

**NARRATIVE
NONFICTION**
reads like fiction—
but it's all true

The Man Who a Thous Babies

PHOTO COLLAGE: CHRISTOPHER B. SHORT. BABIES: GETTY IMAGES. THE ALAN MASON
CHESNEY MEDICAL ARCHIVES OF THE JOHNS HOPKINS MEDICAL INSTITUTION (VIVIEN THOMAS).



**AS YOU READ,
THINK ABOUT:**

A hero is a person who is courageous, outstanding, or noble. In what way was Vivien Thomas a hero?



Saved and

VIVIEN THOMAS WAS ONE OF THE GREAT HEROES OF 20TH-CENTURY MEDICINE. SO WHY HAVEN'T YOU HEARD OF HIM? **BY LAUREN TARSHIS**



One-year-old Eileen Saxon was dying. Tiny and weak, she weighed just 9 pounds. Her lips and fingernails were dark blue. She'd been born with a heart condition that starved her body of oxygen. It was clear that she had little time left.



Eileen's condition was not unique. At the time—the early 1940s—thousands of so-called “blue babies” were born each year. Most lived no more than a few years, because doctors had no way to help them.

That was about to change.

On November 29, 1944, Eileen was wheeled into an operating room at Johns Hopkins Hospital in Baltimore, Maryland. People watched from a glassed-in gallery above, eager to witness the first attempt ever made to perform surgery on a blue baby's heart. Three doctors hovered over Eileen, plus a team of the hospital's most experienced nurses and other medical staff.

When it came to the success of the operation, though, the most important person in the room was not a doctor or a nurse. He was a soft-spoken young man, trained as a carpenter, who stood on a stool looking over the chief surgeon's shoulder. This young man—Vivien Thomas—had never been to medical school or even college, but each time the surgeon was ready to make a cut or stitch into Eileen's tiny chest, he would listen for Thomas's instructions.

Today, Thomas is considered one of the most important figures in 20th-century medicine. Back in 1944, however, almost no medical school in America would have accepted him as a student.

A Time of Prejudice

In the 1940s, racism against

African Americans and other minorities was widespread. Much of the country was segregated—black Americans were kept separate from white Americans. Black people were banned from most white schools and nearly all universities. They were turned away from hospitals, barred from sitting in the front of buses, forbidden to swim in public pools or set foot in many public libraries.

There were some African-American doctors, but they were not allowed to work in most hospitals, including Johns Hopkins.

Yet in the operating room on that November day, it was Vivien Thomas, an African-American man, whose knowledge would make the difference between life and death for Eileen Saxon.

Shattered Plans

Thomas grew up in Nashville, Tennessee, a segregated city with a vibrant African-American community. He attended Pearl High School, which was known for its **rigorous** standards. Thomas graduated with top grades and planned to attend college and then



← THE HEART

In a healthy heart, blood travels through the heart to the lungs, where it receives oxygen. Then the blood travels back through the heart and out into the rest of the body. A blue baby's heart has defects that allow blood without enough oxygen to travel through the body.

medical school. Since the age of 11, he had worked weekends and afternoons as a carpenter, saving money for his education.

But in 1930, the year of his high school graduation, Thomas's plans were shattered by the Great Depression. This national economic crisis led to millions of Americans losing their jobs. Banks closed their doors, and many people, including



Thomas; it paid one-third of what Thomas had earned as a carpenter, or the same amount earned by the Vanderbilt hospital janitors. But jobs were scarce, and, besides, Thomas wanted to start college as soon as possible. He figured he wouldn't be working for Blalock for long.

Little did he know.

No Ordinary Worker

Blalock quickly realized that Thomas was extraordinarily gifted. Blalock began teaching Thomas about conducting

experiments, and Thomas set about learning all he could. He worked 16-hour days and often headed home with a stack of medical textbooks, which he studied late into the night. Within a few years, Thomas was designing experiments to test his and Blalock's theories.

Outside the lab, Thomas dealt with the daily humiliations of living in the segregated South. Inside the lab, amid the bright lights and test tubes, Thomas and Blalock were true partners. (Yet after six years, Thomas was still making only a **menial** wage. What's more, he discovered that in Vanderbilt's official records, his job title was janitor, the only job the school saw fit for a black man.)

In 1940, Blalock and Thomas at last discovered one of the causes of shock and designed an effective

treatment. Their discovery was celebrated around the world, and, within a few months, Blalock was invited to become chief of surgery at one of the country's best hospitals: Johns Hopkins.

Blalock accepted the position on one condition: that Thomas could come work with him.

Thomas was married by then, with two young children. With some **reluctance**, he and his family moved north to Maryland. There, Thomas faced the same discrimination he'd left behind. He even had a hard time finding a place to live. And Johns Hopkins had a long history of segregation. Yet Thomas found the work with Blalock as exciting as ever.

A Call to Action

Soon after moving, Thomas and Blalock met a woman who would change the course of their work—and their lives. Helen Taussig was the first female **pediatric cardiologist** in the U.S. She'd already saved many lives, but could do nothing for blue babies. Taussig challenged Blalock to design a surgical procedure that would create a new pathway for blood to travel between the heart and lungs.

It was an enormous challenge. Heart surgery was considered the "Mount Everest" of medicine—few had attempted it, and nobody had succeeded.

Over the next few months, while Blalock was busy with his new responsibilities, Thomas labored in the lab.



THE SURGERY Alfred Blalock, Helen Taussig, and Vivien Thomas pioneered a surgery that rerouted the blood around the heart defect that caused blue baby syndrome.

Thomas, lost their life savings. With no money and no carpentry work to be found, Thomas was desperate for a job. His search led him to the office of a **brash** and brilliant young doctor named Alfred Blalock at Vanderbilt University in Nashville.

Blalock came from a rich and well-known white Southern family. At 32, he was already the head of Vanderbilt's department of surgery. He needed help in his laboratory, where he was studying a condition called shock, from which many patients died during surgery.

Blalock's job offer didn't impress



↑ THE UNSUNG HERO Inside his lab, Vivien Thomas was respected for his intellect and leadership. But outside the lab, Thomas faced prejudice and countless humiliations. How does the juxtaposition of these two photos show how different Thomas's life was inside and outside the lab?

blue skin turned a healthy pink. "You've never seen anything so dramatic," Thomas would later recall. "It was almost a miracle."

Within months, babies across the country were being rushed to Johns Hopkins. Blalock became famous. Thomas continued his work in the lab, in the background.

Blalock died in 1964, but Thomas remained at Johns Hopkins until 1979. By then he was a legend at the medical school, and a highly respected professor.

Johns Hopkins finally

recognized Thomas and awarded him an honorary doctorate 32 years after the first blue-baby surgery.

Thomas never became rich or famous, but he blazed a trail for other African Americans in medicine, including his own nephew, who entered Johns Hopkins School of Medicine in 1983. Thomas also trained two generations of heart surgeons, some of whom are still operating. His portrait now hangs across from Blalock's in the medical school.

Thomas died in 1985, but his legacy lives on, beat after beat, in the hearts of the thousands of people he helped save. ●

He learned to create blue baby syndrome in animals so that he could then work on treating it. He designed new medical instruments when he could find none delicate enough for his work.

After about a year, Blalock received a frantic call from Taussig. There was a little girl in the infant ward of the hospital, lying in an oxygen tent. She was dying. Her name was Eileen Saxon.

By then, Thomas and Blalock had developed the procedure that Taussig had asked for. They'd found a way to attach one artery to another, giving the blood a new pathway to the lungs.

But they had never tried it on a human. Eileen would be the first.

Thomas expected to watch the surgery from the gallery, but Blalock wanted Thomas next to him. Thomas, after all, had performed the operation hundreds of times on animals. Blalock had done the entire procedure once.

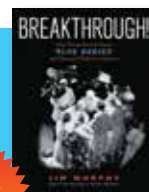
Throughout the operation, Blalock asked for Thomas's help. When the final clamp was removed and the blood began flowing along its new route, Thomas and Blalock stood shoulder to shoulder, their attention fixed on their tiny patient.

Had the surgery worked?

Seconds passed. Eileen's sickly

WRITING CONTEST

The U.S. Post Office is releasing a new postage stamp. It's looking for a historical figure who overcame obstacles and contributed something important to society. Write an essay arguing that Vivien Thomas should be on the new stamp. Send your essay to **HEART CONTEST**. Five winners will get *Breakthrough!* by Jim Murphy. See page 2 for details.



GET THIS
ACTIVITY
ONLINE