



Impact Statement

Madilyn Kim, Grade 9

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Acrylic on illustration board, 20 x 15 inches

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Unsung Hero: Eugene Wilson Caldwell

The Unsung Hero I will be talking about is an engineer and innovator Eugene Wilson Caldwell. Caldwell was a visionary engineer and physician whose groundbreaking work in X-ray technology helped revolutionize medical imaging. I chose this hero because he is an important person who improved medical skills and I thought it would be interesting to research, draw, and learn about him. I find inspiration from Eugene Wilson Caldwell's integrity, leadership, and the huge social impact he made. Back then, the X-ray wasn't a reliable and safe tool to be used on people. The doctors using X-rays were dying from radiation poisoning. Eugene spent years designing and developing the X-ray and in those early years experimenting, he began noticing small areas of skin on his left-hand peeling away. With other radiologists beginning to die from radiation injuries, Eugene was aware of the imminent threat these peeling arches posed to his life. Nonetheless, he remained determined to develop X-ray technology so it could be used harmlessly to help people. Eugene underwent multiple skin graft surgeries to help relieve the pain of his radiation injuries, which had been worsening and spreading for years. In 1899, Eugene became known for inventing a liquid interrupter, a device that helped power X-ray machines. It made the X-ray safe and useful without side effects and harm. He also realized he wanted to be a real doctor, so he joined the university and Bellevue hospital medical college in New York as a student. While in university he helped run an X-ray lab and worked hard, successfully earning his medical degree. He spent most of his life studying and developing X-ray and got cancer. Eugene's cancer got worse throughout our year, yet he never took a break from perfecting his stereoscopic fluoroscopy device. He finally completed his first stereoscopic fluoroscopy apparatus and was sent to a military base overseas. Eugene passed away only a few days later having truly sacrificed himself to develop radiology into the major medical field it is today.

His story of spending his whole life studying and developing the X-ray encouraged an intentional way of living. It shifts the mindset toward making small but meaningful contributions. Even though he had cancer he didn't stop working and studying. He spent his whole life developing X-ray technology, which is a medical tool that is used everyday. It's one of the quickest available diagnostic machines/tools in the medical field. X-rays save many people by showing the inside of the body without surgery. This makes diagnosis much faster and treatments more accurate for the doctors and patients. When I was little I also broke my elbow and had to have surgery. An X-ray made my diagnosis much faster and treatments more accurate. If X-ray wasn't

developed, many people would have passed away because without X-rays it's hard to find disease and find treatment quickly.

"The progress of the science of diagnostic radiology over the course of more than twenty years found its ideal personification in Eugene Wilson Caldwell." -Percy Brown

References:

<https://www.lowellmilkcenter.org/programs/projects/view/eugene-wilson-caldwell/hero>

https://www.arteffectlmc.org/unsung-heroes/unsung-heroes?aa_piece=eugene-wilson-caldwell