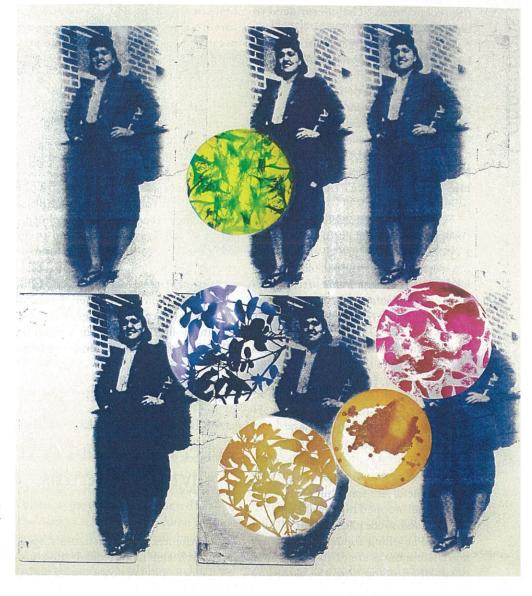
## The Miracle Woman

When Henrietta Lacks was diagnosed with cancer in 1951, doctors took her cells and grew them in test tubes. Those cells led to breakthroughs in everything from Parkinson's to polio. But today, Henrietta is all but forgotten. In an excerpt from her book, *The Immortal Life of Henrietta Lacks*, **REBECCA SKLOOT** tells her story.

n 1951, at the age of 30, Henrietta Lacks, the descendant of freed slaves, was diagnosed with cervical cancer-a strangely aggressive type, unlike any her doctor had ever seen. He took a small tissue sample without her knowledge or consent. A scientist put that sample into a test tube, and, though Henrietta died eight months later, her cells-known worldwide as HeLa-are still alive today. They became the first immortal human cell line ever grown in culture and one of the most important tools in medicine: Research on HeLa was vital to the development of the polio vaccine, as well as drugs for treating herpes, leukemia, influenza, hemophilia, and Parkinson's disease; it helped uncover the secrets of cancer and the effects of the atom bomb, and led to important advances like cloning, in vitro fertilization, and gene mapping. Since 2001 alone, five Nobel Prizes have been awarded for research involving HeLa cells.

There's no way of knowing exactly how many of Henrietta's cells are alive today. One scientist estimates that if you could pile all the HeLa cells ever grown onto a scale, they'd weigh more than 50 million metric tons—the equivalent of at least 100 Empire State Buildings.



Today, nearly 60 years after Henrietta's death, her body lies in an unmarked grave in Clover, Virginia. But her cells are still among the most widely used in labs worldwide—bought and sold by the billions. Though those cells have done wonders for science, Henrietta—whose legacy involves the birth of bioethics and the grim history of experimentation on African-Americans—is all but forgotten. Here is her story.

ON JANUARY 29, 1951, DAVID LACKS sat behind the wheel of his old Buick, watching the rain fall. He was parked under a towering oak tree outside Johns Hopkins Hospital with three of his children—two still in diapers—waiting for their mother, Henrietta. A few minutes

earlier she'd jumped out of the car, pulled her jacket over her head, and scurried into the hospital, past the "colored" bathroom, the only one she was allowed to use. In the next building, under an elegant domed copper roof, a ten-and-a-half-foot marble statue of Jesus stood, arms spread wide, holding court over what was once the main entrance of Hopkins. No one in Henrietta's family ever saw a Hopkins doctor without visiting the Jesus statue, laying flowers at his feet, saying a prayer, and rubbing his big toe for good luck. But that day Henrietta didn't stop.

She went straight to the waiting room of the gynecology clinic, a wideopen space, empty but for rows of long, straight-backed benches that looked > like church pews.

"I got a knot on my womb," she told the receptionist. "The doctor need to have a look."

For more than a year Henrietta had been telling her closest girlfriends that something didn't feel right. One night after dinner, she sat on her bed with her cousins Margaret and Sadie and told them, "I got a knot inside me."

"A what?" Sadie asked.

"A knot," she said. "It hurt somethin' awful—when that man want to get with me, Sweet Jesus aren't them but some pains."

When sex first started hurting, she thought it had something to do with baby Deborah, who she'd just given birth to a few weeks earlier, or the bad blood David sometimes brought home after nights with other women—the kind doctors treated with shots of penicillin and heavy metals.

About a week after telling her cousins she thought something was wrong, at the age of 29, Henrietta turned up pregnant with Joe, her fifth child. Sadie and Margaret told Henrietta that the pain probably had something to do with a baby after all. But Henrietta still said no.

"It was there before the baby," she told them. "It's somethin' else."

They all stopped talking about the knot, and no one told Henrietta's husband anything about it. Then, four and a half months after baby Joseph was born, Henrietta went to the bathroom and found blood spotting her underwear when it wasn't her time of the month.

She filled her bathtub, lowered herself into the warm water, and slowly spread her legs. With the door closed to her children, husband, and cousins, Hen-

rietta slid a finger inside herself and rubbed it across her cervix until

she found what she somehow knew she'd find: a hard lump, deep inside, as though someone had lodged a marble the size of her pinkie tip just to the left of the opening to her womb.

Henrietta climbed out of the bathtub, dried herself off, and dressed. Then she told her husband, "You better take me to the doctor. I'm bleeding and it ain't my time."

Her local doctor took one look inside her, saw the lump, and figured it was a sore from syphilis. But the lump tested negative for syphilis, so he told Henrietta she'd better go to the Johns Hopkins gynecology clinic.

The public wards at Hopkins were filled with patients, most of them black and unable to pay their medical bills. David drove Henrietta nearly 20 miles to get there, not because they preferred it, but because it was the only major hospital for miles that treated black patients. This was the era of Jim Crow—when black people showed up at white-only hospitals, the staff was likely to send them away, even if it meant they might die in the parking lot.

When the nurse called Henrietta from the waiting room, she led her through a single door to a colored-only exam room one in a long row of rooms divided by clear glass walls that let nurses see from

The doctor had seen easily a thousand cancer lesions, but never anything like this.

one to the next. Henrietta undressed, wrapped herself in a starched white hospital gown, and lay down on a wooden exam table, waiting for Howard Jones, the gynecologist on duty. When Jones walked into the room, Henrietta told him about the lump. Before examining her, he flipped through her chart:

Breathing difficult since childhood due to recurrent throat infections and deviated septum in patient's nose. Physician recommended surgical repair. Patient declined. Patient had one toothache for nearly five years. Only anxiety is oldest daughter who is epileptic and can't talk. Happy household. Well nourished, cooperative. Unexplained vaginal bleeding and blood in urine during last two pregnancies; physician recommended sickle cell test. Patient declined. Been with husband since age 14 and has no liking for sexual intercourse. Patient has asymptomatic neurosyphilis but canceled syphilis treatments, said she felt fine. Two months prior to current visit, after delivery of fifth child, patient had significant blood in urine. Tests showed areas of increased cellular activity in the cervix. Physician recommended diagnostics and referred to specialist for ruling out infection or cancer. Patient canceled appointment.

T WAS NO SURPRISE THAT SHE hadn't come back all those times for follow-up. For Henrietta, walking into Hopkins was like entering a foreign country where she didn't speak the language. She knew about harvesting tobacco and butchering a pig, but she'd never heard the words cervix or biopsy. She didn't read or write much, and she hadn't studied science in school. She, like most black patients, only went to Hopkins when she thought she had no choice.

Henrietta lay back on the table, feet pressed hard in stirrups as she stared at the ceiling. And sure enough, Jones found

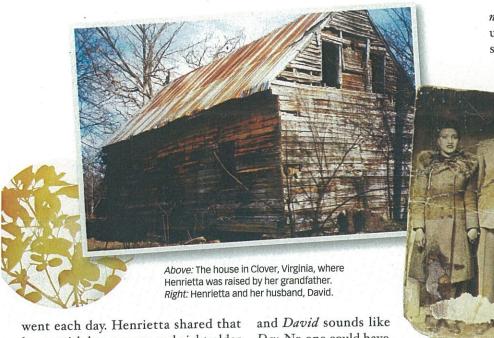
a lump exactly where she'd said he would. If her cervix was a clock's face, the lump was at 4 o'clock. He'd seen easily a thousand cervical cancer lesions, but never anything like this: shiny and purple (like "grape Jello," he wrote later), and so delicate it bled at the slightest touch. Jones cut a small sample and sent it to the pathology lab down the hall for a diagnosis. Then

he told Henrietta to go home.

Soon after, Howard Jones dictated notes about Henrietta and her diagnosis: "Her history is interesting in that she had a term delivery here at this hospital, September 19, 1950," he said. "No note is made in the history at that time or at the six weeks' return visit that there is any abnormality of the cervix."

Yet here she was, three months later, with a full-fledged tumor. Either her doctors had missed it during her last exams—which seemed impossible—or it had grown at a terrifying rate.

HENRIETTA LACKS WAS BORN LORETTA Pleasant in Roanoke, Virginia, on August 1, 1920. No one knows how she became Henrietta. A midwife named Fannie delivered her in a small shack on a deadend road overlooking a train depot, where hundreds of freight cars came and



house with her parents and eight older siblings until 1924, when her mother, Eliza Lacks Pleasant, died giving birth to her tenth child.

Henrietta's father, Johnny Pleasant, was a squat man who hobbled around on a cane he often hit people with. Johnny didn't have the patience for raising children, so when Eliza died, he took them all back to Clover, Virginia, where his family still farmed the tobacco fields their ancestors had worked as slaves. No one in Clover could take all ten children, so relatives divided them up-one with this cousin, one with that aunt. Henrietta ended up with her grandfather, Tommy Lacks.

Tommy lived in what everyone called the home-house, a four-room wooden cabin that once served as slave quarters, with plank floors, gas lanterns, and water Henrietta hauled up a long hill from the creek. The home-house stood on a hillside where wind whipped through cracks in the walls. The air inside stayed so cool that when relatives died, the family kept their corpses in the front hallway for days so people could visit and pay respects. Then they buried them in the cemetery

Henrietta's grandfather was already raising another grandchild that one of his daughters left behind after delivering him on the home-house floor. That child's name was David Lacks, but everyone called him Day, because in the Lacks country drawl, house sounds like hyse, Day. No one could have guessed Henrietta would

spend the rest of her life with Day-first as a cousin growing up in their grandfather's home, then as his wife.

Like most young Lackses, Day didn't finish school: He stopped in the fourth grade because the family needed him to work the tobacco fields. But Henrietta stayed until the sixth grade. During the school year, after taking care of the garden and livestock each morning, she'd walk two miles - past the white school where children threw rocks and taunted her-to the colored school, a three-room wooden farmhouse hidden under tall shade trees.

At nightfall the Lacks cousins built fires with pieces of old shoes to keep the mosquitoes away, and watched the stars from beneath the big oak tree where they'd hung a rope to swing from. They played tag, ring-around-the-rosy, and hopscotch, and danced around the field singing until Grandpa Tommy yelled for everyone to go to bed.

Henrietta and Day had been sharing a bedroom since she was 4 and he was 9, so what happened next didn't surprise anyone: They started having children together. Their son Lawrence was born just months after Henrietta's 14th birthday; his sister, Lucile Elsie Pleasant, came along four years later. They were both born on the floor of the home-house like their father, grandmother, and grandfather before them. People wouldn't use words like epilepsy, mental retardation, or

neurosyphilis to describe Elsie's condition until years later. To the folks in Clover, she was just simple. Touched.

Henrietta and Day married alone at their preacher's house on April

> 10, 1941. She was 20; he was 25. They didn't go on a honeymoon because there was too much work to do, and no money for travel. Henrietta and Day were lucky if they sold enough tobacco each season to feed the family and plant the next crop. So after their wedding, Day went back to gripping the splintered ends of his old wooden plow as Henrietta followed close behind, pushing a homemade wheelbarrow and dropping tobacco seedlings into holes

in the freshly turned red dirt.

A few months later, Day moved north to Turner Station, a small black community outside Baltimore where he'd gotten a job working in a shipyard. Henrietta stayed behind to care for the children and the tobacco until Day made enough money for a house and three tickets north. Soon, with a child on each side, Henrietta boarded a coal-fueled train from the small wooden depot at the end of Clover's Main Street. She left the tobacco fields of her youth and the hundred-year-old oak tree that shaded her from the sun on so many hot afternoons. At the age of 21, she stared through the train window at rolling hills and wideopen bodies of water for the first time, heading toward a new life.

AFTER HER VISIT TO HOPKINS, Henrietta went back to her usual routine, cleaning and cooking for her husband, their children, and the many cousins she fed each day. Less than a week later, Jones got her biopsy results from the pathology lab: "epidermoid carcinoma of the cervix, Stage I." Translation: cervical cancer.

Cervical carcinomas are divided into two types: invasive carcinomas, which have penetrated the surface of the cervix, and noninvasive carcinomas, which haven't. The noninvasive type is sometimes called "sugar-icing carcinoma," because it grows in a smooth layered >