

CWSF 2012 - Charlottetown, Prince Edward Island



Alexander Drover

Pro.Tech.Neck: The Future of Hockey Neck Guards

Challenge: Innovation

Category: Junior

Region: Frontenac, Lennox & Addington

City: Kingston, ON

School: Calvin Park P.S.

Abstract: Hockey neck guards do not protect against the impact of a puck. Our project focused on creating and testing neck guard prototypes designed to reduce the energy transmission of a puck. Our designs incorporated realistic engineered materials. Golf impact tape and clay moulds were used in testing. Results showed that our Pro.Tech.Neck guard provided better protection than anything commercially available.

Biography

I am from Kingston, Ontario. I'm twelve years old and in grade seven at the Challenge program at Calvin Park Public School. I really enjoy sports, I played on the school soccer, volleyball, basketball and ultimate Frisbee teams. I also competed in the cross-country running races. I am the captain of my competitive soccer and hockey teams. I plan on going into engineering or medicine when I am older. My inspiration for this project came from watching my partner's younger brother play hockey. He is on a team that plays up which means they are playing against kids who are two to three years older than him. These kids are much bigger and stronger so I thought there would be some safety concerns with this. We were think, what if one of the big kids took a slap-shot and hit him or one of his teammates in a vulnerable area of their body? That would cause some serious damage. Something I would tell someone who was doing a project is to manage your time wisely. I think we did this w=quite well and it benefited us a lot with not being rushed in the last stages of our project.

Awards

Value

CSSE Engineering Innovation Award - Junior Sponsor: Canadian Society for Senior Engineers	\$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$3 200