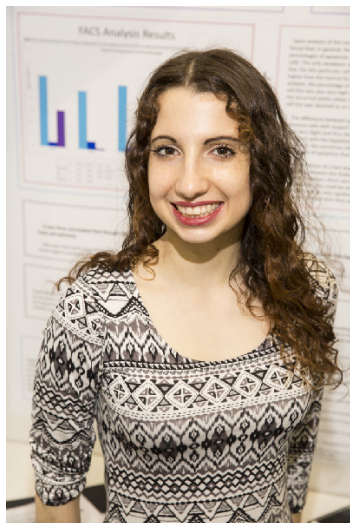


## CWSF 2015 - Fredericton, New Brunswick



### Guadalupe Koen-Alonso

#### The Effect of Differing pH Levels on Cancerous and Non-Cancerous Cells

**Challenge:** Health

**Category:** Senior

**Region:** Eastern Newfoundland

**City:** St. John's, NL

**School:** Holy Heart High School

**Abstract:** One of the properties of cancerous cells observed by scientists has been the greater acidity of the extracellular pH in some tumor tissues compared to that of normal tissues. Building on these findings, this project explores the behaviour and apoptosis of cancerous cells and non-cancerous cells in environments of both more acidic and more basic pH than the general pH of the human body.

#### Biography

My name is Guadalupe, I am 17 years old and was born in Argentina. I am fluent in both Spanish and English, and adore speaking a variety of languages. Over the years, soccer has been a very big hobby of mine, through which I have been able to participate in provincial and national events. However, I also enjoy dancing, writing, yoga, and any active outdoor activities. In terms of university, I am undecided about my career choice because I have an interest in such a quantity of fields, ranging from philosophy to neuroscience. As for my project, I was inspired by the current unit of chemistry I was studying and my knowledge of cancerous cells. Always having been interested in what the mutation in cancerous cells causes, I chose to explore that pathway. I truly do not have plans as of now to continue this project, but perhaps in the future I will choose to explore a different property of cancerous cells. To anyone thinking about doing a project, I would advise to pick a topic that interests you, and to use the project as an opportunity to learn and explore a career or job that you are unfamiliar with!