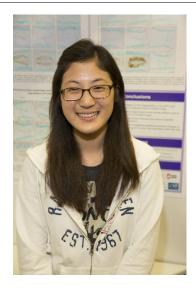




CWSF 2014 - Windsor, Ontario



SeonHo Jang

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



