

## CWSF 2018 - Ottawa, Ontario



### Sarra Parker

#### Microbial Fuel Cells: Energy for Tomorrow

**Challenge:** Energy

**Category:** Senior

**Region:** Ottawa

**City:** Ottawa, ON

**School:** Lisgar C.I.

**Abstract:** Construction of a microbial fuel cell to produce electricity. Use of bacteria-rich water in the place of wastewater. Implanting of different techniques to make the cell more efficient. Purpose of the experiment is to generate cheap and sustainable energy in third-world countries or disaster relief areas.

#### Biography

My name is Sarra Parker, and I am a grade 11 student at Lisgar Collegiate Institute in Ottawa, Ontario. I am interested in sustainable technology that can be implanted in developing countries, and that is where I got the idea for my project. I believe that creating technology that is environmentally friendly and viable for the citizens living in developing regions is important for the growth of developing countries. In school, I perform percussion in the senior band and orchestra. As well, I am a member of the varsity girls basketball team and Nordic ski team. Out of school, I play competitive basketball and also play drums in a rock band. I enjoy traveling and have had the opportunity to visit many countries. Last year, I went on a three-month educational exchange to Valencia, Spain. My advice for future scientists is to research and experiment projects and topics that you believe have the ability to make a difference in the world. If you see something that needs to change in the world, it is up to you to change it.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
Carleton University Entrance Award Senior Bronze Medallist - \$1,000 Entrance Award Sponsor: Carleton University	\$1 000
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	\$3 000