Lowell Milken Center for Unsung Heroes
ARTEFFECT

Impact Statement

Nihaar Pinninti, Grade 10
A Stellar Impact - The Legacy of Gene Shoemaker, 2026
Watercolor, colored pencil, mixed media on paper, 24 x 18 inches
Troy High School, Fullerton, California, USA
Unsung Hero: Gene Shoemaker

My Unsung Hero is Eugene Shoemaker, an astrogeologist who pioneered the study of comets and craters. I chose Eugene Shoemaker as I deeply admire his contributions to geology and its applications. I have a personal passion for rocks and minerals, and an interest in space. Not only did Eugene Shoemaker create major innovations in these fields, but he also pioneered the connection between the subjects. I'm especially inspired by his humility, dedication, and perseverance.

In his early life, he had an intense passion for geology and was accepted into Caltech at the age of 16. After graduation, working for NASA, Eugene Shoemaker created the first geological map of the moon, planned the Apollo 11, 12, and 13 missions, and trained American Astronauts. These missions had major social impacts as they boosted American morale and national pride during the Space Race. He also led efforts to emphasize the importance of geological data and its role in the human exploration of space. Eugene Shoemaker additionally discovered over 150 minor planets and nearly 30 comets. One of these comets, Comet Shoemaker-Levy 9, was famously televised as it crashed into Jupiter. He was a candidate to become an astronaut, however due to health issues he instead became a trainer. I researched Gene's life through NASA databases and other biographical works.

In my artwork, I wanted to capture as many elements of his work as possible. Since he loved exploring and studying craters, I centered the piece around Shoemaker presenting a crater in the background. Above him, I placed the moon and Jupiter at exaggerated proportions to highlight the planets' roles in his life. Given that he studied the moon in intense detail, I focused on capturing as many craters and mountains on the side profile as possible. I placed Jupiter to the side of the moon, with its axis in the direction of Gene. I wanted the planets to lead the viewers' eyes to the hero. Additionally, I added asteroids and comets floating in the air to break up the empty space and represent his discoveries and part-time hobby of comet spotting. Two spacecraft were added, a Lunar landing module design in the crater and the Lunar Prospector in the sky, in front of the moon. The Lunar landing module was one of the many designs that Gene Shoemaker's geological knowledge helped optimize. Additionally, the

Lunar Prospector carried Shoemaker's ashes upon his death, crashing into the moon.

The idea behind the coloring was to be as realistic as possible and focus on the details. Gene Shoemaker himself was devoted to details, so a realistic coloring process seemed the most fitting. I started with a base of watercolors, where I loosely mapped out the general colors. The foreground would be dark, the middle ground would be light, and the background would be dark again. I wanted Gene to overlap all these layers to make him stand out. Once the wash was applied lightly, I went through each component with wax-colored pencils, one at a time. Rather than work on each part in small portions and switch around, I focused part by part to ensure maximum detail. Starting with the pants, I worked on the shoe, then face, but ran into some issues with the shirt. The reference photo was black and white, and I had been using different, color photos of Gene's face for detailing. The shirt, however, was presumably white in the image. I decided to change the color to sky blue to make the shirt pop and accent the Lunar Prospector and moon highlights. I added the shadows and rocks to the foreground with a variety of grays, oranges, and greens, and used a circular scribble method to create the illusion of thick brush. To make the middle ground look like a concave crater, I used alternating light and dark bands to create striations, then surrounded the Lunar module with shadows to increase contrast. I used inspiration from detailed satellite images of Jupiter to make the wavy layers and colors and detailed the moon and Lunar Prospector. Finally, I went in with a pure ink watercolor wash of black to add in the night sky, and scattered stars with white colored pencil.

The impact of my artwork is to spark awareness and appreciation for the work of Eugene Shoemaker. I want the viewer to be amazed by the beauty of geology and be intrigued by the spacecraft, just as Shoemaker was. Gene Shoemaker’s story inspired me to stay dedicated, curious, and think outside of the box. I plan to share the artwork with fellow STEM and space enthusiasts to give them inspiration in their passions as well.