

## CWSF 2017 - Regina, Saskatchewan



### **Nuclei Oxidation Therapy: A New Take on Localized Antineoplastics**

**Challenge:** Health

**Category:** Intermediate

**Region:**

**City:** ,

**School:**

**Abstract:** The focus of my project is to determine whether the nucleus of a tumor cell can be oxidized with a hydrogen peroxide solution delivered via a nanoparticle delivery system. Theoretically, the excessive oxidation will inhibit reproduction of the tumor cell. In conclusion, further research will be needed to determine whether an encapsulated oxidant can penetrate the tumor cell's natural antioxidant defence mechanism.

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