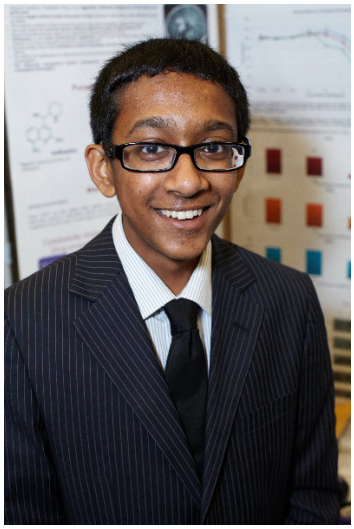
CWSF 2012 - Charlottetown, Prince Edward Island



Sujay Nagaraj

Finding Cures for Childhood Brain Tumors

Challenge: Health
Category: Intermediate
Region: Calgary Youth
City: Calgary, AB
School: Western Canada Senior High School

Abstract: AT/RT is a rare and aggressive childhood brain tumor. This study investigated the potential of the novel drug mefloquine to eradicate AT/RT cells. Mefloquine induced cell death through apoptotic pathways and modulated several key intrinsic proteins. Synergy was also shown to exist between mefloquine and other chemotherapeutic agents. This study adds much needed research into the field and allows for specific protein targets in treatment.

Biography

Sujay Nagaraj is currently in grade 10 at Western Canada High School's IB program. Apart from academics, Sujay is actively involved in Speech, Model U.N., and Debate. Sujay plays the alto-saxophone in his school's band program and plans to further his passion in music throughout his high school life. Sujay has participated in regional science fairs for five years now and was given the privilege of attending the 2011 CWSF in Toronto where he was awarded a gold medal. For this year's project, he worked at a laboratory at the University of Calgary to identify novel chemo-therapeutic agents for the treatment of aggressive pediatric brain tumors. His research allows him to channel his passion for medicine into an academic stream. Sujay believes that research, especially at the youth level, is pivotal in the process of making discoveries as well as benefiting society as a whole. He plans to pursue a career in medicine in the future.

Awards	Value
Canadian Society for Medical Laboratory Science Award Intermediate Sponsor: Canadian Society for Medical Laboratory Science	$750
Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	$700
Western University Scholarship Silver Medallist - $2000 Entrance Scholarship Sponsor: Western University	$2 000
Total	$3 450