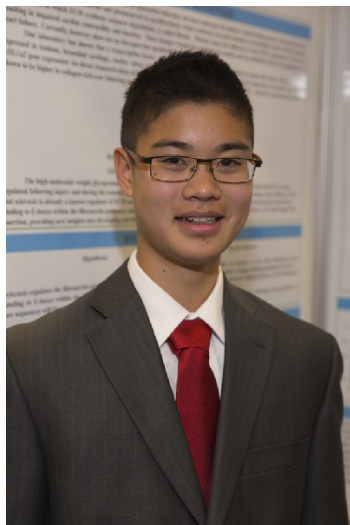


# CWSF 2016 - Montreal, Quebec



## Justin Xi-Yuan Lin

### Regulation of Fibronectin Gene Expression in Fibroblasts by Scleraxis

**Challenge:** Health

**Category:** Senior

**Region:** Manitoba Schools Science Symposium

**City:** Winnipeg, MB

**School:** St. John's Ravenscourt School

**Abstract:** Cardiac fibrosis is the over-production of extracellular matrix, and poses a significant threat to the health of many individuals worldwide, yet lacks specific therapies. We investigated the role of the transcription factor scleraxis in mediating production of fibronectin, a key constituent of this matrix. We found that scleraxis is both sufficient and necessary for fibronectin expression, providing rationale for anti-fibrotic strategies that target scleraxis function.

#### Biography

My name is Justin Lin and I am in Grade 11 at SJR school in Winnipeg, Manitoba. My hobbies include playing piano and debating. I also enjoy playing sports such as soccer, basketball and ultimate frisbee. I hope to pursue a career in medicine. This will be my second time at CWSF! My project this year further elucidated the role of the transcription factor scleraxis in pathological cardiac fibrosis. Specifically, scleraxis was revealed to be a critical regulator of a protein called fibronectin. These discoveries will ultimately bring us closer and closer to developing a drug to target cardiac fibrosis, a deadly disease. My advice to anyone who is considering entering a science fair would be to put in their best effort and enter a field that they are interested in. My experience with science fair has been extremely rewarding, in part due to my amazing mentors. This year, my project allowed me to delve further into research and explore my fascination with science.

#### 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>