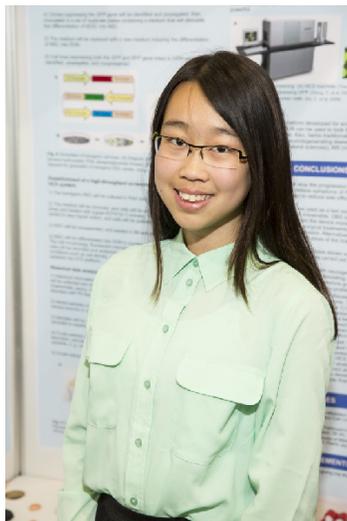


# CWSF 2015 - Fredericton, New Brunswick



## Kate He

### Can Parkinson's Disease Be Cured through Neurogenesis?

**Challenge:** Health

**Category:** Intermediate

**Region:** Halifax

**City:** Halifax, NS

**School:** Park West School

**Abstract:** Parkinson's disease (PD) is a severe incurable neurodegenerating-movement-disorder. My hypothesis is that PD can be cured through neurogenesis. This study reviewed recent advancements in PD drug treatments and neurogenesis. Furthermore, I have developed an innovative concept to screen for novel PD curing drugs from evolutionary, natural compounds from traditional medicine, utilizing advanced extraction techniques, and biotechnology including stem cells, fluorescent markers, high content screening etc.

#### Biography

My name is Kate, and I am a grade 9 student at Park West School in Halifax, NS. This is my first science fair. Academics are very important to be because I would like to go to an honorable university to study medicine. My favorite subjects are math, science, English, social studies, phys. ed., and art. In school, I am part of the band, orchestra, badminton team, chess club, and math club. Outside of school, I play chess and piano, swim, and dance at the Maritime Dance Academy. I also play violin in the Halifax School Symphony Orchestra, and in the Honour Violin performance group. Some of my hobbies include reading, drawing and painting. I volunteer at a local YMCA to tutor immigrants. I decided to study treatments and possible cures for Parkinson's disease because it is one 2nd most common neurodegenerating disorder yet there is no cure. I have developed a concept to select drugs that could possibly cure Parkinson's disease, and plan to follow through as soon as I find the resources. My dream is to be able to find a cure for Parkinson's disease. My advice to other students is never give up! There's always a way!

#### 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