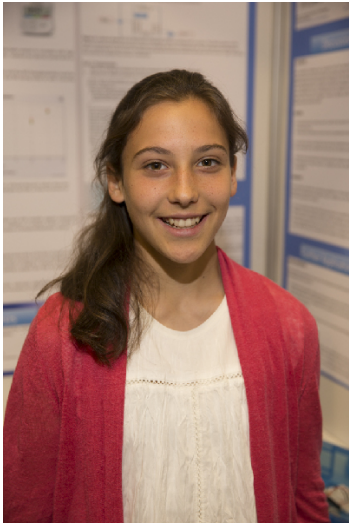


# CWSF 2016 - Montreal, Quebec



## Imogen Lawford-Wickham

### T1D Mouthguard

**Challenge:** Innovation

**Category:** Junior

**Region:** Frontenac, Lennox & Addington

**City:** Kingston, ON

**School:** Calvin Park P.S.

**Abstract:** Type 1 diabetics have to monitor and treat blood glucose levels at night before dangerous health effects occur. Current devices fail to effectively wake patients. An innovative mouthguard composed of a microprocessor, vibration motor and sensor would help diabetics by continuously monitoring bg and waking the patient. This prototype of a medical device would limit the harmful impacts of diabetes on the lives of patients.

### Biography

I am 12 years old and if i'm not doing school work, I am playing sports. I have type one diabetes and have always been looking for a way to make living with diabetes easier. This is my first science fair and it was the perfect chance to make an innovation for diabetes. I did a lot of engineering and programming in my project and became very interested in programming. I plan to continue coding in the future and keep trying to help solve problems related to diabetes.

### Awards

### Value

S.M. Blair Family Foundation Award - Junior Sponsor: S.M. Blair Family Foundation	\$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$2 500</b>