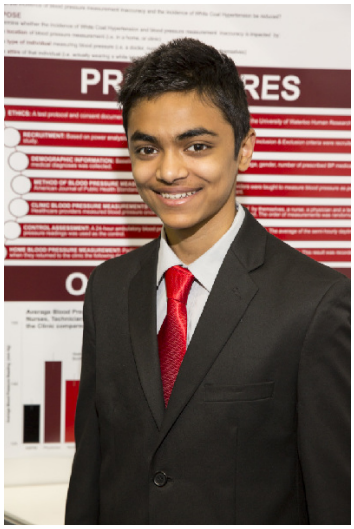
CWSF 2015 - Fredericton, New Brunswick



Arjun Pandey

Determinants of the Accuracy of Blood Pressure Measurement: A Novel Strategy

Challenge: Discovery
Category: Intermediate
Region: Waterloo-Wellington
City: Waterloo, ON
School: Waterloo Collegiate Institute

Abstract: My project aims to develop a more effective strategy for blood pressure (BP) measurement to reduce the risk of erroneous readings and conditions like White Coat Hypertension. Specifically, I tested the impact of the type of individual measuring BP, their attire, and the location of BP measurement on the accuracy of readings and the incidence of Isolated Clinic and White Coat Hypertension in 106 volunteers.

Biography

My name is Arjun Pandey. I am a grade 10 Extended French student at Waterloo Collegiate Institute, in Waterloo Ontario. For the past few years, I have been researching cardiovascular diseases including Pulmonary Hypertension, Nocturnal Blood Pressure Patterns and, most recently, White Coat Hypertension, a condition where individuals have high blood pressure in doctors' offices but normal blood pressure while going about their daily activities. I came up with the idea for my project during a visit to the dentist. I noticed I felt more anxious around the dentist rather than the dental hygienist and thought about how this might affect my blood pressure. From there my research has expanded to a large clinical trial with over 106 participants. My past research has been published in the Canadian Journal of Cardiology, the British Journal of General Practice, the Journal for Student Science and Technology, and the Canadian Young Scientist Journal and was featured in the Pulmonary Hypertension Association of Canada's magazine "Connections," and CTV's Canada AM. I presented my research with a Highlighted & Moderated Poster and Oral presentation at the Canadian Cardiovascular Congress, and with two poster presentations at the American Heart Association's Lifestyle and Epidemiol...