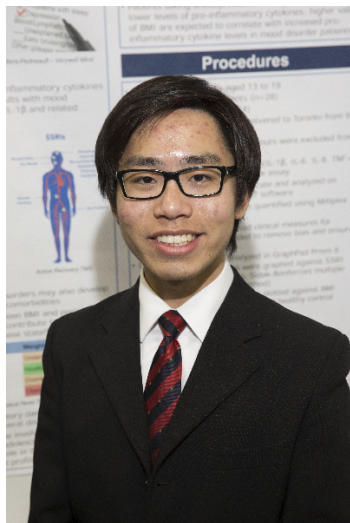


CWSF 2019 - Fredericton, New Brunswick



Matthew Zhou

Effects of BMI and SSRI Use on Inflammation in Adolescents with Mood Disorders

Challenge: Health

Category: Senior

Region: Thames Valley

City: London, ON

School: Central S.S.

Abstract: Youth mental health disorders affect 1 in 5 children in Ontario alone. This project aims to identify markers of mood disorder progression in adolescents by investigating relationships between peripheral inflammation and clinical characteristics. The results of this study demonstrate the importance of monitoring BMI in psychiatric conditions to direct healthier lifestyle choices. In doing so, treatment plans for mood disorder patients can be better optimized.

Biography

My name is Matthew Zhou and I am a Grade 12 student at London Central Secondary School. My interests include music, mathematics, chess, and science. I started playing piano at the age of six and I have won several awards at both regional and provincial competitions, including a Gold medal for the top Grade 10 RCM mark in Ontario. My interest in mathematics has led me to win multiple awards in math contests. I also enjoy playing chess and I have won many prizes in regional chess tournaments. My strong passion for the life sciences has allowed me to win various awards at past Canada-Wide Science Fair competitions. This year, I received the inspiration for my science fair project due to my interest in adolescent mood disorders. Youth mental health is a major concern in society; I aimed to investigate characteristics of the early developmental stages of psychiatric conditions in hopes of improving current standards for disease profiling. With my strong interest in life sciences, I hope to pursue a career in medicine. My advice for any newcomers to the science fair is to never ignore ideas that seem too difficult. With hard work and dedication, anything can be achieved!

Awards

Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
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 New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick	\$2 500
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	\$11 000