



Impact Statement

Sinan Li, Grade 10

The Hand of Protection, 2026

Acrylic on canvas, 24 x 18 inches

Art Lab Studio, Fort Lee, NJ

Unsung Hero: Dr. Francis Kelsey

Dr. Frances Oldham Kelsey was an American pharmacologist and FDA medical officer best known for blocking the deadly drug thalidomide from entering United States markets. I've known her story for a while now, and I've always been struck by the determination and care she displayed in carrying out her job. She refused to compromise on the safety of the American public. Thanks to her actions, the country was shielded from a worldwide disaster. Researching Dr. Kelsey's story gave me insight into a lot of different perspectives. What stood out to me most was that, at the time, she wasn't even aware of how impactful her actions would come to be. She simply continued to do what she knew was important. I find this form of heroism is truly admirable.

In the 1950s, thalidomide was introduced as a sedative and treatment for morning sickness. The drug was soon being distributed in 46 different countries. But before it could be sold in the U.S., it had to undergo an FDA approval process. The application was expected to be a shoo-in; after all, the drug was already widespread throughout Europe and Canada. Among the medical officers assigned to thalidomide was none other than Dr. Frances Kelsey. Despite being the FDA's newest medical officer at the time, she'd soon demonstrate a high level of thoroughness and integrity. Dr. Kelsey realized upon reading the application that there was simply not enough data to prove the drug's safety. The so-called "wonder drug" relied mostly only on testimony. She refused to approve it, instead requesting evidence from controlled clinical trials. The Richardson-Merrell company, impatient to begin marketing the drug, pressured her with visits and phone calls to her superiors. Thalidomide was already so popular everywhere else—surely it could be trusted in the United States? Despite their insistence, Frances Kelsey wouldn't back down until she could be sure that the drug was truly safe.

Two years and several unsuccessful rounds of approval passed by. Soon, alarming reports began cropping up in scientific journals. Dr. Kelsey would come to find out that she had been standing between America and a devastating teratogen. Pregnant women abroad who had taken thalidomide were delivering babies with severe birth defects—including internal organ damage, eye and ear deformities, and—most prominently—malformed or missing limbs. The drug had a staggering 40% infant death rate. Though the true scope of the tragedy is impossible to pinpoint, an estimated 100,000 babies and their families around the world had their lives harmed irreparably. But America was an outlier. It had never approved thalidomide, thanks to the diligent work of one woman.

Dr. Frances Kelsey couldn't have known the magnitude of the situation at the time. But she did know that, as an FDA reviewer, she was responsible for the health and safety of millions of Americans. She displayed true resolve in upholding this purpose. On August 7, 1962, President John F. Kennedy presented her with the President's Award for Distinguished Federal Civilian Service, the highest honor bestowed upon a U.S. civilian. Soon after, the Kefauver-Harris Amendments were passed to further strengthen U.S. drug regulations. America now knew the importance of the standards Dr. Kelsey had tirelessly upheld. Meanwhile, Frances Kelsey went on to head the FDA's Investigational Drugs Branch and later the Division of Scientific Investigations. Her 40-year career showed a lifelong commitment to public health and safety.

It was Dr. Kelsey's steadfastness that I knew I wanted to depict in my painting. Here, she appears grounded and protective in contrast to an environment full of unease. Thalidomide's widespread presence is represented by the scatter of pills surrounding the central figure. The bottles show a glimpse of the word "Kevadon"—this would've been the drug's brand name, had it made its way to the U.S. I added flying application papers to further convey a sense of disorder. Meanwhile, Dr. Kelsey resists these elements. She cradles a baby in one arm and holds up the other to reject thalidomide. She stands out from the rest of the painting with a warm, angelic glow.

Behind the central figure is a scene depicting the challenges Dr. Kelsey faced. While she probably wasn't directly confronted at her desk, I wanted to emphasize the amount of pressure she was under. After all, standing up to a large, multinational company like Merrell would be intimidating for anyone. Yet Frances Kelsey refuses to bow to the demands of the men in front of her. The large, red-stamped words on the papers convey her firm response: Not Approved. It was also important to me that I shared Dr. Frances Oldham Kelsey's actions with the people around me. For most of my friends and family, it was their first time hearing about her. But I was surprised to find out that my dad was familiar with her story. Fittingly, he works as a pharmaceutical chemist. It was heartening to hear that her actions continue to influence and inspire those in the pharmaceutical field today. I also plan on submitting this painting to my school's Literary and Arts magazine; it is my hope that many readers will get the chance to learn from her story. After all, her diligence and her determination are traits that every individual should strive to embody.

References:

Geraghty, Karen. "Protecting the Public: Dr. Frances Oldham Kelsey." AMA Journal of Ethics Nov. 2001 journalofethics.ama-assn.org/article/commemorative-issue-protecting-public-dr-frances-oldham-kelsey/2001-11

Kelsey, Frances O Autobiographical Reflections. U.S. Food And Drug Administration, 1993 <https://www.fda.gov/media/89162/download>

U.S. Food and Drug Administration. "Frances Oldham Kelsey: Medical Reviewer Famous for Averting a Public Health Tragedy." U.S. Food And Drug Administration, 1 Feb. 2018