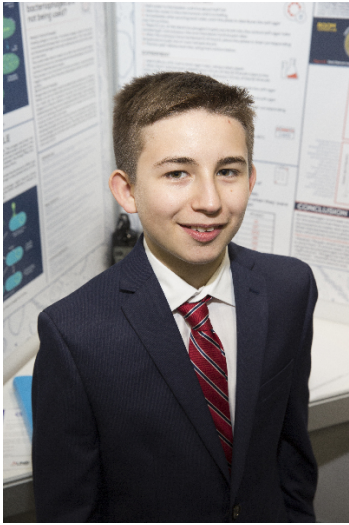


## CWSF 2019 - Fredericton, New Brunswick



### Carlos Furber Espinosa

#### Microwars ? the Battle Most People Don't Know About

**Challenge:** Health

**Category:** Junior

**Region:** Bison

**City:** East St Paul, MB

**School:** St. John Brebeuf School

**Abstract:** Bacteriophages are small viruses that reproduce using bacteria and killing the bacteria in the process. These viruses only affect bacteria and can be an alternative to antibiotics now that superbugs are getting bigger and stronger. Today, I'll put bacteriophages and E.Coli in different temperatures to see how we can make them more efficient.

#### Biography

Since I was 5 years old, I started going every year to summer camps at Planetario Alfa in Monterrey, Mexico where we lived. There I learned to love the universe, science, math and physics. My goal in life is study Astrophysics and work for NASA. I like watching YouTube during my spare time. While I was scrolling through it, I found this channel called Kurzgesagt. They make a lot of videos about science, space, technology, philosophy, society, physics, and biology. In one particular video, they talk about Bacteriophages, what they are, how they work, what they do, and how they could save humanity. This video encouraged me to do this project. I believe that in the future, medicine will not be enough to keep us safe. This project is made to safeguard us against bigger threats that could be nearly impossible to kill with antibiotics, for example, super-bugs. And if this goes right, we might be able to make our little Bacteriophages incredibly efficient at not only killing bacteria but keeping us safe in the process.

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