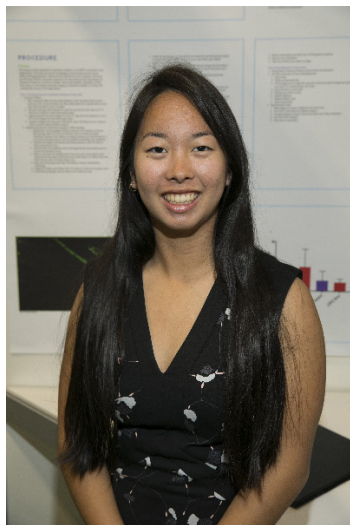


## CWSF 2017 - Regina, Saskatchewan



### Katherine van Kampen

#### Slowing Neuronal Degeneration

**Challenge:** Health

**Category:** Senior

**Region:** Central Okanagan

**City:** Kelowna, BC

**School:** Aberdeen Hall Preparatory School

**Abstract:** Calcium (Ca<sup>2+</sup>) influx plays an important role in cell death when concentration reaches toxic levels. At normal levels, calcium is required for regular biological function. However, scientific reports show that calcium enters the cell during degeneration. If we were to stop the wave of calcium that enters the cell before apoptosis, we could potentially slow the degeneration of the cells.

#### Biography

Katie van Kampen is graduating this year and intends to pursue a career in paediatric surgery. Katie has a black belt in Kung Fu and has also won numerous awards at science fairs over the past years. She enjoys playing piano, guitar, and drums, and is a T.A. for drama 7/8. She is a massive nerd and goes to scientific lectures for fun. She also works at UBCO in the Barker biochemical lab where she gets to play with corrosive acids, flammable liquids and dead mice.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>