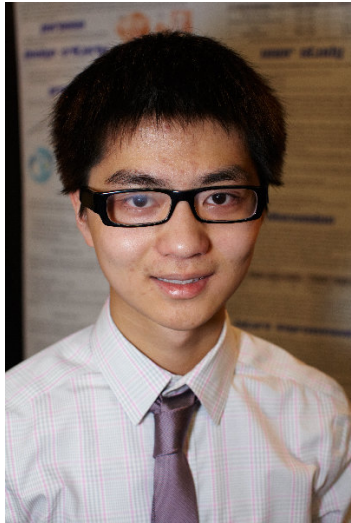


CWSF 2012 - Charlottetown, Prince Edward Island



Tiange Li

Adjustable Circular Cutter for Baseplates in the Ostomy Pouching System

Challenge: Innovation

Category: Senior

Region: Toronto

City: North York, ON

School: A.Y. Jackson S.S.

Abstract: An adjustable circular cutter was designed and prototyped for use on baseplates in the ostomy pouching system. Cost estimates and experiments were conducted, with the results that the device will be relatively cheap to manufacture, is quick and easy to operate, and forms neat and round cuts on ostomy baseplates. Positive feedback was obtained from potential users of the device after conducting several interviews.

Biography

I am currently enrolled at A.Y. Jackson Secondary School in North York, Ontario. I am involved in a number of school groups and activities, as well as volunteering in various healthcare institutions. It is through my interactions with a nurse with previous ostomy care experience that I discovered the inefficiency of current methods of making openings on ostomy baseplates. My science fair is therefore the analyzing of and improvement to such methods. After making a prototype of the current design, I conducted a series of interviews with ostomates and ostomy care nurses to receive feedback. I am currently working on improving aspects of my projects that the interviews raised (i.e. portability, clamping methods, and optimizing user experience), moving the ostomy cutter towards practical usage. For others planning on doing a science fair, my input is to look around you for recurring problems that might be over looked by others. If you are able to analyze and come up with a simple but novel solution to such problems, it can become a very meaningful project.

Awards

Value

Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$2 300