Name: Bao kha

Teacher: Bill Pham

Class: Biology

Grade: 9

Date: October 10, 2016

***On my honor, I have neither received nor given any unauthorized aid on this assignment.-Kha***

William C. Campbell

There are many people who won the Nobel Prize in Medicine and Physiology. But today, I will focus specifically on William C. Campbell. According to *Nobel Prize*, “William C. Campbell was born on June 28, 1930 in Ramelton, Ireland.” When he was still a graduate student, he was fascinated by parasites and the life-cycles of them. William has not only researched about parasites, he also draws them, according to the *Huffington Post*, “William blurs the line between art and science. Furthermore, he also writes poets and paint pictures of parasites.” According to *Wikipedia*, “William was a third son, his father was a farm supplier. He graduated in 1952 at Trinity College. After that, he studied at University of Winscon-Madison, earning his Ph.D in 1957 on working on the Liver fluke, a disease that affects the sheep.” William was popular even before he got the Nobel Prize due to the fact that according to *Huffington Post*, “William found out a way to keep larvae worms alive is by putting them in an environment at -321 F. This was an important discovery (not as the discovery about Avermectin) because when scientists need live worms, they would have to slaughter infected animals.” He then got his Nobel Prize in 2015 for discovering a treatment for roundworms and river blindness. Roundworms are a parasitic disease that usually occurs in warm tropical climates. These worms could be found in the intestines of animals and can range from 1 millimeter to 1 meter. The effects of roundworms are according to *Health Line*, “coughing or gagging, vomit roundworms, shortness of breath, nausea, vomiting, irregular stools, stomach pain, etc.” William C Campbell unfortunately got ¼ of the Nobel Prize because he worked with two other scientists. Even though he only got ¼ of the prize, he was still honored by his family and his country. Without these discoveries, many people would have kept on dying and more people would be blind. Quoting to *The New York Times*, “The discovery has revolutionized the treatment of some of the most devastating parasitic diseases”. The discovery, improved the health of humans and lessen the suffering. Futhermore, William C. Campbell discoveries made a huge impact on medicine because quoting from *The* *New York Times*, “Dr. Campbell, Dr. Omura, and Dr. Youyou Tu developed Avermectin, the parent of Ivermectin, a medicine that has nearly put an end to river blindness and radically reduced the incidence of fibrosis, which can cause the disfiguring swelling of the lymph system in the legs and lower body known as elephantiasis.” Also, without Artemisinin other wonderful medicines would not be developed, and a long forgotten malaria cure would not have been rediscovered. According to *NCBI*, *“*William started his research in 1970 where he would collect environmental samples and study the samples.” In the meantime, William and the two other scientists are still working and improving Artemisinin.

The reason I want to research on William C Campbell is because I want to learn more about how to cure roundworms and about Avermectin. Also, because the Nobel Prize was usually only given to one person and would usually not be a group so I decided that William C Campbell and his group would be a topic that I would want to learn and write about.

**Works Cited**

"William C. Campbell - Facts." *William C. Campbell - Facts*. N.p., n.d. Web. 12 Oct. 2016.

Siddall, Mark. "A Noble and Laudable Nobel Laureate: William C. Campbell."*The Huffington Post*.

TheHuffingtonPost.com, n.d. Web. 12 Oct. 2016.

"William C. Campbell (scientist)." *Wikipedia*. Wikimedia Foundation, n.d. Web. 12 Oct. 2016.

@healthline. "Ascariasis." *Healthline*. N.p., n.d. Web. 12 Oct. 2016.

N.p., n.d. Web. http://www.nytimes.com/2015/10/06/science/william-c-campbell-satoshi-omura-youyou-tu-nobel-prize-physiology-medicine.html

Voorhis, Wesley C. Van, Rob Hooft Van Huijsduijnen, and Timothy N. C. Wells. "Profile of William C. Campbell, Satoshi Ōmura, and Youyou Tu, 2015 Nobel Laureates in Physiology or Medicine." *Proceedings of the National Academy of Sciences of the United States of America*. National Academy of Sciences, 29 Dec. 2015. Web. 12 Oct. 2016.