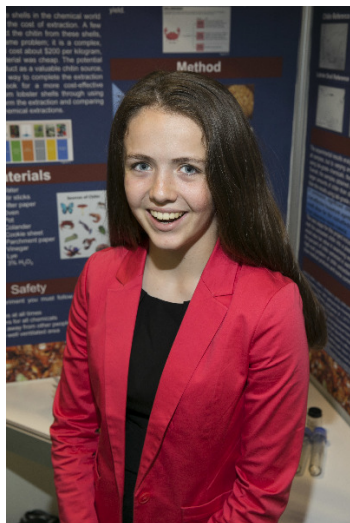


# CWSF 2017 - Regina, Saskatchewan



## Neleah Lavoie

### Cost-Effective Extraction of Chitin from Lobster Shells

**Challenge:** Resources

**Category:** Junior

**Region:** 4-H Canada

**City:** Hunter River, PE

**School:** Gulf Shore Consolidated School

**Abstract:** Chitin is a biodegradable molecule with many useful applications. Because of the high cost of extraction, the value of many chitin sources, like lobster shells is being ignored. My project is designed to determine a cost-effective method to extract chitin from lobster shells by replacing expensive lab-grade chemicals with household products. The final product was analyzed using FTIR spectroscopy.

#### Biography

My name is Neleah Lavoie and I'm thirteen years old. This is my second time at the CWSF and I am very excited to be back. My hobbies include competitive gymnastics and soccer. On top of that, I have participated in school sports, band and 4-H. As for my future career, I am interested in becoming an orthopedic surgeon. The inspiration for my project came from reading an article in my local newspaper and from living in a lobster fishing community. I read further about the problem, the complexity, and the cost, of chitin extraction from lobster shells and realized it was a topic I wanted to look deeper into. My advice I would give to students who are considering doing a project is: choose a topic you're interested in. You will have loads of fun and learn more than you could imagine.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Challenge Award - Resources - Junior Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 000</b>