aware of the complexity of cancer since a very young age. Prostate cancer, in particular, is one of the most common cancers in men. Furthermore, this is a very aggressive type of cancer where there is currently no effective curative therapy. Since I wanted to experience being a research student, I decided to base my project on something that interested me and also allowed me to get lab experience: prostate can...

Kendra - My name is Kendra Fu, and I'm in grade 10 at York House School, Vancouver, BC. As strange as this sounds, I quite enjoy school and simply being there. I take the most pleasure in making friends, both short- and long-term ones. Art (visual?especially drawing, painting, sculpting), reading, music making (piano, alto sax, vocal), and volunteering locally are some other interests of mine. Since I was young, I've been indecisive to no ends. You name it, I've dreamed of careers in everything. But hey, who knows. I have, though, always been attracted to science and technology. Still, even now, I don't know which area of focus I want to go ...

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100

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