

CWSF 2019 - Fredericton, New Brunswick



Bhavya Mohan

Taking ABiTE out of Cancer: A Novel Aptamer based BiTE for Cancer Immunotherapy

Challenge: Health

Category: Intermediate

Region: Ottawa

City: Ottawa, ON

School: Colonel By S.S.

Abstract: Bi-Specific T Cell Engagers (BiTE) is a current immunotherapy platform. Despite its clinical success, BiTEs have several limitations which make them less effective. In this project, a novel immunotherapy platform is introduced: ABiTES (Aptamer based BiTEs). ABiTES help immune cells recognize cancer cells and are safer, cheaper and more effective than BiTEs. ABiTES could provide patients a better and affordable alternative to current immunotherapies.

Biography

I am a grade 10 student from Ottawa currently attending the International Baccalaureate program at Colonel By Secondary School. Since a young age, I have been curious about the world and have developed a passion for science. I have been doing scientific research for the past 6 years and have explored various fields including nanotechnology in cancer, disease diagnostics and now immunology. With my past projects, I have competed at the Canada Wide Science Fairs (CWSF). This year I have developed a cheaper, safer and more effective treatment for cancer treatment. I am doing my research at Dr. William Willmore's lab at Carleton University. I hope that, one day, my treatment will be used to treat all cancer types and become more accessible to patients. Apart from science, I am interested in public speaking, graphic design, and basketball. I have participated in many competitions in these fields and have also served as a grade representative at my school. I recommend to other students to find a passion and invest their energies in further exploring these field to be creative and innovative.

Awards

Value

Awards	Value
European Union Contest for Young Scientists - Trip to EUCYS Sponsor: The Gwyn Morgan and Patricia Trottier Foundation	\$3 000
Ted Rogers Innovation Awards - All categories Sponsor: Rogers Communications Inc.	\$2 000
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	
Challenge Award - Health - Intermediate Sponsor: Youth Science Canada	
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Youth Can Innovate Awards - Intermediate Sponsor: The Gwyn Morgan and Patricia Trottier Foundation	\$750
Platinum Award - Best Intermediate Project Sponsor: Youth Science Canada	
Best Project Award Sponsor: Youth Science Canada	
Total	\$9 750