



Impact Statement

Cameron Prim, Grade 12

Systems of the Lab, 2026

Charcoal, pastel, gold leaf on paper, 25 x 19 inches

Westover Comprehensive High School, Albany, GA

Unsung Hero: Robert R. Williams

Thinking about how a scientist can be a hero really changed my perspective. Most people think of heroes as people in capes or soldiers on a battlefield, but after researching Robert R. Williams, I realized that some of the greatest battles are fought in a lab with a microscope. I chose Williams because his story isn't just about chemistry; it's about having the "grit" to stick with a problem for decades. What I admire most is his selflessness. He spent 26 years chasing a cure for a disease called beriberi, and when he finally found it, he didn't try to get rich. He just wanted to make sure people stopped suffering. That kind of character where you put the world's needs above your own bank account is exactly the kind of role model I want to follow.

Robert R. Williams' impact is honestly massive, even if most kids my age have never heard of him. Back in the early 1900s, beriberi was a total nightmare. It caused heart failure and paralyzed people, and nobody really knew why. While Williams was working in the Philippines, he saw how it destroyed families, and he became obsessed with finding a cure. My research showed that he spent his nights and weekends on top of his actual job trying to isolate Vitamin B (thiamine) from rice hulls. He finally did it in 1936. Instead of keeping the money from his discovery, he started a fund to help get vitamins into basic foods like white rice and flour. Because of him, beriberi was basically wiped out in many countries. I used resources from the Lowell Milken Center for Unsung Heroes and old science journals to piece together how he turned a tiny molecule into a global lifesaver.

For my artwork, I wanted to show that science is beautiful. My vision was to combine the "technical" side of his brain with the "human" side of his heart. I used mixed media for this. In the center, I drew a single grain of rice using gold metallic paint to show that it's more valuable than it looks. Surrounding the rice, I drew the chemical structure of thiamine using clean, black ink lines like a blueprint. But then, I used bright watercolors to make the lines "bleed" out into shapes of healthy people and growing plants. I chose a blueprint style because it represents his logic, but the watercolor represents the life he gave back to millions. Using gold leaf was important to me because it shows that even something as small as a vitamin can be a treasure.

Working on this ARTEFFECT project has really made me think about my own future. Before this, I thought "making it" meant being famous or making a lot of money, but Williams showed me that real success is leaving the world better than you found it. His 26-year journey taught me that I shouldn't give up on things just because they're hard or take a long time. I'm planning to show my art at our school's spring gallery and hopefully put a print of it in our local health clinic.

I want people to see my art and realize that "unsung heroes" are all around us, often working quietly to keep us safe and healthy. Robert R. Williams might not be on a cereal box, but he's the reason the food inside that box keeps us alive.

References:

Carpenter, Kenneth J. Beriberi, White Rice, and Vitamin B. University of California Press, 2000.

Lowell Milken Center for Unsung Heroes. "Robert R. Williams: The Man Who Saved Millions."

Research Corporation for Science Advancement. "The History of the Williams-Waterman Fund."

Williams, Robert R. Toward the Conquest of Beriberi. Harvard University Press, 1961.