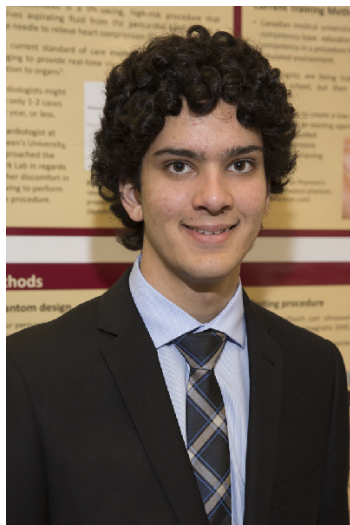


## CWSF 2016 - Montreal, Quebec



### Aidan Baksh

#### An Inexpensive Medical Training Aid for Pericardiocentesis

**Challenge:** Health

**Category:** Intermediate

**Region:** Frontenac, Lennox & Addington

**City:** Kingston, ON

**School:** Leahurst College

**Abstract:** Pericardiocentesis is a relatively rare, but high-risk procedure that involves aspirating fluid from the pericardial cavity to relieve heart compression. Currently, ultrasound imaging is used to provide real-time visualization of the needle intraoperatively. Commercially available pericardiocentesis training models are extremely expensive. The goal was to create a low-cost, realistic phantom to be used alongside an open-source software platform for image-guided pericardiocentesis intervention training.

#### Biography

Aidan Baksh, a Grade 10 student at Leahurst College in Kingston, Ontario, is an avid mountain biker and enthusiastic member of his high school climbing team. He has been very actively involved in the W.A.F.F.L.E.S robotics FRC team for 3 years, beginning with the team a year younger than most. He has taken on a significant role with the CAD design for the group, and is a strong and considerate leader for the team. In 2015, Aidan accepted a summer internship with the Laboratory for Percutaneous Surgery in the School of Computing at Queen's University, where he was involved in assisting their research team, and co-authored a paper. He was invited stay on over this past year, co-authoring a second paper involving the work done on this project, and will be continuing his work with the lab this coming summer. Aidan is looking forward to completing a grade 11 pre-AP course load, while in grade 10, and is a valued member of the Leahurst College math team. Aidan is very well-liked by his peers, team-mates, teachers and colleagues. He is a gentle and humble force in all of his classes and activities, and demonstrates excellence in all of his endeavors.

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