

# CWSF 2014 - Windsor, Ontario



## Arjun Pandey

### The Effects of Body Mass Index and Weight Loss on Pulmonary Blood Pressure

**Challenge:** Health

**Category:** Intermediate

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Waterloo Collegiate Institute

**Abstract:** Pulmonary hypertension can have many negative effects on individuals' health, including premature mortality. My study demonstrates a strong correlation between obesity (measured through Body Mass Index) and elevated pulmonary pressures, and also demonstrates a strong correlation between weight loss and a reduction in pulmonary pressures, suggesting that obesity is an important potential contributor to pulmonary hypertension.

#### Biography

I am a Grade 9 high school student in the Waterloo Collegiate Institute Pre-AP and Extended French programs. My areas of research include nocturnal hypertension, white coat hypertension, and pulmonary hypertension as well as the impact of lifestyle changes. Based on my research, I have 2 papers in print, and one pending publication. Effective communication has always been important to me. I have won local, regional and provincial speech and debate championships in both English and French. I also believe in social engagement, and uplifting those in need. Today's youth must be engaged in social discourse and must help contribute to the changes necessary in our world. I believe words must be put into action, and as such, I personally campaigned door-to-door for two weeks in both 2008 and 2012 for Barack Obama's presidential run. My brothers and I also created our own charity, [www.child2child.ca](http://www.child2child.ca), designed to empower youth to assist other youth in need around the world. We partnered with Mother Teresa's Missionaries of Charity, raised funds and personally volunteered to assist orphans and street children in impoverished India. To all my fellow competitors, good luck!

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$300
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$2 300</b>