

# Henrietta Lacks' "immortal" cells

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Level **680L**



TOP: Henrietta Lacks' (left) cells were essential in developing the polio vaccine and were used in scientific landmarks such as cloning, gene mapping and in vitro fertilization. (Courtesy of the Lacks family). SECOND: Scanning electron micrograph of just-divided HeLa cells. Courtesy of National Institutes of Health (NIH)

Would you want to live forever? One woman is doing just that. Not her body and mind. Some of her cells.

Cells are the building blocks of life. We are all made up of cells.

Scientists study them to learn more about diseases. They do this by collecting cells from humans and then growing more cells from those cells. To do this, scientists need cells that can always grow and also stay frozen for many years.

## HeLa Cells

In 1951, a scientist in Maryland created the first everlasting human cell line. The cells came from a young black woman with cancer.

Those cells were named HeLa cells. They have been important to the world of medicine. But, no one knew much about the person they came from.

When the cells were taken, they were given the code name HeLa, for the first two letters in Henrietta and Lacks. Henrietta's real name wasn't known until the 1970s.

Rebecca Skloot wrote a book published in 2010. It is called "The Immortal Life of Henrietta Lacks." Skloot tracked down the story behind the amazing HeLa cells.

### **Henrietta Lacks' important cells**

Henrietta was a farmer from Virginia who had cancer when she was 30. A doctor took a piece of her tumor without telling her and sent it to scientists.

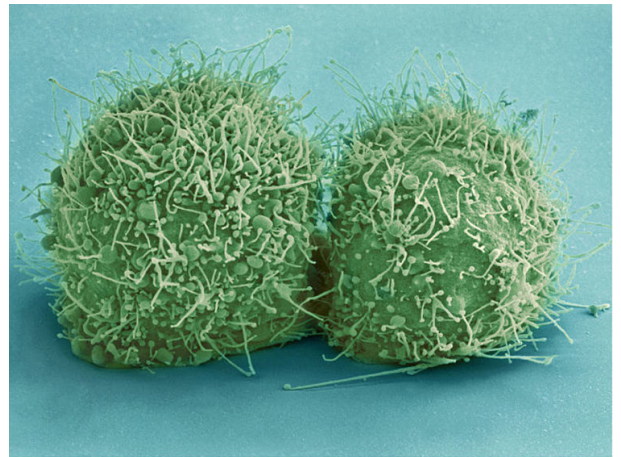
No one knows why, but her cells never died. Henrietta's cells were the first human cells ever grown in culture to continue living. Grown in culture means cells are taken from where they are living, like a human body. Then the cells go to a lab so scientists can grow more of them to study.

Henrietta's cells were important to developing a vaccine for a deadly disease called polio. Her cells also went into outer space to see what would happen to them there. Many scientists have used her cells for other studies, too.

### **Learning Henrietta's Story**

Before writing her book, Skloot first learned about Henrietta in 1988 at school. Skloot's teacher knew Henrietta's real name and that she was black. But that's all he knew. Skloot later decided to find Henrietta's family and write about them.

It took Skloot almost a year even to get Henrietta's daughter, Deborah, to talk to her. Skloot went to Henrietta's hometown. There she talked to Henrietta's cousins. She called Deborah and told her their stories.



This convinced Deborah to help Skloot learn more about Henrietta. Deborah wanted to know more, too. Deborah never knew her mother. She was a baby when Henrietta died.

### **Finding Out HeLa Is Henrietta Lacks**

A scientist discovered even more of Henrietta's cells 25 years after she died. Many cells were thought to be from other people. But they were HeLa cells. The cells must have floated on dust and traveled on unwashed hands into other cell cultures.

So, scientists tracked down Henrietta's family members to take some cell samples from them. This would allow scientists to know which cells were HeLa and which weren't.

### **Lessons From The Book**

Much of science today revolves around using human cells of some kind. But, the people behind those samples are usually left out of the decision-making process. Henrietta never knew her cells were being used by scientists. For a long time, her family did not know either.

Skloot hopes people don't think collecting and growing cells is bad. Medicine today depends on it. We would not have many tests, medicines and vaccines if it wasn't for this. Or, if it wasn't for

Henrietta.

## Quiz

- 1 Select the sentence from the article that BEST explains why collecting cells is important to medicine.
- (A) Cells are the building blocks of life.
  - (B) We are all made up of cells.
  - (C) Scientists study them to learn more about diseases.
  - (D) Those cells were named HeLa cells.
- 2 Select the sentence from the section "Henrietta Lacks' Important Cells" that helps the reader to understand HOW Henrietta's cells helped people.
- (A) A doctor took a piece of her tumor without telling her and sent it to scientists.
  - (B) Henrietta's cells were the first human cells ever grown in culture to continue living.
  - (C) Then the cells go to a lab so scientists can grow more of them to study.
  - (D) Henrietta's cells were important to developing a vaccine for a deadly disease called polio.
- 3 Based on the section "Learning Henrietta's Story," with which statement would Rebecca Skloot be MOST likely to agree?
- (A) It was important to get Deborah's help to be able to write about Henrietta.
  - (B) Scientists should not have taken Henrietta's cells without her permission.
  - (C) Henrietta's cells have not been as important to medicine as other cells.
  - (D) Deborah already knew everything about Henrietta meeting Skloot.
- 4 Which sentence from the article explains the author's opinion about HeLa cells?
- (A) Scientists study them to learn more about diseases.
  - (B) The cells came from a young black woman with cancer.
  - (C) They have been important to the world of medicine.
  - (D) Henrietta never knew her cells were being used by scientists.