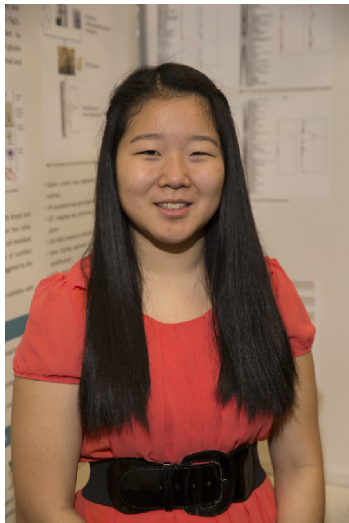


## CWSF 2016 - Montreal, Quebec



### WenYu Ruan

#### Identification and Characterization of the Low-Gluten Gene for Celiac-Safe Wheat

**Challenge:** Health

**Category:** Senior

**Region:** Saskatoon

**City:** Saskatoon, SK

**School:** Walter Murray Collegiate

**Abstract:** A QTL analysis identified a low gluten content gene, located on chromosome 1B. With gene cloning approach, at position 577 of the sequence, there is one nucleotide change from G to T, resulted to an amino acid change from arginine to methionine. This project will help to achieve the development of celiac safe wheat in near future, protecting people with celiac disease.

#### Biography

Hi, my name is WenYu Ruan, and I am currently a student at Walter Murray Collegiate. In my spare time, I enjoy playing the piano, violin, sports, and doing various art projects. I remember a couple years back, my best friend told me about her little sister, who had just been diagnosed with Celiac disease. My friend talked about the difficulties her family had to face, including dietary and lifestyle restrictions. I was saddened by what I heard, as her sister was only five at the time. I learned that things such as shampoo, and ice pops contained gluten. It was then that I decided I would like to help the development of gluten-free wheat. For anyone who would like to do a project, I would tell them to go for it. Science fair is a unique experience, where you will gain important social skills and lab skills, that you may need in the future. If you want a different experience, then science fair is for you, but be prepared for some hard work.