



Impact Statement

Cecilee Faville, Grade 11

An Unseen Star, 2026

Oil on canvas, 20 x 16 inches

Scio High School, Scio, OR

Unsung Hero: Cecilia Payne-Gaposchkin

Cecilia Payne-Gaposchkin was a female astronomer and astrophysicist, who primarily studied the chemical makeup of stars. Her work affects how we view our solar system today. She proved that stars are made primarily of hydrogen and helium and was astronomically (excuse my wordplay) important to understanding stellar composition.

Payne originally studied at Cambridge University, but she was not allowed to get a degree because of her gender. She moved from her home to Harvard, USA, for the increase of academic opportunities for women at the time, and in 1925 she completed her PhD. Her thesis discussed that stars do not have the same chemical makeup as earth, challenging common belief. Her studies were originally persuaded to be given up on the grounds that it was "Clearly impossible." However, in 1929 she proved herself correct. She was also Harvard's first female professor, breaking gender barriers and discrimination against women in STEAM. She fought for her place in a male dominated field, and proved that she, her work, and her gender are worthy of recognition. Even with all of this, she was still never paid as much as her male colleagues.

When first brainstorming about my painting, I couldn't figure out how to get the angles right. After my first few attempts sketching, I decided to make a 3D model of the room she was in out of cardboard to help me capture the angles, perspective, and lighting. Then, when sketching her surroundings, I brought recent elements of astronomy and mixed them with elements from her lifetime to highlight how her discoveries live beyond her. I sketched her first staring up at the galaxy, however after I started painting, I considered that this art is not about the wonder of the universe, but the determination of this brilliant woman who fought for her right to be respected as intelligent. I moved her face so she could look out at people learning from her all these years after she stopped teaching. She is small in this picture to represent how she is still overlooked today when people look up toward the stars and appreciate scientific advances. She is not as well-known as the men who made discoveries of equal importance.

I had never painted a galaxy, or a scene like this before, so it was an enlightening new experience. I used oil paints, a medium I have not experimented with before, to try to give the painting a more timeless quality than other media might have achieved. I styled the background after dark academia to really bring out the strength and intellectual importance of Payne's life. One of the challenges I faced painting this was inexperience, with the media, the scene, the person, and the sky. Whenever I felt like I couldn't possibly make it perfect, I remembered two things; 1) She wasn't perfect either. She was a person and she likely, with the rest of us, often

felt like she did not know if everything would work out for her; and 2) She pushed through her inexperience, moved to another country, changed her whole life to make something, a discovery, new. If she could do that, I can surely make an imperfect painting and still be proud of the experience I gained.

What I have learned from Payne is that I do not have to conform to the typical role to be respected, in fact, being an outsider is one of the requirements for greatness. Dr. Cecilia Payne-Gaposchkin is a remarkable reminder to continue to advocate for my rights as a woman, to not be ashamed or embarrassed of my own intelligence, and to help others be confident in their strengths as well. She is a role model for grit in the face of adversity. I will be sharing her story and my artwork at our upcoming art showcase on May 8th. Everyone in the community is invited to attend the reception and awards. The link for the event is here:

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