

Impact Statement

Nina-Eleanor Constantino, Grade 7.

The Measurement of Stars, 2023.

Digital art, 7 x 9 inches.

LaVilla School of the Arts, Jacksonville, FL

Unsung Hero: Henrietta Swan Leavitt

I found Henrietta Swan Leavitt by looking through the list of unsung heroes on the Lowell Milken Center website. One reason I chose her was because she helped contribute to the idea that our universe is bigger than what we once thought by figuring out how to measure stars, and she should be known for it. The other reason I chose her is because I am personally interested in astrology and anything to do with the universe. I find her to be inspirational because she figured out how to measure the stars which helped us learn how to measure the ever-growing size of our universe. They used to think that the Milky Way was the only galaxy, but due to Henrietta's law (Leavitt's Law) and Edwin Hubble, they discovered that the universe is always expanding. This inspires me and many others to expand our knowledge about our world and the world outside our galaxy.

She did all of her research at the Harvard Observatory as a human computer. Henrietta was paid 30 cents an hour, which was 5 more cents than the other women in the department because her work was seen as valuable. She studied cepheid variable stars. After observing them for a while she noticed that by measuring the period of a cepheid variable it will give you its true brightness, which when compared to its apparent brightness you get its distance. This is Leavitt's Law. Henrietta never got awarded for her discovery because she was only recognized after her death due to stomach cancer at age 53. She was heroic to me because of her dedication to her work. She worked in the observatory even though she was suffering and ill.

I wanted to express her dedication and love for astronomy in this artwork. Since she worked in the observatory until her death, I wanted her to be in the stars. When a loved one dies something, I hear often is that "they are watching you from the stars", so I wanted to bring this concept of a beloved deceased person in the stars. I wanted her to have fun and do what she loves even in the afterlife, so I made her ride the Pegasus constellation while measuring the constellation itself. I gave her a light blue color palette to imitate illustrated ghosts in media. I also stuck to a mostly blue color palette to make it feel very tranquil. I believe she deserves a tranquil place to do what she loves after suffering with stomach cancer. I wanted people to feel relaxed and calm when they see my piece.

I don't have a big community to share this with, but I did share it with my family members who are overseas. I made a google document for them with facts about Henrietta. I sent it to my family members in the Philippines that I don't see often so that we can keep in touch and to share my knowledge about something I enjoyed learning about. The document contains a picture of my artwork and facts about Henrietta. This project has taught me that our world is way larger than any average person can comprehend so we need to appreciate our scientists much more. They are the people who make it their life's mission to comprehend the ever-growing universe. I have many young cousins in the Philippines who I hope to inspire with this new

knowledge and art just like it inspired me. I always want to try and inspire someone with my art so I hope that someone in my family is inspired to learn about the subject of art or science after reading the document.

This is the link to the google drive I sent to my family members:

<https://docs.google.com/document/d/14dD7kEljLHu9v5JTqgd6T7nq-DL--TFoC55NDmJPZpA/edit>