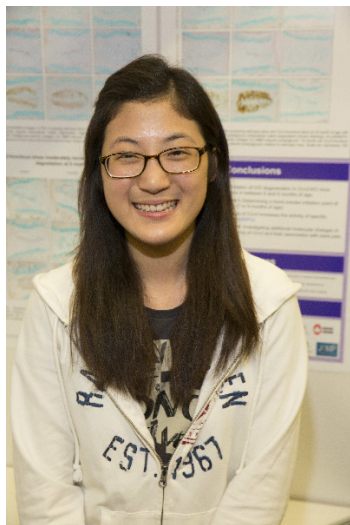


CWSF 2014 - Windsor, Ontario



SeonHo Jang

Progression of Intervertebral Disc Degeneration in Mice Lacking Expression of CCN

Challenge: Health

Category: Senior

Region: Thames Valley

City: London, ON

School: A.B. Lucas S.S.

Abstract: Intervertebral disc (IVD) degeneration is a major cause of back pain, and CCN2 proteins play a critical role in IVD development and aging. Previous study has proven that the loss of CCN2 in the nucleus pulposus results in the accelerated degeneration. My project's goal was to determine the molecular mechanism of the accelerated degeneration, and to determine the initiation point of the tissue degeneration.

Biography

I got the inspiration for my project from my dad. My dad has a spine disease, and seeing the consequences of the spine disease, I was interested in getting to know more about it. I would like to continue in determining the mechanism of intervertebral disc degeneration until molecular treatment for the disease is developed. Participating in science fair opens up so many different opportunities for everyone, and disregarding the results, it is a good experience overall. Having enthusiasm is the most important point, and results will correspond to the commitment that was put into the project.

Awards

Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	\$300
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$8 800