



Immortal Cell Line of Henrietta Lacks

INTRODUCTION:

Henrietta Lacks was a black tobacco farmer living in Baltimore, Maryland. She was a wife and a mother of five. In 1951, Henrietta Lacks visited Dr. George Gey at Johns Hopkins University for abdominal pain and bleeding. At this time, Johns Hopkins was one of few hospitals that would treat black people. During her visit, Dr. Gey and his assistant diagnosed Mrs. Lacks with a severe stage of cervical cancer. Without her permission, however, Dr. Gey kept a section of her tumor and noticed something remarkable: her cells would not die, even after generations of multiplying.



Prior to the discovery of Henrietta Lacks' cells (HeLa cells), cells cultivated in labs would either die immediately or after a couple of generations. HeLa cells, on the other hand, survived for generations on all surfaces. Dr. Gey sold this immortal cell line to scientists around the world, fueling thousands of medical advancements, such as the polio vaccine, knowledge of chromosomal count, and HPV's role in cervical cancer. Despite the financial gain HeLa cells provided those in the medical field, Mrs. Lack's family was not informed of the use of her cells for nearly two decades.

SOCIAL JUSTICE STANDARDS:

- ❖ Identity 2 - Students will develop language and historical and cultural knowledge that affirm and accurately describe their membership in multiple identity groups.
- ❖ Diversity 8 - Students will respectfully express curiosity about the history and lived experiences of others and will exchange ideas and beliefs in an open-minded way.
- ❖ Justice 13 - Students will analyze the harmful impact of bias and injustice on the world, historically and today.
- ❖ Action 18 - Students will speak up with courage and respect when they or someone else has been hurt or wronged by bias.

LEARNING STANDARDS: Cells, Cell Division, Cancer

PURPOSE: To introduce cell division and cancer by incorporating the story and contributions of Henrietta Lacks.

ACTIVITY:

1. Watch the video "[The immortal cells of Henrietta Lacks - Robin Bulleri](#)"

*This can be played for the whole class or assigned independently on EdPuzzle. EdPuzzle allows you to ask checkpoint and reflection questions while the video is playing to ensure 100% student participation. Click this [link](#) to see/use our example.

2. Engage class with discussion after the video with the following probing questions:

- a. "Who was Henrietta Lacks as a person? Give me personal facts."
- b. "What was so special about her tumor cells?"
- c. "What did Dr. Gey do that was so problematic?"
- d. "What medical advancements did her cells contribute to?"
- e. "Do you know of any other medical studies that were wrongfully conducted on black people?"

*If students do not know an answer to the previous question, inform them about the Tuskegee Syphilis Study and/or J. Marion Sims' Gynecology Studies on black women.

3. Conclude class with a personal reflection question as their exit ticket:

"After learning about Mrs. Lacks and other studies wrongfully conducted on black people to advance medicine, how does this make you feel?"

*This can be written on sticky notes by each student and posted on the board or assigned on Nearpod. Nearpod's Collaborate Board allows students to post virtual sticky notes and read/ "like" their classmates' responses. Click this [link](#) to see/use our example.