

Before going into the operating room, George told his surgeons that he wanted them to take samples of his tumor, just as Dr. Wharton had done with Henrietta's tumor decades earlier. Gey gave his lab staff careful instructions for growing GeGe, a line of cancer cells taken from his pancreas. He hoped that his cells, like Henrietta's, would become immortal.

"Work all day and night if you have to," he told his postdocs and assistants. "Make this happen."

Soon, with Gey anesthetized on the operating table, surgeons opened him up and found that the cancer was inoperable—growths covered his stomach, spleen, liver, and intestines. They worried that cutting into the cancer might kill him. Despite Gey's wishes, they sewed him up without taking any samples. When he awoke from anesthesia and found out there would be no GeGe line, he was furious. If this cancer was going to kill him, he wanted it to help advance science in the process.

As soon as he'd recovered enough from his surgery to travel, Gey began contacting cancer researchers around the country, asking who was doing research on pancreatic cancer and needed a patient to experiment on. He was flooded with replies—some from scientists he didn't know, others from friends and colleagues.

In the three months between his surgery and his death, Gey went to the Mayo Clinic in Minnesota for a week of treatments with an experimental Japanese drug that made him violently ill. His son, George Jr., who had just finished medical school, sat with Gey through the whole thing and made sure he had a freshly pressed suit each day. After leaving the Mayo Clinic, Gey spent several days in New York City at Sloan-Kettering for another study, and he underwent chemotherapy at Hopkins using a drug not yet approved for use in humans.

Gey was six and a half feet tall and about 215 pounds when he was diagnosed, but he withered quickly. He often doubled over from abdominal pain, he vomited constantly, and the treatments soon left him confined to a wheelchair. But he continued showing up at the lab and writing letters to his colleagues. At some point not long before his

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"The Fame She So Richly Deserves"

One afternoon in the late spring of 1970, George Gey stood in his favorite waders on the bank of the Potomac River, where he and several other Hopkins researchers had been fishing together every Wednesday for years. Suddenly Gey was so exhausted, he could hardly hold his fishing rod. His buddies dragged him up the embankment to the white Jeep he'd bought using money from a cancer research award.

Soon after that fishing trip, at the age of seventy-one, Gey learned he had the disease he'd spent his entire life trying to fight. And he had one of its most deadly forms: pancreatic cancer. If doctors didn't operate, Gey knew he would die within months. If they did, it might buy him a little time. Or it might not.

On August 8, 1970, around 6:00 a.m., Margaret called each member of the Gey lab's staff, including a postdoctoral student who'd just flown in on a red-eye from Europe.

"Come down to the lab as fast as you can," she told them. "There's going to be an emergency procedure this morning." She didn't tell them what that procedure would be.

death, he told his former assistant Mary Kubicek that it was fine to release Henrietta's name if anyone asked, since it had been so many years. But Mary never told a soul.

George Gey died on November 8, 1970.

A few months after Gey's death, Howard Jones and several Hopkins colleagues—including Victor McKusick, a leading geneticist—decided to write an article about the history of the HeLa cell line as a tribute to Gey's career. Before writing the article, Jones pulled Henrietta's medical records to remind himself of the details of her case. When he saw the photographs of her biopsy, he immediately realized her tumor had been misdiagnosed. To be sure, he dug out the original biopsy sample, which had been stored on a shelf since 1951.

In December 1971, when Jones and his colleagues published their tribute to Gey in the journal *Obstetrics and Gynecology*, they reported that the original pathologist had "misinterpreted" and "mislabeled" Henrietta's cancer. Her tumor was invasive, but not an epidermoid carcinoma as originally diagnosed. Rather, the article said, it was "a very aggressive adenocarcinoma of the cervix," meaning it originated from glandular tissue in her cervix instead of epithelial tissue.

A misdiagnosis of this type was not uncommon at the time. In 1951, the same year Jones biopsied Henrietta's tumor, researchers from Columbia University reported that the two types of cancer were easily and often confused.

According to Howard Jones and other gynecologic oncologists I talked with, the correct diagnosis wouldn't have changed the way Henrietta's cancer was treated. By 1951, at least twelve studies had found that cervical adenocarcinomas and epidermoid carcinomas responded the same to radiation, which was the treatment of choice for both types.

Though it wouldn't have changed Henrietta's treatment, this new diagnosis could help explain why the cancer spread throughout her body so much faster than her doctors expected. Cervical adenocarci-

nomas are often more aggressive than epidermoid. (Her syphilis, it turns out, could have been a factor as well—syphilis can suppress the immune system and allow cancer to spread faster than normal.)

Regardless, Jones and his colleagues wrote, the new diagnosis was "but a footnote to the abiding genius of George Gey. . . . It has been often said that scientific discovery results when the right man is in the right place at the right time." Gey, they said, was precisely that man. And HeLa was the result of that luck. "If allowed to grow uninhibited under optimal cultural conditions, [HeLa] would have taken over the world by this time," they wrote. "The biopsy. . . has secured for the patient, Henrietta Lacks as HeLa, an immortality which has now reached 20 years. Will she live forever if nurtured by the hands of future workers? Even now Henrietta Lacks, first as Henrietta and then as HeLa, has a combined age of 51 years."

This was the first time Henrietta's real name appeared in print. Along with it, for the first time, ran the now ubiquitous photograph of Henrietta standing with her hands on her hips. The caption called her "Henrietta Lacks (HeLa)." With that publication, Henrietta's doctor and his colleagues forever linked Henrietta, Lawrence, Sonny, Deborah, Zakariyya, their children, and all future generations of Lackses to the HeLa cells, and the DNA inside them. And Henrietta's identity would soon spread from lab to lab as quickly as her cells.

Just three weeks after Henrietta's name was first published, Richard Nixon signed the National Cancer Act into law and launched the War on Cancer, designating \$1.5 billion for cancer research over the next three years. In a move many believe was intended to distract attention from the Vietnam War, Nixon announced that scientists would cure cancer within five years, just in time for the United States Bicentennial.

With this new funding came intense political pressure for scientists to meet the president's deadline. Researchers raced to find what they believed to be the elusive cancer virus, with hopes of developing

a vaccine to prevent it. And in May 1972, Nixon pledged that American and Russian scientists would work together in a biomedical exchange program to find the virus.

Though much of the War on Cancer hinged on research using cell cultures, few people knew that those cultures had been contaminated with HeLa. A *Washington Post* reporter had been at the conference when Gartler announced the contamination problem, but he hadn't covered it, and most scientists were still denying that the problem existed. Some were even conducting studies aimed at disproving Gartler's findings.

But the problem wasn't going to go away. Near the end of 1972, when Russian scientists claimed they'd found a cancer virus in cells from Russian cancer patients, the U.S. government had samples of the cells hand-delivered to the Naval Biomedical Research Laboratory in California for testing. It turned out those cells weren't from Russian cancer patients at all. They were from Henrietta Lacks.

The man who discovered that fact was Walter Nelson-Rees, a chromosome expert who was director of cell culture at the Naval laboratory. Nelson-Rees had been in the audience when Gartler presented his infamous research, and he was one of the few scientists who believed it. Nelson-Rees had since been hired by the National Cancer Institute to help stop the contamination problem. He would become known as a vigilante who published "HeLa Hit Lists" in *Science*, listing any contaminated lines he found, along with the names of researchers who'd given him the cells. He didn't warn researchers when he found that their cells had been contaminated with HeLa; he just published their names, the equivalent of having a scarlet *H* pasted on your lab door.

Despite all the evidence, most researchers still refused to believe there was a problem. And the media didn't seem to notice, until news hit that the Russian cells had been contaminated by American ones. Only then did newspapers in London, Arizona, New York, and Washington run headlines saying things like **CANCER CELLS FROM LONG-DEAD WOMAN INVADE OTHER CULTURES**. They reported "serious confusion," "misguided research," and millions of wasted dollars.

Suddenly, for the first time since the *Collier's* article in the fifties, the press was very interested in the woman behind those cells. They wrote about her "unusual kind of immortality" in one article after another; they called her Helen Larsen or Helen Lane, but never Henrietta Lacks, because Jones and McKusick had published her name in a small science journal few people read.

Rumors spread about the identity of this mysterious Helen L. Some said she'd been Gey's secretary, or maybe his mistress. Others said she was a prostitute off the streets near Hopkins or a figment of Gey's imagination, a fictitious character he'd created to hide the true identity of the woman behind the cells.

As Helen showed up in articles again and again with different last names, a few scientists began feeling the need to set the record straight. On March 9, 1973, the journal *Nature* published a letter from J. Douglas, a biologist at Brunel University:

It is twenty-one years since George Gey established the famous HeLa cells in culture. It has been estimated that the weight of these cells in the world today exceeds that of the American negro from whose cervical tumour they originated. That lady has achieved true immortality, both in the test-tube and in the hearts and minds of scientists the world over, since the value of HeLa cells in research, diagnosis, etc., is inestimable. Yet we do not know her name! It has been widely stated that He and La are the first letters of her names but whereas one textbook says the names were Helen Lane another says Henrietta Lacks. My letters to the authors, inquiring the source of their information, like the letter to the hospital from which Gey's paper emanated, remain unanswered. Does anyone know for sure? Would it be contrary to medical ethics in the HeLa cell's coming-of-age year to authenticate the name and let He . . . La . . . enjoy the fame she so richly deserves?

Douglas was flooded with responses. There's no record of readers addressing his question about medical ethics, but they did correct his grammar and his use of the word "negro" in place of "negress." Many replies offered the names of women they believed were behind the HeLa cells: Helga Larsen, Heather Langtree, even the actress Hedy Lamarr. In a follow-up letter on April 20, 1973, Douglas announced that all those women should "withdraw as gracefully as they can," because he'd received a letter from Howard W. Jones that left "no doubt that HeLa cells were named after Henrietta Lacks."

And Jones wasn't the only one setting the record straight about Henrietta's name: soon Victor McKusick, one of Jones's coauthors, would send a similar letter to a reporter from *Science*, correcting her misuse of the name Helen Lane. In response, the journalist wrote a short follow-up article in *Science* titled "HeLa (for Henrietta Lacks)." In it she explained that she'd inadvertently "repeated the lore about the origin of those cells." Then, in one of the most widely read science journals in the world, she corrected her error: "Helen Lane, it seems, never lived. But Henrietta Lacks did, long protected by the pseudonym Helen Lane." She also reported that Henrietta's tumor had been incorrectly diagnosed.

"None of this alters the validity of the work done with HeLa cells," she wrote, "but it may be worth noting—for the record."