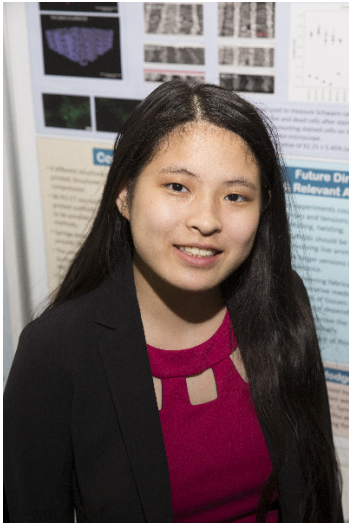


## CWSF 2019 - Fredericton, New Brunswick



### Britney Feng

#### 3D Bio-Fabrication of Schwann-Cell-Laden Scaffolds for Nerve Tissue Regeneration

**Challenge:** Innovation

**Category:** Senior

**Region:** Saskatoon

**City:** Saskatoon, SK

**School:** Centennial Collegiate

**Abstract:** Nerve damage is a common injury that often requires surgical repair. 3D printing scaffolds, that can sustain live cells within it, could make this procedure more accessible and less reliant on donor tissue. In this project, 3D-printed scaffolds composed of different materials and structures were created and then analyzed in a body-like environment to find the combination that holds the most potential for clinical use.

#### Biography

My name is Britney Feng, I am 17 years old and from Saskatoon, Saskatchewan. I began research when I was 13. Throughout the past five years, I have looked at various topics regarding health related issues. This ranged from nutritional research for combating obesity to my current project of making nerve tissue repair surgery more accessible. Since I have been participating in local science fairs for a while now, my inspiration comes from different places. For this project, I actually heard about 3D printing in a health science course. I then learned that the University of Saskatchewan was conducting research at their College of Engineering and decided that I would like to pursue this area of study for this year's project. In the future, I plan on heading to Ontario for my post secondary education and study life/health sciences. I am certain that I will try to continue my research endeavours to the best of my ability, but this will be dependent on the availability of opportunities. My advice for aspiring scientists would be to reach out in your areas of interest and to not be afraid of failure. Sometimes the best ideas come when you least expect it!

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