



Impact Statement

Eric Qiao, Grade 8

In Pursuit of the Invisible, 2026

Colored pencil, marker, acrylic on paper, 22 x 17 inches

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Unsung Hero: Maurice Hilleman

Maurice Ralph Hilleman was a leading American microbiologist who specialized in vaccinology and developed over 40 vaccines, an unparalleled record of productivity. According to one estimate, his vaccines save nearly eight million lives each year. He has been described as one of the most influential vaccinologists ever. He has been called the "father of modern vaccines". Robert Gallo called Hilleman "the most successful vaccinologist in history". He has been described by some researchers as having saved more lives than any other scientist in the 20th century.

Of the 14 vaccines routinely recommended in American vaccine schedules, Hilleman and his team developed eight: those for measles, mumps, hepatitis A, hepatitis B, chickenpox, *Neisseria meningitidis*, *Streptococcus pneumoniae* and *Haemophilus influenzae* bacteria. During the influenza pandemic in Southern China, his vaccine is believed to have saved hundreds of thousands of lives. He also played a key role in developing the vaccine for the Hong Kong flu, as well as roles in the discovery of antigenic shift and drift, the cold-producing adenoviruses, the hepatitis viruses, and the potentially cancer-causing virus SV40. Hilleman was a forceful man yet at the same time, modest in his claims. None of his vaccines or discoveries are named after him.

I created this piece to capture the curiosity and determination behind scientific discovery. The repeated figure of the scientist represents not just only emphasizes the different working conditions of scientists, but the many stages of thinking, observing, and experimenting that happen in the mind of a researcher. Maurice Ralph Hilleman examining a sample through a microscope at the top right and observing a laboratory environment at the top left. The central gesture—the hand holding a small sample—symbolizes a breakthrough or moment of realization. It's small, but powerful, reminding us that even tiny discoveries can change everything. The microscope and syringe represent tools of knowledge and progress, connecting observation with real-world impact.

Each version shows a different moment—watching, analyzing, and questioning—because discovery is never a single action, but a process. The painting uses a vibrant, high-contrast color palette to create a sense of energy and importance around the subject of science. The use of repetitive circular patterns and organic shapes for the viruses adds a rhythmic quality to the background, contrasting with the more literal, realistic rendering of the scientist. The bright, layered background of cells, molecules, and abstract shapes reflects the invisible world

scientists explore. I wanted it to feel alive and complex, almost overwhelming, to show how much there is to uncover beneath what we can normally see. The bold colors and patterns express both the beauty and chaos of science. The ring-shaped reagent cluster in the upper right corner overlaps with the shape of the virus, seemingly showcasing the vaccine production process and its magical power.

Through this artwork, I wanted to show that science is not just technical—it is creative, human, and driven by curiosity.